# PSYCHOLOGY OF ADOLESCENCE



*Nicole Rosa & Kathryn Frazier*
Worcester State University

LibreTexts™

# Psychology of Adolescence

This text is disseminated via the Open Education Resource (OER) LibreTexts Project (https://LibreTexts.org) and like the thousands of other texts available within this powerful platform, it is freely available for reading, printing, and "consuming."

The LibreTexts mission is to bring together students, faculty, and scholars in a collaborative effort to provide an accessible, and comprehensive platform that empowers our community to develop, curate, adapt, and adopt openly licensed resources and technologies; through these efforts we can reduce the financial burden born from traditional educational resource costs, ensuring education is more accessible for students and communities worldwide.

Most, but not all, pages in the library have licenses that may allow individuals to make changes, save, and print this book. Carefully consult the applicable license(s) before pursuing such effects. Instructors can adopt existing LibreTexts texts or Remix them to quickly build course-specific resources to meet the needs of their students. Unlike traditional textbooks, LibreTexts' web based origins allow powerful integration of advanced features and new technologies to support learning.




LibreTexts is the adaptable, user-friendly non-profit open education resource platform that educators trust for creating, customizing, and sharing accessible, interactive textbooks, adaptive homework, and ancillary materials. We collaborate with individuals and organizations to champion open education initiatives, support institutional publishing programs, drive curriculum development projects, and more.

The LibreTexts libraries are Powered by NICE CXone Expert and was supported by the Department of Education Open Textbook Pilot Project, the California Education Learning Lab, the UC Davis Office of the Provost, the UC Davis Library, the California State University Affordable Learning Solutions Program, and Merlot. This material is based upon work supported by the National Science Foundation under Grant No. 1246120, 1525057, and 1413739.

Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation nor the US Department of Education.

Have questions or comments? For information about adoptions or adaptions contact info@LibreTexts.org or visit our main website at https://LibreTexts.org.

The LibreTexts name, logo, and book covers are trademarked by LibreTexts, Inc. (a 501(c)(3) not-for-profit organization) and protected against unauthorized use.

This text was compiled on 08/23/2026

# TABLE OF CONTENTS


**Licensing**

**1: Studying Adolescent Psychology**

1.1: Human Development

1.2: Key Issues in Human Development

1.3: The Forbidden Experiment

1.4: The Lifespan Perspective

1.5: Glossary

**2: Psychological Research**

2.1: The Scientific Method

2.2: Quantitative and Qualitative Approaches to Research

2.3: Descriptive Research

2.4: Methods of Data Collection

2.5: Analyzing Data- Correlational and Experimental Research

2.6: Correlational Research

2.7: Experimental Research

2.8: Developmental Research Designs

2.9: Challenges in Conducting Developmental Research

2.10: Glossary

**3: Psychological Approaches**

3.1: Understanding Theories

3.2: History of Developmental Psychology

3.3: Contemporary Psychological Approaches

3.4: Psychodynamic Approach

3.5: Behavioral Approach

3.6: Humanistic Approach

3.7: Cognitive Approach

3.8: Contextual Approach

3.9: Biopsychology and Evolutionary Psychology

3.10: Comparing Contemporary Approaches

3.11: Glossary

**4: Physical Development during Adolescence**

4.1: Puberty Begins

4.2: Sexual Development

4.3: Health Concerns during Adolescence

4.4: Glossary

## 5: Brain Development during Adolescence

5.1: Brain Basics

5.2: Brain Changes during Adolescence

5.3: Adolescent Sleep

5.4: Teens and Risk-Taking Behavior

5.5: Inside the Teenage Brain

5.6: Behavioral and Psychological Adjustment

5.7: Glossary

## 6: Cognitive Changes during Adolescence

6.1: Constructivist Theories

6.2: Psychological Constructivism

6.3: Social Constructivism

6.4: Information Processing Theories

6.5: Intelligence

6.6: Glossary

## 7: Learning, Achievement, and Work in Adolescence

7.1: Education

7.2: Understanding Learning Difficulties

7.3: Academic Achievement

7.4: Work and Career

7.5: Glossary

## 8: Identity Development

8.1: Identity Formation

8.2: Identity Development Theory

8.3: Domains of Identity

8.4: Glossary

## 9: Moral Development

9.1: Theories of Moral Development

9.2: Modern Views of Moral Development

9.3: Influences on Moral Development

9.4: Moral Reasoning in Adolescence

9.5: Glossary

## 10: Changing Family Relationships

10.1: Key Components of Good Parenting

10.2: Family Life

10.3: Child Maltreatment

10.4: Stress and Development

10.5: Glossary

## 11: Changing Peer Relationships

11.1: Peer Relationships

11.2: Sociometric Peer Status

11.3: Bullying

11.4: Teen Dating

11.5: Glossary

## 12: Intimacy and Sexuality

12.1: Sexual Development in Adolescence

12.2: Finding Love, Intimacy, and Romance in Early Adulthood

## 13: Emerging and Early Adulthood

13.1: Emerging Adulthood

13.2: When Does Adulthood Begin?

13.3: Physical Development in Emerging and Established Adulthood

13.4: A Healthy but Risky Time

13.5: Gender

13.6: Sexuality

13.7: Cognitive Development in Emerging and Early Adulthood

13.8: Education and Career

13.9: Psychosocial Development in Emerging and Early Adulthood

13.10: Attachment in Young Adulthood

13.11: Relationships and Intimacy

13.12: Emerging and Established Adult Lifestyles

13.13: Intimate Partner Abuse

13.14: Parenthood

13.C: COVID-19 Impact on Emerging and Established Adulthood

13.R: Emerging and Early Adulthood (References)

## 14: Issues in Adolescence

14.1: Adolescent Sleep

14.2: Health During Adolescence

14.3: Eating Disorders

14.4: Adolescents' Relationships

14.5: Adolescent Sexual Activity

14.6: COVID-19 Impact on Adolescence

14.7: Teenage Drivers

14.8: Behavioral and Psychological Adjustment

14.9: Teenagers and Working

## 15: Extra chapters/content

### 15.1: Adolescence

15.1.1: Growth in Adolescence

15.1.2: Adolescent Brain
15.1.3: Cognitive Development in Adolescence
15.1.4: Psychosocial Development in Adolescence
15.1.R: Adolescence (References)

**15.2: Adolescence**
15.2.1: Why It Matters- Adolescence
15.2.2: Introduction to Physical Growth and Development in Adolescence
15.2.3: Physical Development during Adolescence
15.2.4: Brain Development During Adolescence
15.2.5: Introduction to Cognitive Development in Adolescence
15.2.6: Cognitive Development during Adolescence
15.2.7: Introduction to Emotional and Social Development in Adolescence
15.2.8: Social Development during Adolescence
15.2.9: Putting It Together- Adolescence
15.2.10: Discussion- Adolescence
15.2.11: Assignment- Build an Interactive
15.2.12: Discussion- Adolescence Interview Assignment

**15.3: Adolescence**
15.3.1: Introduction to Adolescence
15.3.2: Physical Development
15.3.3: Cognitive Development
15.3.4: Social Development
15.3.5: Adolescence
15.3.6: Adolescence

**15.4: Adolescence**
15.4.1: Introduction to Adolescense
15.4.2: Physical Development
15.4.3: Cognitive Development
15.4.4: Social Development
15.4.5: Lecture- Adolescence

**15.5: Early Adulthood**
15.5.1: Introduction to Early Adulthood
15.5.2: Physical Development
15.5.3: Cognitive Development
15.5.4: Psychosocial Development
15.5.5: Types of Love
15.5.6: Love Attitude Scale
15.5.7: Love Styles
15.5.8: Adolescence and Early Adulthood

15.5.9: Early Adulthood
15.5.10: Early Adulthood
15.5.11: Adolescence and Early Adulthood
15.5.12: Unit 3 Exam

**15.6: Early Adulthood**
15.6.1: Lecture- Early Adulthood
15.6.2: Physical Development
15.6.3: Cognitive Development
15.6.4: Psychosocial Development
15.6.5: Activity- Love Attitude Scale
15.6.6: Types of Love
15.6.7: Work and Personality

**15.7: Young Adulthood**
15.7.1: Emerging Adulthood
15.7.2: Health and Physical Development for Young Adults
15.7.3: Gender in Young Adulthood
15.7.4: Sexuality in Young Adulthood
15.7.5: Cognitive Development in Young Adulthood
15.7.6: Work and Education in Young Adulthood
15.7.7: Psychosocial Development in Young Adulthood
15.7.8: Young Adult Lifestyles
15.7.9: Part 4 References

**15.8: Physical and Cognitive Development in Adolescence (Ages 12 to 18)**
15.8.1: What Does Psychology Say?
15.8.2: Physical Growth and Development in Adolescence
15.8.3: Puberty, Sexual Behavior, and Sexual Health in Adolescence
15.8.4: Cognition in Adolescence
15.8.5: Decision-Making and Risky Behaviors in Adolescence
15.8.6: Key Terms
15.8.7: Summary
15.8.8: Review Questions
15.8.9: Check Your Understanding Questions
15.8.10: Personal Application Questions
15.8.11: Essay Questions

**15.9: Physical and Cognitive Development in Early Adulthood (Ages 18 to 29)**
15.9.1: What Does Psychology Say?
15.9.2: Becoming an Adult
15.9.3: Physical Health and Growth in Early Adulthood
15.9.4: Sexuality in Early Adulthood

15.9.5: Cognitive Development in Early Adulthood
15.9.6: Contexts - Higher Education and Work Achievement in Early Adulthood
15.9.7: Key Terms
15.9.8: Summary
15.9.9: Review Questions
15.9.10: Check Your Understanding Questions
15.9.11: Personal Application Questions
15.9.12: Essay Questions

**15.10: Social and Emotional Development in Adolescence (Ages 12 to 18)**
15.10.1: What Does Psychology Say?
15.10.2: Theories of Adolescent Socioemotional Development
15.10.3: Emotional and Self-Development in Adolescence
15.10.4: Identity and Culture- Race/Ethnicity, Gender, and Sexuality in Adolescence
15.10.5: Social Contexts in Adolescence
15.10.6: Family and Community Contexts in Adolescence
15.10.7: Key Terms
15.10.8: Summary
15.10.9: Review Questions
15.10.10: Check Your Understanding Questions
15.10.11: Personal Application Questions
15.10.12: Essay Questions

**15.11: Social and Emotional Development in Early Adulthood (Ages 18 to 29)**
15.11.1: What Does Psychology Say?
15.11.2: The Development of Self in Early Adulthood
15.11.3: Identity Development in Context in Early Adulthood
15.11.4: Relationships with Friends and Family in Early Adulthood
15.11.5: Contexts- School and Work Settings in Early Adulthood
15.11.6: Key Terms
15.11.7: Summary
15.11.8: Review Questions
15.11.9: Check Your Understanding Questions
15.11.10: Personal Application Questions
15.11.11: Essay Questions

**15.12: Early Adulthood**
15.12.1: Why It Matters- Early Adulthood
15.12.2: Introduction to Physical Development in Early Adulthood
15.12.3: Developmental Tasks of Early Adulthood
15.12.4: Physical Development in Early Adulthood
15.12.5: Sex and Fertility in Early Adulthood
15.12.6: Introduction to Cognitive Development in Early Adulthood

15.12.7: Cognitive Development in Early Adulthood
15.12.8: Education and Work
15.12.9: Introduction to Theories of Adult Psychosocial Development
15.12.10: Theories of Early Adult Psychosocial Development
15.12.11: Emerging Adulthood
15.12.12: Introduction to Relationships in Early Adulthood
15.12.13: Attraction and Love
15.12.14: Trends in Dating, Cohabitation, and Marriage
15.12.15: Parenting
15.12.16: Putting It Together- Early Adulthood
15.12.17: Discussion- Early Adulthood
15.12.18: Assignment- Emerging Adulthood in the Media
15.12.19: Discussion- Dating and Marriage Interview Assignment
15.12.20: Assignment- My Development Journal

15.13: Research Methods
15.13.1: Introduction to Research in Lifespan Development
15.13.2: Research Methods
15.13.3: Correlational and Experimental Research
15.13.4: Developmental Research Designs
15.13.5: Challenges Conducting Developmental Research
15.13.6: Conducting Ethical Research
**15.13.7: Extras - Keep/Delete**
15.13.7.1: Research Methods
15.13.7.2: Research Designs
15.13.7.3: Developmental Research Designs
15.13.7.4: The Cohort Effect

15.14: Developmental Theories
**15.14.1: Historical Theories on Development**
15.14.1.1: Psychodynamic Theory
**15.14.2: Contemporary Theories on Development**
15.14.2.1: Psychosocial Theory
15.14.2.2: Exploring Behaviour
15.14.2.3: Exploring Cognition

**15.15: Adolescence - Physical Development**
15.15.1: Physical Growth
15.15.2: Brain Growth
15.15.3: Physical Changes in Adolescence
15.15.4: Adolescent Health- Sleep, Diet, and Exercise
15.15.5: Maintaining Emotional Health

15.15.6: Disorders and Syndromes
15.15.S: Summary

**15.16: Adolescence - Cognitive Development**
15.16.1: Cognitive Development in Adolescence
15.16.2: Cognitive Changes in the Brain
15.16.3: Cognitive Theorists- Piaget, Elkind, Kohlberg, and Gilligan
15.16.4: Information Processing Theory- Memory, Encoding, and Storage
15.16.5: Adolescence (A Time of Transitions)
15.16.6: Wisdom and Risk-Taking
15.16.S: Summary

**15.17: Adolescence - Social Emotional Development**
15.17.1: Erik Erikson – Theory of Psychosocial Development
15.17.2: James Marcia – Theory of Identity Development
15.17.3: Development of Identity and Self Concept - Who am I?
15.17.4: Development of Gender Identity
15.17.5: Socialization Agents During Adolescence
15.17.6: Community, Society, and Culture
15.17.7: Media- Influences on Teens
15.17.8: Development of Sexual Identity
15.17.9: Antisocial Behavior in Adolescence
15.17.10: Antisocial Behaviors, Violence, and Child Abuse
15.17.11: Violence and Abuse
15.17.12: Emerging Adulthood - The Bridge Between Adolescence and Adulthood
15.17.S: Summary

**15.18: Education**
15.18.1: School During Adolescence

**15.19: Identity Formation**
15.19.1: Moral Reasoning During Adolescence

**Index**

**Glossary**

**Detailed Licensing**

**Detailed Licensing**

This page titled Psychology of Adolescence is shared under a license and was authored, remixed, and/or curated by Nicole Rosa & Kathryn Frazier.

# Licensing

*A detailed breakdown of this resource's licensing can be found in* ***Back Matter/Detailed Licensing***.

This page titled Licensing is shared under a license and was authored, remixed, and/or curated by Nicole Rosa and Kathryn Frazier.

# 1: STUDYING ADOLESCENT PSYCHOLOGY

## Learning Objectives

- Describe human development and its three domains: physical, cognitive, and psychosocial development
- Explain key human development issues about the nature of change: continuous/discontinuous, one course/multiple courses, and nature/nurture
- Describe Baltes' lifespan perspective with its key principles about development
- Explain what is meant by development being lifelong, multidimensional, and multidirectional
- Explain contextual influences on development

**Adolescent psychology** is the study of human development with a focus on the adolescent year and issues specific to this age group. In general, development examines patterns of growth, change, and stability by applying universal principles of development, including variations due to culture, race, ethnicity, and individual differences. The study of development investigates changes in the physical or biological, cognitive, and psychosocial or socioemotional domains, as well as the interactions between changes in these domains.

Adolescence is a developmental stage that has been defined as starting with puberty and ending with the transition to adulthood (approximately ages 10–20). Adolescence has evolved historically, with evidence indicating that this stage is lengthening as individuals start puberty earlier and transition to adulthood later than in the past. Puberty today begins, on average, at age 10–11 years for girls and 11–12 years for boys. This average age of onset has decreased gradually over time since the 19th century by 3–4 months per decade, which has been attributed to a range of factors including better nutrition, obesity, increased father absence, and other environmental factors (Steinberg, 2013). Completion of formal education, financial independence from parents, marriage, and parenthood have all been markers of the end of adolescence and beginning of adulthood, and all of these transitions happen, on average, later now than in the past. In fact, the prolonging of adolescence has prompted the introduction of a new developmental period called *emerging adulthood* that captures these developmental changes out of adolescence and into adulthood, occurring from approximately ages 18 to 29 (Arnett, 2000).

While we will be studying the period that we call adolescence, it is important to remember that developmental age ranges are social constructs. People mature at different rates and reach milestones at various points; we most often refer to milestone averages, but some people will be above or below the average. Environmental factors also influence development. Variations in development may exist in different cultures. When we discuss developmental theories and milestones, we are discussing the average, typical, or trend that applies to the most significant segments of the population. Individual and cultural variations exist and do not necessitate abnormality or concern.

You will discover that no matter the domain or topic of study, developmental psychologists consider several key questions. Is development continuous or discontinuous? Is development active or passive? Are there critical periods of development or only sensitive periods? Is development a result of nature or nurture? Does development vary due to cohort effects, sociocultural influences, and life events? In this chapter, we will explore these questions more in-depth.


1.1: Human Development

1.2: Key Issues in Human Development

1.3: The Forbidden Experiment

1.4: The Lifespan Perspective

1.5: Glossary



This page titled 1: Studying Adolescent Psychology is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 1: Studying Adolescent Psychology by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 1.1: Human Development

Development refers to humans' physical, cognitive, and psychosocial development throughout their lifespan. What types of development are involved in each of these three domains, or areas, of life? Physical development involves growth and changes in the body, brain, senses, motor skills, and health and wellness. Cognitive development involves learning, attention, memory, language, thinking, reasoning, and creativity. Psychosocial development involves emotions, personality, and social relationships.

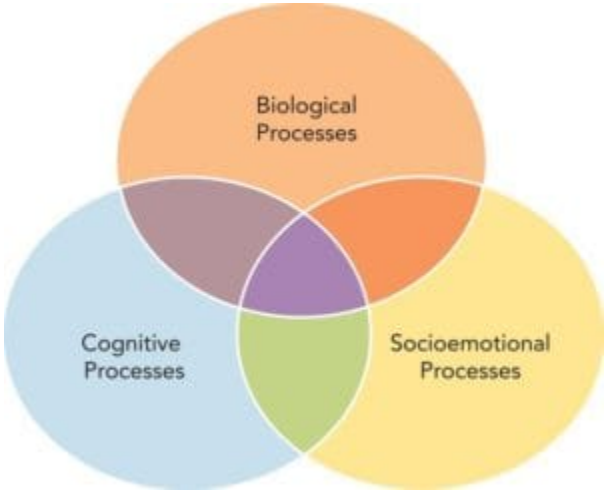



**Figure 1.2.1**. Physical, cognitive, and psychosocial development are interrelated.

## Physical Domain

Many of us are familiar with the height and weight charts that pediatricians consult to estimate if babies, children, and teens are growing within normative ranges of physical development. We may also be aware of changes in children's fine and gross motor skills and their increasing coordination, particularly in sports. But we may not realize that physical development also involves brain development, which enables childhood motor coordination and greater coordination between emotions and planning in adulthood, as our brains are not done developing in infancy or childhood. Physical development also includes puberty, sexual health, fertility, menopause, changes in our senses, and healthy habits with nutrition and exercise.

## Cognitive Domain

If we watch and listen to infants and toddlers, we can't help but wonder how they learn so much so fast, particularly regarding language development. Then as we compare young children to those in middle childhood, there appear to be considerable differences in their ability to think logically about the concrete world around them. Cognitive development includes mental processes, thinking, learning, and understanding, and it doesn't stop in childhood. Adolescents develop the ability to think logically about the abstract world (and may like to debate matters with adults as they exercise their new cognitive skills!). Moral reasoning develops further, as does practical intelligence—wisdom may develop with experience over time. Memory abilities and different forms of intelligence tend to change with age. Brain development and the brain's ability to adapt and compensate for losses are significant to cognitive functions across the lifespan, too.

## Psychosocial Domain

Development in the psychosocial (or socioemotional) domain involves what's going on both psychologically and socially. Early on, the focus is on infants and caregivers, as temperament and attachment are significant. As the social world expands and the child grows psychologically, different types of play and interactions with other children and teachers become essential. Psychosocial development involves emotions, personality, self-esteem, and relationships. Peers become more important for adolescents, who are exploring new roles and forming their own identities. Dating, romance, cohabitation, marriage, having children, and finding

work or a career are all parts of the transition into adulthood. Psychosocial development continues across adulthood with similar (and some different) developmental issues of family, friends, parenting, romance, divorce, remarriage, blended families, caregiving for elders, becoming grandparents and great-grandparents, retirement, new careers, coping with losses, and death and dying.

As you may have already noticed, physical, cognitive, and psychosocial development are often interrelated. Puberty exemplifies this interaction well. Puberty is a biological change that releases hormones that spurs the maturation of sex organs and physical growth. However, puberty also triggers changes within the brain that affect cognition, emotions, and social relationships. Puberty often comes with mood swings but also an improved ability to self-regulate. Puberty is also when relationships change with parents and peers. While puberty may be a topic within the physical domain, there is clearly an interaction with the other areas.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 1.2.1.** *Domains in Development* describes the three domains and how those domains interact.

https://assessments.lumenlearning.co...essments/16494

## Who Studies Development and Why?

Many academic disciplines contribute to the study of development, and developmental psychology is related to other applied fields. The study of development informs several applied fields in psychology, including educational psychology, psychopathology, and forensic developmental psychology. It also complements several other specific areas of psychology, including social psychology, cognitive psychology, and comparative psychology. This multidisciplinary course is made up of contributions from researchers in the areas of biology, health care, anthropology, nutrition, and sociology, among others.

The main goals of those studying development are to describe, predict, and explain changes. Throughout this course, we will describe observations during development, predict courses and milestones for change, and then examine how theories explain these changes.

## Candela Citations

CC licensed content, Original

- Domains in Human Development. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...n-development/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Lifespan Development. **Provided by**: Lumen Learning. **Retrieved from**: https://courses.lumenlearning.com/wm...andevelopment/. **License**: CC BY: Attribution
- Lifespan Development. **Authored by**: Martha Lally and Suzanne Valentine-French. **Provided by**: College of Lake County Foundation. **Retrieved from**: http://dept.clcillinois.edu/psy/Life...evelopment.pdf. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

All rights reserved content

- Domains in Development. **Authored by**: Prof Newton. **Retrieved from**: https://youtu.be/pgaGa-B_5po. **License**: *All Rights Reserved*

This page titled 1.1: Human Development is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 1.1: Human Development by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 1.2: Key Issues in Human Development

There are many different theoretical approaches regarding human development. As we evaluate them in this course, recall that development focuses on how people change, and the approaches address the nature of change in different ways:

- Are changes an active or passive process?
- Is the change smooth or uneven (continuous versus discontinuous)?
- Is this pattern of change the same for everyone, or are there different patterns of change (one course of development versus many courses)?
- Are there prescribed periods in which change must occur (critical and sensitive periods)?
- How do genetics and environment interact to influence development (nature versus nurture)?

## Is Development Active or Passive?

How much does one play a role in their developmental path? Are we at the whim of our genetic inheritance or the environment that surrounds you, or are we able to decide and steer our development? Some theorists believe that humans play a much more active role in their development. Piaget, for instance, believed that children actively explore their world and construct new ways of thinking to explain the things they experience. Humanist theorists forward that people have self-determination. In contrast, many behaviorists view humans as being more passive in the developmental process, with outcomes being determined by their experiences. Evolutionary psychologists emphasize the role of heredity in determining development. As we explore various theories, ask yourself whether each approach considers development to be an active or passive process.

## Is Development Continuous or Discontinuous?

Is human development best characterized as a slow, gradual process, or as one of more abrupt change? The answer to that question often depends on which developmental theorist you ask and which topic is being studied. **Continuous development** theories view development as a cumulative process, gradually improving on existing skills (see figure below). With this type of development, there is a gradual change. Consider, for example, a child's physical growth: adding inches to their height year by year. In contrast, theorists who view development as **discontinuous** believe that development takes place in unique stages and that it occurs at specific times or ages. With this type of development, the change is more sudden, such as an infant's ability to demonstrate awareness of object permanence (which is a cognitive skill that develops toward the end of infancy, according to Piaget's cognitive theory—more on that theory in the next module).

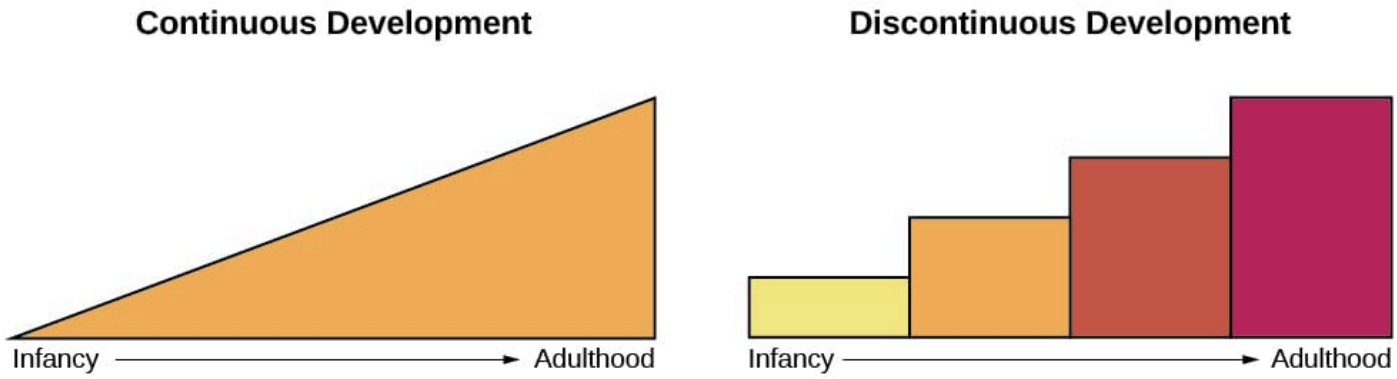



**Figure 1.3.1.** Visualizations of continuous and discontinuous development.

## Is There One Course of Development or Many?

Is development essentially the same, or universal, for all children (i.e., there is one course of development) or does development follow a different course for each child, depending on the child's specific genetics and environment (i.e., there are many courses of development)? Do people across the world share more similarities or more differences in their development? How much do

culture and genetics influence a child's behavior?

Stage theories hold that the sequence of development is universal. For example, in cross-cultural studies of language development, children from around the world reach language milestones in a similar sequence (Gleitman & Newport, 1995). Infants in all cultures coo before they babble. They begin babbling at about the same age and utter their first word around 12 months old. Yet we live in diverse contexts that have a unique effect on each of us. For example, researchers once believed that motor development followed one course for all children regardless of culture. However, childcare practices vary by culture, and different practices have been found to accelerate or inhibit the achievement of developmental milestones such as sitting, crawling, and walking (Karasik, Adolph, Tamis-LeMonda, & Bornstein, 2010).

For instance, let's look at the Aché society in Paraguay. They spend a significant amount of time foraging in forests. While foraging, Aché mothers carry their young children, rarely putting them down to protect them from getting hurt in the forest. Consequently, their children walk much later: They walk around 23–25 months old, in comparison to infants in Western cultures who begin to walk around 12 months old. However, as Aché children become older, they are allowed more freedom to move about, and by about age 9, their motor skills surpass those of U.S. children of the same age: Aché children can climb trees up to 25 feet tall and use machetes to chop their way through the forest (Kaplan & Dove, 1987). As you can see, our development is influenced by multiple contexts, so the timing of basic motor functions may vary across cultures. However, the functions are present in all societies.

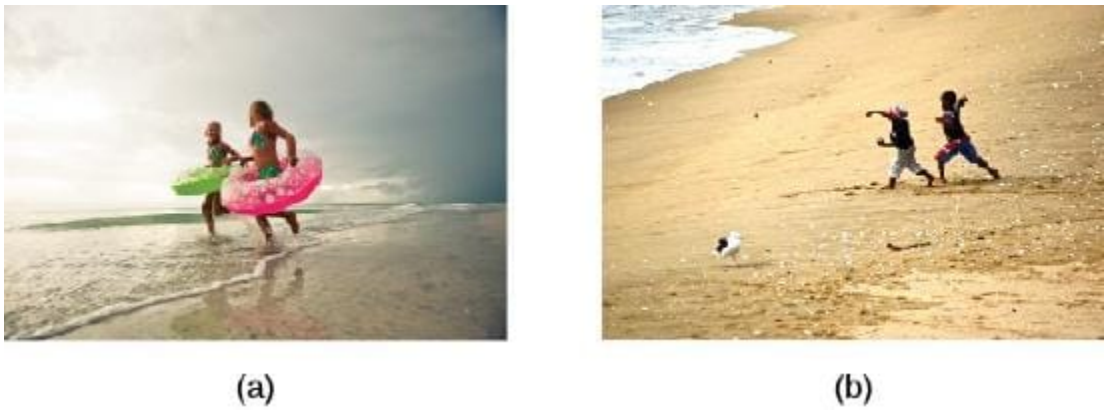



**Figure 1.3.2.** All children across the world love to play. Whether in (a) Florida or (b) South Africa, children enjoy exploring sand, sunshine, and the sea.

## Are there Critical or Sensitive Periods of Development?

Various developmental milestones are universal in timing. For example, most children begin learning and expressing language during their first year. However, what happens if a person misses that window of typical experience? What if the child were not exposed to language early in life, could they learn language in later years? Does the timing of experience influence development, and can it be corrected later?

Psychologists believe that there are time spans in which a person is biologically ready for certain developments, but successful progress is reliant on the person having essential experiences during that time. If these experiences fail to occur or occur after the time span ends, then the person will not develop normally or may not fully recover, even with later intervention.

Some aspects of development have critical periods; finite time spans in which specific experiences must occur for successful development. Once this period ends, later experiences would have no impact on this aspect of development. Failure to have the necessary experiences during the critical period will result in permanent impairments. For instance, a person that does not receive minimal nutrition during childhood would not reach their full height potential by adulthood. Even with excellent nutrition during adulthood, they would never grow taller because their critical period of growth has ended.

More often, developmental aspects are considered to have sensitive periods. Like critical periods, a sensitive period requires particular experiences during a specific time for development to occur. However, with sensitive periods, experiences after the period ends can support developmental gains later in life. It is not to say that post-period interventions will always be simple or successful. For example, someone that was not exposed to language in early childhood, with intervention and great effort, may be able to make some gains in late childhood, but may not fully recover all language-related skills.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 1.3.1.** *Sensitive vs Critical Periods of Learning* explains the differences between the two

## How Do Nature and Nurture Influence Development?

Are we who we are because of genetics, or are we who we are because of our environment? For instance, why do biological children sometimes act like their parents—is it because of genetics or because of early childhood environment and what the child has learned from their parents? What about children who are adopted—are they more like their biological families or more like their adoptive families? And how can siblings from the same family be so different?

This longstanding question is known in psychology as the nature versus nurture debate. For any particular aspect of development, those on the side of **nature** would argue that heredity plays the most important role in bringing about that feature. While those on the side of **nurture** would say that one's environment is most significant in shaping the way we develop. However, most scholars agree that there is a constant interplay between the two forces. It is difficult to isolate the root of any single outcome as a result solely of nature or nurture.

We are all born with specific genetic traits inherited from our parents, such as eye color, height, and certain personality traits. Beyond our basic genotype, however, there is a deep interaction between our genes and our environment. Our unique experiences in our environment influence whether and how particular traits are expressed, and at the same time, our genes influence how we interact with our environment (Diamond, 2009; Lobo, 2008). There is a reciprocal interaction between nature and nurture as they both shape who we become, but the debate continues as to the relative contributions of each.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 1.3.2.** *Gene-Environment Interaction* explains how nature and nurture interact to influence development.

https://assessments.lumenlearning.co...essments/16495

## Candela Citations

CC licensed content, Original

- Key Issues in Human Development. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...n-development/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Human Development. **Authored by**: Margaret Clark-Plaskie. **Provided by**: Lumen Learning. **Retrieved from**:

https://courses.lumenlearning.com/wm...n-development/. **License**: CC BY: Attribution

CC licensed content, Specific attribution

- Gene Environment Interaction. **Authored by**: Ryan Scott Patton. **Provided by**: Khan Academy. **Retrieved from**: https://youtu.be/sMyZO9YDlk8. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

All rights reserved content

- Sensitive vs Critical periods of learning - VCE Psychology. **Authored by**: Andrew Scott. **Retrieved from**: https://www.youtube.com/watch?v=ytRC15vIA24. **License**: *All Rights Reserved*

This page titled 1.2: Key Issues in Human Development is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 1.2: Key Issues in Human Development by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 1.3: The Forbidden Experiment

As previously discussed, psychologists are interested in the role of nature and nurture on human development. It is almost impossible to remove the influence of either nature or nurture to study only the influence of the other. The closest that we have come to this is the study of feral children.

A **feral child** (also called **wild child**) is a human child who has lived isolated from human contact from a very young age, and so has had little or no experience of human care, behavior, or human language. There are several confirmed cases and other speculative ones. Feral children may have experienced severe abuse or trauma before being abandoned or running away.

The following three cases are examples of feral children that spent part of their lives isolated from normal human society. Examining these cases helps us better understand the key concept of nature versus nurture. Note some of the differences between these cases and consider why these differences may exist.

## Oxana




## John



# Genie




## Candela Citations

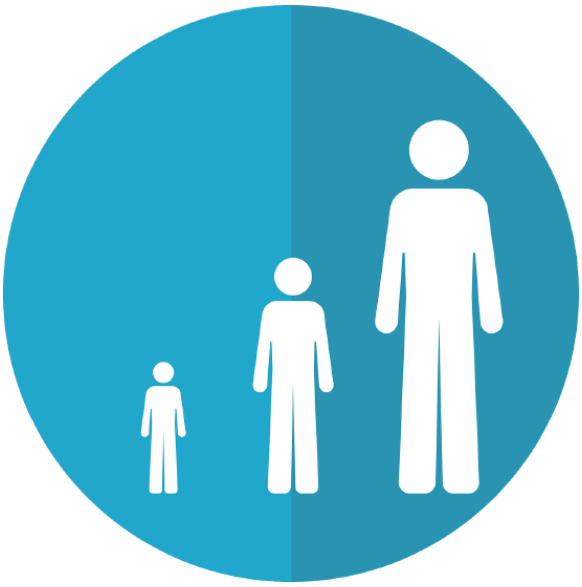
CC licensed content, Shared previously

- Feral Children. **Provided by**: Wikipedia. **Retrieved from**: https://en.wikipedia.org/wiki/Feral_child. **License**: CC BY: Attribution

This page titled 1.3: The Forbidden Experiment is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 1.3: The Forbidden Experiment by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 1.4: The Lifespan Perspective



Development has been presented as a theoretical perspective, proposing several fundamental, theoretical, and methodological principles about the nature of human development. An attempt by researchers has been made to examine whether research on the nature of development suggests a specific metatheoretical worldview. Several beliefs, taken together, form the "family of perspectives" that contribute to this particular view.

German psychologist Paul Baltes (1987), a leading expert on development, established one of the most widely accepted approaches to studying development called the **lifespan perspective**. This approach is based on several key assumptions:

- Development occurs across one's entire life, or is *lifelong*.
- Development is *multidimensional,* meaning it involves the dynamic interaction of factors like physical, emotional, and psychosocial development
- Development is *multidirectional* and results in gains and losses throughout life
- Development is *plastic*, meaning that characteristics are malleable or changeable.
- Development is influenced by *contextual* and socio-cultural influences.
- Development is *multidisciplinary*.

## Development is Lifelong

Lifelong development means that change is not completed in infancy or childhood or at any specific age; it encompasses the entire lifespan, from conception to death. The study of development traditionally focused almost exclusively on the changes occurring from conception to adolescence and the gradual decline in old age; it was believed that the five or six decades after adolescence yielded little to no developmental change at all. The current view reflects the possibility that specific changes in development can occur later in life, without having been established at birth. Later events in one's life can transform the early events of one's childhood. This belief clearly emphasizes that all stages of the lifespan contribute to the regulation of the nature of human development.

Many diverse patterns of change, such as direction, timing, and order, can vary among individuals and affect how they develop. For example, the developmental timing of events can affect individuals in different ways because of their current level of maturity and understanding. As individuals move through life, they are faced with many challenges, opportunities, and situations that impact their development. Remembering that development is a lifelong process helps us gain a broader perspective on the meaning and impact of each event.

## Development is Multidimensional

By multidimensionality, Baltes is referring to the fact that a complex interplay of factors influences development across the lifespan, including biological, cognitive, and socioemotional changes. Baltes argues that a dynamic interaction of these factors is what affects an individual's development.

For example, in adolescence, puberty consists of physiological and physical changes with changes in hormone levels, the development of primary and secondary sex characteristics, alterations in height and weight, and several other bodily changes. But these are not the only types of changes taking place; there are also cognitive changes, including the development of advanced cognitive faculties such as the ability to think abstractly. There are also emotional and social changes involving regulating emotions, interacting with peers, and possibly dating. The fact that the term puberty encompasses such a broad range of domains illustrates the multidimensionality component of development (think back to the physical, cognitive, and psychosocial domains of human development we discussed earlier).

## Development is Multidirectional

Baltes states that the development of a particular domain does not occur in a strictly linear fashion but that the development of certain traits can be characterized as having the capacity for both an increase and a decrease in efficacy over the course of an individual's life.

If we use the example of puberty again, we can see that certain domains may improve or decline in effectiveness during this time. For example, self-regulation is one domain of puberty that undergoes profound multidirectional changes during the adolescent period. During childhood, individuals have difficulty effectively regulating their actions and impulsive behaviors. Scholars have noted that this lack of effective regulation often results in children engaging in behaviors without fully considering the consequences of their actions. Throughout puberty, neuronal changes modify this unregulated behavior by increasing the ability to regulate emotions and impulses. Inversely, the ability of adolescents to engage in spontaneous activity and creativity, both domains commonly associated with impulse behavior, decreases over the adolescent period in response to changes in cognition. Neuronal changes to the limbic system and prefrontal cortex of the brain, which begin in puberty, lead to the development of self-regulation, and the ability to consider the consequences of one's actions (though recent brain research reveals that this connection will continue to develop into early adulthood).

Extending on the premise of multidirectionality, Baltes also argued that development is influenced by the "joint expression of features of growth (gain) and decline (loss)" (Baltes, 1987). This relation between developmental gains and losses occurs in a direction to selectively optimize particular capacities. This requires the sacrificing of other functions, a process known as selective optimization with compensation. According to the process of selective optimization, individuals prioritize particular functions above others, reducing the adaptive capacity of particulars for specialization and improved the efficacy of other modalities.

The acquisition of effective self-regulation in adolescents illustrates this gain/loss concept. As adolescents gain the ability to regulate their actions effectively, they may be forced to sacrifice other features to selectively optimize their reactions. For example, individuals may sacrifice their capacity to be spontaneous or creative if they are constantly required to make thoughtful decisions and regulate their emotions. Adolescents may also be forced to sacrifice their fast reaction times toward processing stimuli in favor of being able to consider the consequences of their actions fully.

https://assessments.lumenlearning.co...essments/16497

## Development is Plastic

Plasticity denotes intrapersonal variability and focuses heavily on the potentials and limits of the nature of human development. The notion of plasticity emphasizes that there are many possible developmental outcomes and that the nature of development is much more open and pluralistic than originally implied by traditional views; there is no single pathway that must be taken in an individual's development across the lifespan. Plasticity is imperative to current research because the potential for intervention is derived from the notion of plasticity in development. Undesired development or behaviors could potentially be prevented or changed.

As an example, recently, researchers have been analyzing how other senses compensate for the loss of vision in blind individuals. Without visual input, blind humans have demonstrated that tactile and auditory functions still fully develop, and they can use

tactile and auditory cues to perceive the world around them. One experiment designed by Röder and colleagues (1999) compared the auditory localization skills of people who are blind with people who are sighted by having participants locate sounds presented either centrally or peripherally (lateral) to them. Both congenitally blind adults and sighted adults could locate a sound presented in front of them with precision, but people who are blind were superior in locating sounds presented laterally. Currently, brain-imaging studies have revealed that the sensory cortices in the brain are reorganized after visual deprivation. These findings suggest that when vision is absent in development, the auditory cortices in the brain recruits areas that are normally devoted to vision, thus becoming further refined.

https://assessments.lumenlearning.co...essments/16498

## Development is Contextual

In Baltes' theory, the paradigm of contextualism refers to the idea that three systems of biological and environmental influences work together to influence development. Development occurs in context and varies from person to person, depending on factors such as a person's biology, family, school, church, profession, nationality, and ethnicity. Baltes identified three types of influences that operate throughout the life course: normative age-graded influences, normative history-graded influences, and non-normative influences. Baltes wrote that these three influences operate throughout the life course, their effects accumulate with time, and, as a dynamic package, they are responsible for how lives develop.

**Normative age-graded influences** are those biological and environmental factors that have a strong correlation with chronological age, such as puberty or menopause, or age-based social practices such as beginning school or entering retirement. **Normative history-graded influences** are associated with a specific time period that defines the broader environmental and cultural context in which an individual develops. For example, development and identity are influenced by historical events of the people who experience them, such as the Great Depression, WWII, Vietnam, the Cold War, the War on Terror, or advances in technology.

This has been exemplified in numerous studies, including Nesselroade and Baltes', showing that the level and direction of change in adolescent personality development were influenced as strongly by the socio-cultural settings at the time (in this case, the Vietnam War) as age-related factors. The study involved individuals of four different adolescent age groups who all showed significant personality development in the same direction (a tendency to occupy themselves with ethical, moral, and political issues rather than cognitive achievement). Similarly, Elder showed that the Great Depression was a setting that significantly affected the development of adolescents and their corresponding adult personalities by showing a similar common personality development across age groups. Baltes' theory also states that the historical socio-cultural setting had an effect on the development of an individual's intelligence. The areas of influence that Baltes thought most important to the development of intelligence were health, education, and work. The first two areas, health, and education, significantly affect adolescent development because healthy children who are educated effectively will tend to develop a higher level of intelligence. The environmental factors, health, and education have been suggested by Neiss and Rowe to have as much effect on intelligence as inherited intelligence.

**Non-normative influences** are unpredictable and not tied to a certain time in a person's development or to a historical period. They are the unique experiences of an individual, whether biological or environmental, that shape the development process. These could include milestones like earning a master's degree or getting a certain job offer or other events like going through a divorce or coping with the death of a child.

The most important aspect of contextualism as a paradigm is that the three systems of influence work together to affect development. Concerning adolescent development, the age-graded influences would help to explain the similarities within a cohort, the history-graded influences would help to explain the differences between cohorts, and the non-normative influences would explain the idiosyncrasies of each adolescent's individual development. When all influences are considered together, it provides a broader explanation of an adolescent's development.

https://assessments.lumenlearning.co...essments/16499

## Other Contextual Influences on Development: Cohort, Socioeconomic Status, and Culture

What is meant by the word "context"? It means that we are influenced by when and where we live. Our actions, beliefs, and values are a response to the circumstances surrounding us. Sternberg describes contextual intelligence as the ability to understand what

is called for in a situation (Sternberg, 1996). The key here is to understand that behaviors, motivations, emotions, and choices are all part of a bigger picture. Our concerns are such because of who we are socially, where we live, and when we live; they are part of a social climate and set of realities that surround us. Important social factors include cohort, social class, gender, race, ethnicity, and age. Let's begin by exploring two of these: cohort and social class.

A **cohort** is a group of people who are born at roughly the same time period in a particular society. Cohorts share histories and contexts for living. Members of a cohort have experienced the same historical events and cultural climates which have an impact on the values, priorities, and goals that may guide their lives. Consider the differences in experiences of someone from the 'Silent' generation that lived with constant scarcity and rationing during WWII versus the economic prosperity that followed for the 'Baby Boomer' generation and how those historical contexts influence their development.

## Watch It

**Video 1.4.1.** *Generations Throughout History* describes the normative history-graded influences that shaped the development of seven generations over the past 125 years of United States history. Can you identify your generation? Does the description seem accurate?

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

Another context that affects our lives is our social standing, socioeconomic status, or social class. **Socioeconomic status** is a way to identify families and households based on their shared levels of education, income, and occupation. While there is certainly individual variation, members of a social class tend to share similar lifestyles, patterns of consumption, parenting styles, stressors, religious preferences, and other aspects of daily life. We also find differences between social classes in these and other areas of development. Often, those in low socioeconomic groups, people living in poverty, are disadvantaged, lack opportunities, and have different life experiences than those with more financial stability and wealth.

**Poverty** describes the state of not having access to material resources, wealth, or income, and also includes the lack of opportunity to improve one's standard of living and acquire resources. **Life chances** is a term used to describe someone's access to marketplace resources—essentially, how likely it is in their environment that they might be able to find employment or have a social safety net. Someone who is living in poverty but has high life chances may be able to improve their economic standing, but someone with low life chances will likely have a consistently low standard of living. The term for a person's ability to change their economic status in a society is known as **social mobility**.

When families have low social mobility, they may become trapped in poverty for generations; we refer to this as the **cycle of poverty**. Typically, these families have either limited or nonexistent social and economic resources. There are many disadvantages that collectively work in a circular process to make it virtually impossible for individuals to break the cycle of poverty. They are less likely to have financial capital, education, job skills, reliable transportation, and social capital (connections to people with specialized knowledge or in power). Without these resources, poverty-stricken individuals experience disadvantages that, in turn, increase their poverty.

Additionally, those living in poverty suffer disproportionately from hunger, poor nutrition, and exhibit disproportionately high rates of physical and mental health issues. These illnesses can be disabling, preventing people in poverty from working, thus reducing one's opportunities to improve their social and economic status.

Finally, poverty increases the risk of homelessness. People who are homeless have low access to neighborhood resources, high-status social contacts, or basic services such as a phone line, limiting their ability to improve their economic position, again perpetuating poverty.

**Culture** is often referred to as a blueprint or guideline shared by a group of people that specifies how to live. It includes ideas about what is right and wrong, what to strive for, what to eat, how to speak, what is valued, as well as what kinds of emotions are called for in certain situations. Culture teaches us how to live in a society and allows us to advance because each new generation can benefit from the solutions found and passed down from previous generations.

Culture is learned from parents, schools, churches, media, friends, and others throughout a lifetime. The kinds of traditions and values that evolve in a particular culture serve to help members function in their society and value their society. We tend to believe that our own culture's practices and expectations are the right ones. This belief that our own culture is superior is called ethnocentrism and is a normal by-product of growing up in a culture. It becomes a roadblock, however, when it inhibits understanding of cultural practices from other societies. Cultural relativity is an appreciation for cultural differences and the understanding that cultural practices are best understood from the standpoint of that particular culture.

Culture is a crucial context for human development, and understanding development requires being able to identify which features of development are culturally based. This understanding is somewhat new and still being explored. So much of what developmental theorists have described in the past has been culturally bound and difficult to apply to various cultural contexts. For example, Erikson's theory that teenagers struggle with identity assumes that all teenagers live in a society in which they have many options and must make an individual choices about their future. In many parts of the world, one's identity is determined by family status or society's dictates. In other words, there is no choice to make.

Even the most biological events can be viewed in cultural contexts that are incredibly varied. Consider two very different cultural responses to menstruation in young girls. In the United States, girls in public schools often receive information on menstruation around 5th grade, get a kit containing feminine hygiene products, and receive some sort of education about sexual health. Contrast this with some developing countries where menstruation is not publicly addressed, or where girls on their period are forced to miss school due to limited access to feminine products or unjust attitudes about menstruation.

### How Does socioeconomic status affect language development?

The achievement gap refers to the persistent difference in grades, test scores, and graduation rates that exist among students of different ethnicities, races, and—in certain subjects—sexes (Winerman, 2011). Research suggests that these achievement gaps are strongly influenced by differences in socioeconomic factors that exist among the families of these children. Low-income children perform significantly more poorly than their middle- and high-income peers on a number of educational variables: They have significantly lower standardized test scores, graduation rates, and college entrance rates, and they have much higher school dropout rates. Many of these problems start before the children even enter school.

Psychologists Betty Hart and Todd Risley (2006) spent their careers looking at early language ability and progression of children at various income levels. In one longitudinal study, researchers found that although all the parents in the study engaged and interacted with their children, middle- and high-income parents interacted with their children differently than low-income parents. The researchers found that middle- and high-income parents talk to their children significantly more, starting when the children are infants. By age 3, high-income children knew almost double the number of words known by low-income children, and they heard about 30 million more words than their low-income counterparts (Hart & Risley, 2003). These gaps become more pronounced by kindergarten, with high-income children scoring 60% higher on achievement tests than their low-income peers (Lee & Burkam, 2002).

There are solutions to this problem. Experts are working with low-income families to encourage them to speak more to their children and designing preschools in which students from diverse economic backgrounds are placed in the same classroom (Schechter & Byeb, 2007).

## Development is Multidisciplinary

Any single discipline's account of development across the lifespan would not be able to express all aspects of this theoretical framework. That is why it is suggested explicitly by lifespan researchers that a combination of disciplines is necessary to understand development. Psychologists, sociologists, neuroscientists, anthropologists, educators, economists, historians, medical researchers, and others may all be interested and involved in research related to the normative age-graded, normative history-graded, and nonnormative influences that help shape development. Many disciplines contribute important concepts that integrate knowledge, which may ultimately result in the formation of a new and enriched understanding of development across the lifespan.

THINK IT OVER

- Consider your cohort. Can you identify it? Does it have a name, and if so, what does the name imply? To what extent does your cohort shape your values, thoughts, and aspirations? (Some cohort labels popularized in the media for generations in the United States include Baby Boomers, Generation X, Millennials, and Generation Z.)
- Think of other ways culture may have affected your development. How might cultural differences influence interactions between teachers and students, nurses and patients, or other relationships?

## Candela Citations

CC licensed content, Original

- The Lifespan Perspective. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...n-perspective/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- The Lifespan Perspective. **Authored by**: Margaret Clark-Plaskie. **Provided by**: Lumen Learning. **Retrieved from**: https://courses.lumenlearning.com/wm...andevelopment/. **License**: CC BY-SA: Attribution-ShareAlike
- Poverty. **Provided by**: Lumen Learning. **Retrieved from**: https://courses.lumenlearning.com/bo...apter/poverty/. **License**: CC BY-SA: Attribution-ShareAlike

This page titled 1.4: The Lifespan Perspective is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 1.4: The Lifespan Perspective by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

**continuous development:** the idea that development is a progressive and cumulative process, gradually improving on existing skills

**cohort:** a group of people who are born at roughly the same period in a particular society. Cohorts share histories and contexts for living[/glossary-definition

**culture:** blueprint or guideline shared by a group of people that specifies how to live; passed down from generation to generation; learned from parents and others

**cycle of poverty:** when families with ow social mobility become trapped in poverty for generations

**discontinuous development:** idea that development takes place in unique stages and occurs at specific times or ages

**life chances:** someone's access to marketplace resources

**lifespan perspective:** an approach to studying development which emphasizes that development is lifelong, multidimensional, multidirectional, plastic, contextual, and multidisciplinary

**nature:** the influences of biology and genetics on behavior

**non-normative influences:** unpredictable influences not tied to a certain developmental time, personally or historical period

**normative age-graded influences:** biological and environmental factors that have a strong correlation with chronological age

**normative history-graded influences:** influences associated with a specific time period that define the broader bio-cultural context in which an individual develops

**nurture:** environmental, social, and cultural influences of behavior

**poverty:** the state of not having access to material resources, wealth, or income

**social mobility:** the ability to change one's economic status in a society

**socioeconomic status: a** way to identify families and households based on their shared levels of education, income, and occupation

This page titled 1.5: Glossary is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 1.5: Glossary by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 2: PSYCHOLOGICAL RESEARCH

Learning Objectives

- Explain how the scientific method is used in researching development
- Compare various types and objectives of developmental research
- Describe methods for collecting research data (including observation, survey, case study, content analysis, and secondary content analysis)
- Explain correlational research
- Describe the value of experimental research
- Compare the advantages and disadvantages of developmental research designs (cross-sectional, longitudinal, and sequential)
- Describe challenges associated with conducting research in lifespan development

How do we know what changes and stays the same (and when and why) in development? We rely on research that utilizes the scientific method so that we can have confidence in the findings. How data are collected and analyzed vary by the type of information sought. The design of the study will affect the data and the conclusions that can be drawn from them about actual age changes.

## Research in Development

An essential part of learning any science is having a basic knowledge of the techniques used in gathering information. The hallmark of scientific investigation is that of following a set of procedures designed to keep questioning or skepticism alive while describing, explaining, or testing any phenomenon. Not long ago, a friend said to me that he did not trust academicians or researchers because they always seem to change their stories. That, however, is precisely what science is all about; it involves continuously renewing our understanding of the subjects in question and an ongoing investigation of how and why events occur. Science is a vehicle for going on a never-ending journey. In the area of development, we have seen changes in recommendations for nutrition, in explanations of psychological states as people age, and in parenting advice. So think of learning about human development as a lifelong endeavor.

## Personal Knowledge

How do we know what we know? Take a moment to identify two things that you know about adolescence. Now, how do you know? Chances are you know these things based on your own history (experiential reality), what others have told you, or cultural ideas (agreement reality) (Seccombe and Warner, 2004). There are several problems with personal inquiry, or drawing conclusions based on our personal experiences. Read the following sentence aloud:

Paris in the
the spring

Are you sure that is what it said? Read it again.

If you read it differently the second time (adding the second “the”), you just experienced one of the problems with relying on personal inquiry; that is, the tendency to see what we believe. Our assumptions very often guide our perceptions; consequently, when we believe something, we tend to see it even if it is not there. Have you heard the saying, “seeing is believing”? Well, the truth is just the opposite: believing is seeing. This problem may just be a result of cognitive ‘blinders,’ or it may be part of a more conscious attempt to support our own views. Confirmation bias is the tendency to look for evidence that we are right, and in so doing, we ignore contradictory evidence.

Philosopher Karl Popper suggested that the distinction between that which is scientific and that which is unscientific is that science is falsifiable; scientific inquiry involves attempts to reject or refute a theory or set of assumptions (Thornton, 2005). A theory that cannot be falsified is not scientific. And much of what we do in personal inquiry involves drawing conclusions based on what we have personally experienced or validating our own experience by discussing what we think is true with others who

share the same views.

Science offers a more systematic way to make comparisons and guard against bias. One technique used to avoid sampling bias is to select participants for a study in a random way. This means using a technique to ensure that all members have an equal chance of being selected. Simple random sampling may involve using a set of random numbers as a guide in determining who is to be selected. For example, if we have a list of 400 people and wish to randomly select a smaller group or sample to be studied, we use a list of random numbers and select the case that corresponds with that number (Case 39, 3, 217, etc.). This is preferable to asking only those individuals with whom we are familiar to participate in a study; if we conveniently chose only people we know, we know nothing about those who had no opportunity to be selected. There are many more elaborate techniques that can be used to obtain samples that represent the composition of the population we are studying. But even though a randomly selected representative sample is preferable, it is not always used because of costs and other limitations. As a consumer of research, however, you should know how the sample was obtained and keep this in mind when interpreting results. It is possible that what was found was limited to that sample or similar individuals and not generalizable to everyone else.


2.1: The Scientific Method

2.2: Quantitative and Qualitative Approaches to Research

2.3: Descriptive Research

2.4: Methods of Data Collection

2.5: Analyzing Data- Correlational and Experimental Research

2.6: Correlational Research

2.7: Experimental Research

2.8: Developmental Research Designs

2.9: Challenges in Conducting Developmental Research

2.10: Glossary



This page titled 2: Psychological Research is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 2: Psychological Research by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 2.1: The Scientific Method

The general scientific approach has three fundamental features (Stanovich, 2010). The first is *systematic empiricism*. Empiricism refers to learning based on observation, and scientists learn about the natural world systematically, by carefully planning, making, recording, and analyzing observations of it. The second feature of the scientific approach is that it is concerned with *empirical questions*. These are questions about the way the world actually is and, therefore, can be answered by systematically observing it. The third feature is that it creates *public knowledge*. After asking empirical questions, making observations, and drawing their conclusions, scientists publish their work. This usually means writing an article for publication in a professional journal, in which they put their research question in the context of previous research, describe in detail the methods they used to answer their question, and clearly present their results and conclusions. Publication is an essential feature of science for two reasons. One is that science is a social process—a large-scale collaboration among many researchers distributed across both time and space. Our current scientific knowledge of most topics is based on many different studies conducted by many different researchers who have shared their work with each other over the years. The second is that publication allows science to be self-correcting. Individual scientists understand that despite their best efforts, their methods can be flawed, and their conclusions incorrect. Publication allows others in the scientific community to detect and correct these errors so that, over time, scientific knowledge increasingly reflects the way the world actually is.

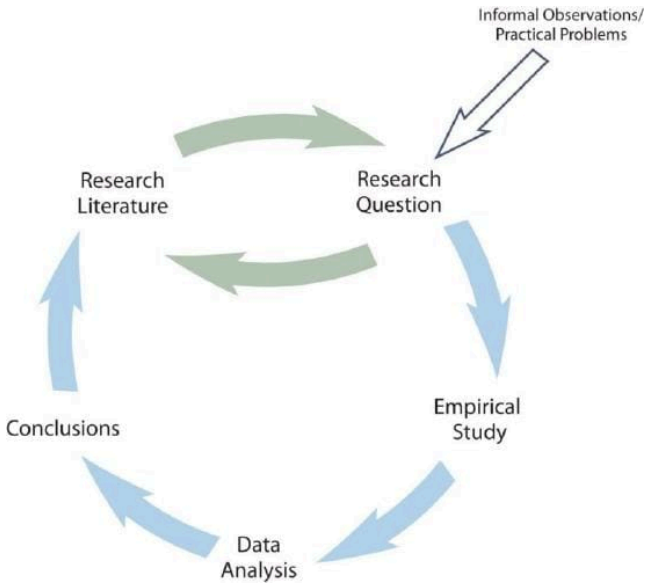



**Figure 2.2.1.** Simple model of scientific research in psychology.

Figure 2.2.1 is a simple model of scientific research in psychology and presents a more specific model of scientific research in psychology. The researcher (who more often than not is really a small group of researchers) formulates a research question, conducts a study designed to answer the question, analyzes the resulting data, draws conclusions about the answer to the question, and publishes the results so that they become part of the research literature. Because the research literature is one of the primary sources of new research questions, this process can be thought of as a cycle. New research leads to new questions, which leads to new research, and so on. The model also indicates that research questions can originate outside of this cycle, either with informal observations or with practical problems that need to be solved. But even in these cases, the researcher would start by checking the research literature to see if the question had already been answered and to refine it based on what previous research had already found.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 2.2.1.** The Scientific Method explains the basic steps taken for most scientific inquiry.

https://assessments.lumenlearning.co...sessments/2695

## Candela Citations

CC licensed content, Original

- The Scientific Method. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...ntific-method/. **License**: Public Domain: No Known Copyright

CC licensed content, Shared previously

- Research Methods in Psychology. **Provided by**: University of Minnesota . **Retrieved from**: https://open.lib.umn.edu/psychologyresearchmethods/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Specific attribution

- The Scientific Method. **Provided by**: Khan Academy. **Retrieved from**: https://youtu.be/N6IAzlugWw0. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

This page titled 2.1: The Scientific Method is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 2.1: The Scientific Method by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 2.2: Quantitative and Qualitative Approaches to Research



If you think about the vast array of fields and topics covered in psychology, you understand that in order to do psychological research, there must be a diverse set of ways to gather data and perform experiments. For example, a biological psychologist might work predominately in a lab setting or alongside a neurologist. A social scientist may set up situational experiments, a health psychologist may administer surveys, and a developmental psychologist may make observations in a classroom. In this section, you'll learn about the various types of research methods that psychologists employ to learn about human behavior.

When designing a study, typically, researchers choose a quantitative or qualitative research design. In some cases, a mixed-method approach may be appropriate. Which approach used will develop on the research question and the type of information sought. Quantitative methods may be better for understanding what is happening, while qualitative methods may be better for understanding the hows and why of a phenomenon.

Interactive Content

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this Interactive Content online

**Quantitative research** typically starts with a focused research question or hypothesis, collects a small amount of data from each of a large number of individuals, describes the resulting data using statistical techniques, and draws general conclusions about some large population. The strength of quantitative research is its ability to provide precise answers to specific research questions and to draw general conclusions about human behavior; however, it is not nearly as good at *generating* novel and interesting research questions. Likewise, while quantitative research is good at drawing general conclusions about human behavior, it is not nearly as good at providing detailed descriptions of the behavior of particular groups in particular situations. And it is not very good at all at communicating what it is actually like to be a member of a particular group in a particular situation. But the relative weaknesses of quantitative research are the relative strengths of qualitative research.

## Qualitative Research

Although this is by far the most common approach to conducting empirical research in psychology, there is a vital alternative called **qualitative research**. Qualitative research can help researchers to generate new and interesting research questions and hypotheses. Qualitative researchers generally begin with a less focused research question, collect large amounts of relatively "unfiltered" data from a relatively small number of individuals, and describe their data using nonstatistical techniques. They are usually less concerned with drawing general conclusions about human behavior than with understanding in detail the *experience* of their research participants. Qualitative research can also provide rich and detailed descriptions of human behavior in the real-world contexts in which it occurs. Similarly, qualitative research can convey a sense of what it is actually like to be a member of a particular group or in a particular situation—what qualitative researchers often refer to as the 'lived experience' of the research participants.

## Mixed-Methods

Given their differences, it may come as no surprise that quantitative and qualitative research do not coexist in complete harmony. Some quantitative researchers criticize that qualitative methods lack objectivity, are challenging to evaluate, and do not allow generalization to other people or situations. At the same time, some qualitative researchers criticize that quantitative methods overlook the richness of behavior and experience, and instead answer simple questions about easily quantifiable variables. However, many researchers from both camps now agree that the two approaches can and should be combined into what has come to be called mixed-methods research (Todd, Nerlich, McKeown, & Clarke, 2004). One approach to combining quantitative and qualitative research is to use qualitative research for hypothesis generation and quantitative research for hypothesis testing. A second approach to combining quantitative and qualitative research is referred to as triangulation. The idea is to use both quantitative and qualitative methods simultaneously to study the same general questions and to compare the results. If the results of the quantitative and qualitative methods converge on the same general conclusion, they reinforce and enrich each other. If the results diverge, then they suggest an interesting new question: Why do the results diverge, and how can they be reconciled?

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 2.3.2.** *What are Qualitative and Quantitative Variables* explains the difference between quantitative and qualitative variables that may be used in research.

https://assessments.lumenlearning.co...essments/16500

## Becoming Familiar with Research

An excellent way to become more familiar with these research approaches, both quantitative and qualitative, is to look at journal articles, which are written in sections that follow these steps in the scientific process. Most psychological articles and many papers in the social sciences follow the writing guidelines and format dictated by the American Psychological Association (APA). In general, the structure follows: abstract (summary of the article), introduction or literature review, methods explaining how the study was conducted, results of the study, discussion and interpretation of findings, and references.

### The aftermath of teenage suicide: a qualitative study of the psychosocial consequences for the supervising family

Per Lindqvist and his colleagues (2008), wanted to learn how the families of teenage suicide victims cope with their loss. They did not have a specific research question or hypothesis, such as, what percentage of family members join suicide support groups? Instead, they wanted to understand the variety of reactions that families had, with a focus on what it is like from *their* perspectives. To do this, they interviewed the families of 10 teenage suicide victims in their homes in rural Sweden. The interviews were relatively unstructured, beginning with a general request for the families to talk about the victim and ending with an invitation to talk about anything else that they wanted to tell the interviewer. One of the most important themes that emerged from these interviews was that even as life returned to "normal," the families continued to struggle with the question of why their loved one committed suicide. This struggle appeared to be especially difficult for families in which the suicide was most unexpected. This relationship can now be explored using quantitative research. But it is unclear whether this question would have arisen at all without the researchers sitting down with the families and listening to what they themselves wanted to say about their experience.

## Candela Citations

CC licensed content, Original

- Quantitative and Qualitative Approaches to Research. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...s-to-research/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike
- What are Qualitative and Quantitative Variables. **Provided by**: StraighterLine. **Retrieved from**: https://youtu.be/RJrkR4X0Lrg. **License**: *All Rights Reserved*

CC licensed content, Shared previously

- Research Methods in Psychology. **Provided by**: University of Minnesota . **Retrieved from**: https://open.lib.umn.edu/psychologyresearchmethods/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike
- Psychology. **Provided by**: Open Stax. **License**: CC BY: Attribution

CC licensed content, Specific attribution

- Types of Research: Qualitative & Quantitative Designs. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://hvcc.techsmithrelay.com/Vu4x. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

This page titled 2.2: Quantitative and Qualitative Approaches to Research is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 2.2: Quantitative and Qualitative Approaches to Research by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 2.3: Descriptive Research

There are many research methods available to psychologists in their efforts to understand, describe, and explain behavior. Some methods rely on observational techniques. Other approaches involve interactions between the researcher and the individuals who are being studied—ranging from a series of simple questions to extensive, in-depth interviews—to well-controlled experiments. The main categories of psychological research are descriptive, correlational, and experimental research. Each of these research methods has unique strengths and weaknesses, and each method may only be appropriate for certain types of research questions.

https://assessments.lumenlearning.co...sessments/2706

Research studies that do not test specific relationships between variables are called **descriptive studies**. For this method, the research question or hypothesis can be about a single variable (e.g., How accurate are people's first impressions?) or can be a broad and exploratory question (e.g., What is it like to be a working mother diagnosed with depression?). The variable of the study is measured and reported without any further relationship analysis. A researcher might choose this method if they only needed to report information, such as a tally, an average, or a list of responses. Descriptive research can answer interesting and important questions, but what it cannot do is answer questions about relationships between variables.

Interactive Content

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this Interactive Content online

**Video 2.4.1.** *Descriptive Research Design* provides explanation and examples for quantitative descriptive research. A closed-captioned version of this video is available here.

Descriptive research is distinct from **correlational research**, in which researchers formally test whether a relationship exists between two or more variables. **Experimental research** goes a step further beyond descriptive and correlational research and randomly assigns people to different conditions, using hypothesis testing to make inferences about causal relationships between variables. We will discuss each of these methods more in-depth later.

*Table 2.4.1. Comparison of research design methods*

| Research design | Goal | Advantages | Disadvantages |
|---|---|---|---|
| Descriptive | To create a snapshot of the current state of affairs | Provides a relatively complete picture of what is occurring at a given time. Allows the development of questions for further study. | Does not assess relationships among variables. May be unethical if participants do not know they are being observed. |
| Correlational | To assess the relationships between and among two or more variables | Allows testing of expected relationships between and among variables and the making of predictions. Can assess these relationships in everyday life events. | Cannot be used to draw inferences about the causal relationships between and among the variables. |
| Experimental | To assess the causal impact of one or more experimental manipulations on a dependent variable | Allows drawing of conclusions about the causal relationships among variables. | Cannot experimentally manipulate many important variables. May be expensive and time-consuming. |

Source: Stangor, 2011.

# Candela Citations

CC licensed content, Original

- Descriptive Research. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...tive-research/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Introduction to Psychology. **Authored by**: Charles Stangor and Jennifer Walinga. **Provided by**: BC Campus Open Education. **Retrieved from**: https://opentextbc.ca/introductiontopsychology/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Specific attribution

- Descriptive Research Design. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://hvcc.techsmithrelay.com/LNvM. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

This page titled 2.3: Descriptive Research is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 2.3: Descriptive Research by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 2.4: Methods of Data Collection

Regardless of the method of research, data collection will be necessary. The method of data collection selected will primarily depend on the type of information the researcher needs for their study; however, other factors, such as time, resources, and even ethical considerations can influence the selection of a data collection method. All of these factors need to be considered when selecting a data collection method because each method has unique strengths and weaknesses. We will discuss the uses and assessment of the most common data collection methods: observation, surveys, archival data, and tests.

## Observation

**The observational method** involves the watching and recording of a specific behavior of participants. In general, observational studies have the strength of allowing the researcher to see for themselves how people behave. However, observations may require more time and manpower than other data collection methods, often resulting in smaller samples of participants. Researchers may spend significant time waiting to observe a behavior, or the behavior may never occur during observation. It is important to remember that people tend to change their behavior when they know they are being watched (known as the **Hawthorne effect**).

Observations may be done in a naturalist setting to reduce the likelihood of the Hawthorne effect. During naturalistic observations, the participants are in their natural environment and are usually unaware that they are being observed. For example, observing students participating in their class would be a naturalist observation. The downside of a naturalistic setting is that the research doesn't have control over the environment. Imagine that the researcher goes to the classroom to observe those students, and there is a substitute teacher. The change in instructor that day could impact student behavior and skew the data.

If controlling the environment is a concern, a laboratory setting may be a better choice. In the laboratory environment, the researcher can manage confounding factors or distractions that might impact the participants' behavior. Of course, there are expenses associated with maintaining a laboratory setting, increasing the cost of the study, that would not be associated with naturalist observations. And, again, the Hawthorne effect may impact behavior.

https://assessments.lumenlearning.co...sessments/2713

## Surveys



**Surveys** are familiar to most people because they are so widely used. This method enhances accessibility to subjects because they can be conducted in person, over the phone, through the mail, or online, and are commonly used by researchers to gather information on many variables in a relatively short period of time.

Most surveys involve asking a standard set of questions to a group of participants. In a highly structured survey, subjects are forced to choose from a response set such as "strongly disagree, disagree, undecided, agree, strongly agree"; or "0, 1-5, 6-10, etc." One of the benefits of having forced-choice items is that each response is coded so that the results can be quickly entered and analyzed using statistical software. While this type of survey typically yields surface information on a wide variety of factors, it may not allow for an in-depth understanding of human behavior.

Of course, surveys can be designed in a number of ways. Some surveys ask open-ended questions, allowing each participant to devise their own response, allowing for a variety of answers. This variety may provide deeper insight into the subject than forced-choice questions, but makes comparing answers challenging. Imagine a survey question that asked participants to report how they are feeling today. If there were 100 participants, there could be 100 different answers, which is more challenging and takes more time to code and analyze.

Surveys are useful in examining stated values, attitudes, opinions, and reporting on practices. However, they are based on self-report, and this can limit accuracy. For a variety of reasons, people may not provide honest or complete answers. Participants may be concerned with projecting a particular image through their responses, they may be uncomfortable answering the questions, inaccurately assess their behavior, or they may lack awareness of the behavior being assessed. So, while surveys can provide a lot of information for many participants quickly and easily, self-reporting may not be as accurate as other methods.

https://assessments.lumenlearning.co...sessments/2716

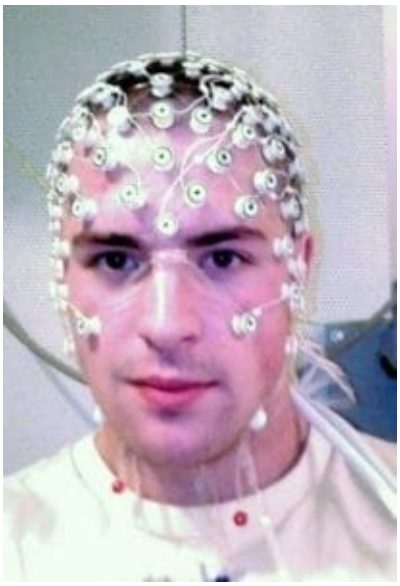
## Content Analysis of Archival data

**Content analysis** involves looking at media such as old texts, pictures, commercials, lyrics, or other materials to explore patterns or themes in culture. An example of content analysis is the classic history of childhood by Aries (1962) called “Centuries of Childhood” or the analysis of television commercials for sexual or violent content or for ageism. Passages in text or television programs can be randomly selected for analysis as well. Again, one advantage of analyzing work such as this is that the researcher does not have to go through the time and expense of finding respondents, but the researcher cannot know how accurately the media reflects the actions and sentiments of the population.

**Secondary content analysis,** or archival research, involves analyzing information that has already been collected or examining documents or media to uncover attitudes, practices, or preferences. There are a number of data sets available to those who wish to conduct this type of research. The researcher conducting secondary analysis does not have to recruit subjects but does need to know the quality of the information collected in the original study. And unfortunately, the researcher is limited to the questions asked and data collected originally.

https://assessments.lumenlearning.co...sessments/2720

## Tests



Many variables studied by psychologists—perhaps the majority—are not so straightforward or simple to measure. These kinds of variables are called constructs and include personality traits, emotional states, attitudes, and abilities. Psychological constructs cannot be observed directly. One reason is that they often represent *tendencies* to think, feel, or act in certain ways. For example, to say that a particular college student is highly extroverted does not necessarily mean that she is behaving in an extroverted way

right now. Another reason psychological constructs cannot be observed directly is that they often involve internal processes, like thoughts or feelings. For these psychological constructs, we need another means of collecting data. Tests will serve this purpose.

A good test will aid researchers in assessing a particular psychological construct. What is a good test? Researchers want a test that is standardized, reliable, and valid. A standardized test is one that is administered, scored, and analyzed in the same way for each participant. This minimizes differences in test scores due to confounding factors, such as variability in the testing environment or scoring process, and assures that scores are comparable. Reliability refers to the consistency of a measure. Researchers consider three types of consistency: over time (test-retest reliability), across items (internal consistency), and across different researchers (interrater reliability). Validity is the extent to which the scores from a measure represent the variable they are intended to. When a measure has good test-retest reliability and internal consistency, researchers should be more confident that the scores represent what they are supposed to.

There are various types of tests used in psychological research. Self-report measures are those in which participants report their own thoughts, feelings, and actions, such as the Rosenberg Self-Esteem Scale or the Big Five Personality Test. Some tests measure performance, ability, aptitude, or skill, like the Stanford-Binet Intelligence Scale or the SATs.There are also tests that measure physiological states, including electrical activity or blood flow in the brain.

Interactive Content

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this Interactive Content online

**Video 2.5.1.** *Methods of Data Collection* explains various means for gathering data for quantitative and qualitative research. A closed-captioned version of this video is available here.

https://assessments.lumenlearning.co...sessments/2710

## Reliability and Validity

**Reliability** and **validity** are two important considerations that must be made with any type of data collection. Reliability refers to the ability to consistently produce a given result. In the context of psychological research, this would mean that any instruments or tools used to collect data do so in consistent, reproducible ways. Unfortunately, being consistent in measurement does not necessarily mean that you have measured something correctly. To illustrate this concept, consider a kitchen scale that would be used to measure the weight of cereal that you eat in the morning. If the scale is not properly calibrated, it may consistently under- or overestimate the amount of cereal that's being measured. While the scale is highly reliable in producing consistent results (e.g., the same amount of cereal poured onto the scale produces the same reading each time), those results are incorrect. This is where validity comes into play. Validity refers to the extent to which a given instrument or tool accurately measures what it's supposed to measure. While any valid measure is by necessity reliable, the reverse is not necessarily true. Researchers strive to use instruments that are both highly reliable and valid.

**h5p**

Interactive Content

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this Interactive Content online

### Everyday Connection: How Valid Is the SAT?

Standardized tests like the SAT are supposed to measure an individual's aptitude for a college education, but how reliable and valid are such tests? Research conducted by the College Board suggests that scores on the SAT have high predictive validity for first-year college students' GPA (Kobrin, Patterson, Shaw, Mattern, & Barbuti, 2008). In this context, predictive validity refers to the test's ability to effectively predict the GPA of college freshmen. Given that many institutions of higher education require the SAT for admission, this high degree of predictive validity might be comforting.

However, the emphasis placed on SAT scores in college admissions has generated some controversy on a number of fronts. For one, some researchers assert that the SAT is a biased test that places minority students at a disadvantage and unfairly reduces the likelihood of being admitted into a college (Santelices & Wilson, 2010). Additionally, some research has suggested that the predictive validity of the SAT is grossly exaggerated in how well it is able to predict the GPA of first-year college students. In fact, it has been suggested that the SAT's predictive validity may be overestimated by as much as 150% (Rothstein, 2004). Many institutions of higher education are beginning to consider de-emphasizing the significance of SAT scores in making admission decisions (Rimer, 2008).

In 2014, College Board president David Coleman expressed his awareness of these problems, recognizing that college success is more accurately predicted by high school grades than by SAT scores. To address these concerns, he has called for significant changes to the SAT exam (Lewin, 2014).

## Candela Citations

CC licensed content, Original

- Methods of Data Collection. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...ta-collection/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Research Methods. **Provided by**: Lumen Learning. **Retrieved from**: https://courses.lumenlearning.com/wm...earch-methods/. **License**: CC BY: Attribution

This page titled 2.4: Methods of Data Collection is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 2.4: Methods of Data Collection by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 2.5: Analyzing Data- Correlational and Experimental Research

Did you know that as sales of ice cream increase, so does the overall rate of crime? Is it possible that indulging in your favorite flavor of ice cream could send you on a crime spree? Or, after committing a crime, do you think you might decide to treat yourself to a cone? There is no question that a relationship exists between ice cream and crime (e.g., Harper, 2013), but does one thing actually caused the other to occur.

It is much more likely that both ice cream sales and crime rates are related to the temperature outside. When the temperature is warm, there are lots of people out of their houses, interacting with each other, getting annoyed with one another, and sometimes committing crimes. Also, when it is warm outside, we are more likely to seek a refreshing treat like ice cream. How do we determine if there is indeed a relationship between two things? And when there is a relationship, how can we discern whether it is attributable to coincidence or causation? We do this through statistical analysis of the data. Which analysis we use will depend on several conditions outlined next.

## Introduction to Statistical Thinking



**Figure 2.6.1**. People around the world differ in their preferences for drinking coffee versus drinking tea. Would the results of the coffee study be the same in Canada as in China? [Image: Duncan, https://goo.gl/vbMyTm, CC BY-NC 2.0, https://goo.gl/l8UUGY]

Does drinking coffee actually increase your life expectancy? A recent study (Freedman, Park, Abnet, Hollenbeck, & Sinha, 2012) found that men who drank at least six cups of coffee a day had a 10% lower chance of dying (women 15% lower) than those who drank none. Does this mean you should pick up or increase your own coffee habit? Modern society has become awash in studies such as this; you can read about several such studies in the news every day. Conducting such a study well, and interpreting the results of such studies requires understanding basic ideas of **statistics**, the science of gaining insight from data. Key components to a statistical investigation are:

- Planning the study: Start by asking a testable research question and deciding how to collect data. For example, how long was the study period of the coffee study? How many people were recruited for the study, how were they recruited, and from where? How old were they? What other variables were recorded about the individuals? Were changes made to the participants' coffee habits during the course of the study?
- Examining the data: What are appropriate ways to examine the data? What graphs are relevant, and what do they reveal? What descriptive statistics can be calculated to summarize relevant aspects of the data, and what do they reveal? What patterns do you see in the data? Are there any individual observations that deviate from the overall pattern, and what do they reveal? For example, in the coffee study, did the proportions differ when we compared the smokers to the non-smokers?
- Inferring from the data: What are valid statistical methods for drawing inferences "beyond" the data you collected? In the

coffee study, is the 10%–15% reduction in risk of death something that could have happened just by chance?
- Drawing conclusions: Based on what you learned from your data, what conclusions can you draw? Who do you think these conclusions apply to? (Were the people in the coffee study older? Healthy? Living in cities?) Can you draw a **cause-and-effect** conclusion about your treatments? (Are scientists now saying that the coffee drinking is the cause of the decreased risk of death?)

Notice that the numerical analysis ("crunching numbers" on the computer) comprises only a small part of overall statistical investigation. In this section, you will see how we can answer some of these questions and what questions you should be asking about any statistical investigation you read about.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 2.6.1.** *Types of Statistical Studies* explains the differences between correlational and experimental research.

https://assessments.lumenlearning.co...sessments/2708

## Distributional Thinking

When data are collected to address a particular question, an important first step is to think of meaningful ways to organize and examine the data. Let's take a look at an example.

**Example 1**: Researchers investigated whether cancer pamphlets are written at an appropriate level to be read and understood by cancer patients (Short, Moriarty, & Cooley, 1995). Tests of reading ability were given to 63 patients. In addition, readability level was determined for a **sample** of 30 pamphlets, based on characteristics such as the lengths of words and sentences in the pamphlet. The results, reported in terms of grade levels, are displayed in Figure 2.6.2.

| Patients' reading levels | < 3 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | > 12 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Count (number of patients) | 6 | 4 | 4 | 3 | 3 | 2 | 6 | 5 | 4 | 7 | 2 | 17 | 63 |

| Pamphlet's readability levels | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Count (number of pamphlets) | 3 | 3 | 8 | 4 | 1 | 1 | 4 | 2 | 1 | 2 | 1 | 30 |

**Figure 2.6.2**. Frequency tables of patient reading levels and pamphlet readability levels.

Testing these two variables reveal two fundamental aspects of statistical thinking:

- Data *vary*. More specifically, values of a variable (such as reading level of a cancer patient or readability level of a cancer pamphlet) vary.
- Analyzing the pattern of variation, called the **distribution** of the variable, often reveals insights.

Addressing the research question of whether the cancer pamphlets are written at appropriate levels for the cancer patients requires comparing the two distributions. A naïve comparison might focus only on the centers of the distributions. Both medians turn out to be ninth grade, but considering only medians ignores the variability and the overall distributions of these data. A more illuminating approach is to compare the entire distributions, for example with a graph, as in Figure 2.6.3.

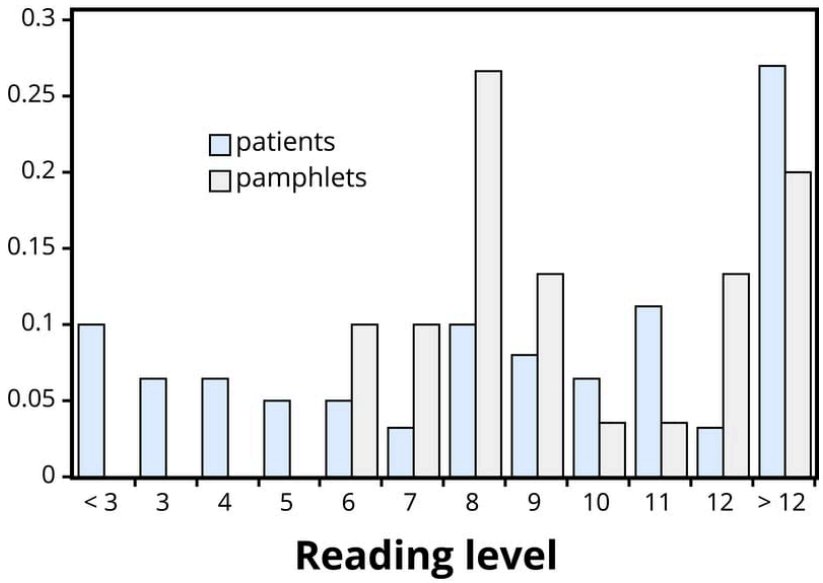



**Figure 2.6.3**. Comparison of patient reading levels and pamphlet readability levels.

Figure 2.6.3 makes clear that the two distributions are not well aligned at all. The most glaring discrepancy is that many patients (17/63, or 27%, to be precise) have a reading level below that of the most readable pamphlet. These patients will need help to understand the information provided in the cancer pamphlets. Notice that this conclusion follows from considering the distributions as a whole, not simply measures of center or variability, and that the graph contrasts those distributions more immediately than the frequency tables.

https://assessments.lumenlearning.co...sessments/2741

## Statistical Significance

Even when we find patterns in data, often there is still uncertainty in various aspects of the data. For example, there may be potential for measurement errors (even your own body temperature can fluctuate by almost 1°F over the course of the day). Or we may only have a "snapshot" of observations from a more long-term process or only a small subset of individuals from the **population** of interest. In such cases, how can we determine whether patterns we see in our small set of data is convincing evidence of a systematic phenomenon in the larger process or population? Let's take a look at another example.

**Example 2**: In a study reported in the November 2007 issue of *Nature*, researchers investigated whether pre-verbal infants take into account an individual's actions toward others in evaluating that individual as appealing or aversive (Hamlin, Wynn, & Bloom, 2007). In one component of the study, 10-month-old infants were shown a "climber" character (a piece of wood with "googly" eyes glued onto it) that could not make it up a hill in two tries. Then the infants were shown two scenarios for the climber's next try, one where the climber was pushed to the top of the hill by another character ("helper"), and one where the climber was pushed back down the hill by another character ("hinderer"). The infant was alternately shown these two scenarios several times. Then the infant was presented with two pieces of wood (representing the helper and the hinderer characters) and asked to pick one to play with.

The researchers found that of the 16 infants who made a clear choice, 14 chose to play with the helper toy. One possible explanation for this clear majority result is that the helping behavior of the one toy increases the infants' likelihood of choosing that toy. But are there other possible explanations? What about the color of the toy? Well, prior to collecting the data, the researchers arranged so that each color and shape (red square and blue circle) would be seen by the same number of infants. Or maybe the infants had right-handed tendencies and so picked whichever toy was closer to their right hand?

Well, prior to collecting the data, the researchers arranged it so half the infants saw the helper toy on the right and half on the left. Or, maybe the shapes of these wooden characters (square, triangle, circle) had an effect? Perhaps, but again, the researchers controlled for this by rotating which shape was the helper toy, the hinderer toy, and the climber. When designing experiments, it is important to *control* for as many variables as might affect the responses as possible. It is beginning to appear that the researchers accounted for all the other plausible explanations. But there is one more important consideration that cannot be

controlled—if we did the study again with these 16 infants, they might not make the same choices. In other words, there is some *randomness* inherent in their selection process.

## P-value

Maybe each infant had no genuine preference at all, and it was simply "random luck" that led to 14 infants picking the helper toy. Although this random component cannot be controlled, we can apply a *probability model* to investigate the pattern of results that would occur in the long run if random chance were the only factor.

If the infants were equally likely to pick between the two toys, then each infant had a 50% chance of picking the helper toy. It's like each infant tossed a coin, and if it landed heads, the infant picked the helper toy. So if we tossed a coin 16 times, could it land heads 14 times? Sure, it's possible, but it turns out to be very unlikely. Getting 14 (or more) heads in 16 tosses is about as likely as tossing a coin and getting 9 heads in a row. This probability is referred to as a **p-value**. The p-value represents the likelihood that experimental results happened by chance. Within psychology, the most common standard for p-values is "$p < .05$". What this means is that there is less than a 5% probability that the results happened just by random chance, and therefore a 95% probability that the results reflect a meaningful pattern in human psychology. We call this **statistical significance**.

https://assessments.lumenlearning.co...sessments/2743

So, in the study above, if we assume that each infant was choosing equally, then the probability that 14 or more out of 16 infants would choose the helper toy is found to be 0.0021. We have only two logical possibilities: either the infants have a genuine preference for the helper toy, or the infants have no preference (50/50), and an outcome that would occur only 2 times in 1,000 iterations happened in this study. Because this p-value of 0.0021 is quite small, we conclude that the study provides very strong evidence that these infants have a genuine preference for the helper toy.

If we compare the p-value to some cut-off value, like 0.05, we see that the p=value is smaller. Because the p-value is smaller than that cut-off value, then we reject the hypothesis that only random chance was at play here. In this case, these researchers would conclude that *significantly* more than half of the infants in the study chose the helper toy, giving strong evidence of a genuine preference for the toy with the helping behavior.

https://assessments.lumenlearning.co...sessments/2742

## Generalizability



**Figure 2.6.4**. Generalizability is an important research consideration: The results of studies with widely representative samples are more likely to generalize to the population. [Image: Barnacles Budget Accommodation]

One limitation to the study mentioned previously about the babies choosing the "helper" toy is that the conclusion only applies to the 16 infants in the study. We don't know much about how those 16 infants were selected. Suppose we want to select a subset of

individuals (a **sample**) from a much larger group of individuals (the **population**) in such a way that conclusions from the sample can be **generalized** to the larger population. This is the question faced by pollsters every day.

**Example 3**: The General Social Survey (GSS) is a survey on societal trends conducted every other year in the United States. Based on a sample of about 2,000 adult Americans, researchers make claims about what percentage of the U.S. population consider themselves to be "liberal," what percentage consider themselves "happy," what percentage feel "rushed" in their daily lives, and many other issues. The key to making these claims about the larger population of all American adults lies in how the sample is selected. The goal is to select a sample that is representative of the population, and a common way to achieve this goal is to select a **random sample** that gives every member of the population an equal chance of being selected for the sample. In its simplest form, random sampling involves numbering every member of the population and then using a computer to randomly select the subset to be surveyed. Most polls don't operate exactly like this, but they do use probability-based sampling methods to select individuals from nationally representative panels.

https://assessments.lumenlearning.co...sessments/2747

In 2004, the GSS reported that 817 of 977 respondents (or 83.6%) indicated that they always or sometimes feel rushed. This is a clear majority, but we again need to consider variation due to *random sampling*. Fortunately, we can use the same probability model we did in the previous example to investigate the probable size of this error. (Note, we can use the coin-tossing model when the actual population size is much, much larger than the sample size, as then we can still consider the probability to be the same for every individual in the sample.) This probability model predicts that the sample result will be within 3 percentage points of the population value (roughly 1 over the square root of the sample size, the **margin of error**). A statistician would conclude, with 95% confidence, that between 80.6% and 86.6% of all adult Americans in 2004 would have responded that they sometimes or always feel rushed.

https://assessments.lumenlearning.co...sessments/2748

The key to the margin of error is that when we use a probability sampling method, we can make claims about how often (in the long run, with repeated random sampling) the sample result would fall within a certain distance from the unknown population value by chance (meaning by random sampling variation) alone. Conversely, non-random samples are often suspect to bias, meaning the sampling method systematically over-represents some segments of the population and under-represents others. We also still need to consider other sources of bias, such as individuals not responding honestly. These sources of error are not measured by the margin of error.

## Cause and Effect Conclusions

In many research studies, the primary question of interest concerns differences between groups. Then the question becomes how were the groups formed (e.g., selecting people who already drink coffee vs. those who don't). In some studies, the researchers actively form the groups themselves. But then we have a similar question—could any differences we observe in the groups be an artifact of that group-formation process? Or maybe the difference we observe in the groups is so large that we can discount a "fluke" in the group-formation process as a reasonable explanation for what we find?

**Example 4**: A psychology study investigated whether people tend to display more creativity when they are thinking about intrinsic (internal) or extrinsic (external) motivations (Ramsey & Schafer, 2002, based on a study by Amabile, 1985). The subjects were 47 people with extensive experience with creative writing. Subjects began by answering survey questions about either intrinsic motivations for writing (such as the pleasure of self-expression) or extrinsic motivations (such as public recognition). Then all subjects were instructed to write a haiku, and those poems were evaluated for creativity by a panel of judges. The researchers conjectured beforehand that subjects who were thinking about intrinsic motivations would display more creativity than subjects who were thinking about extrinsic motivations. The creativity scores from the 47 subjects in this study are displayed in Figure 2.6.5, where higher scores indicate more creativity.

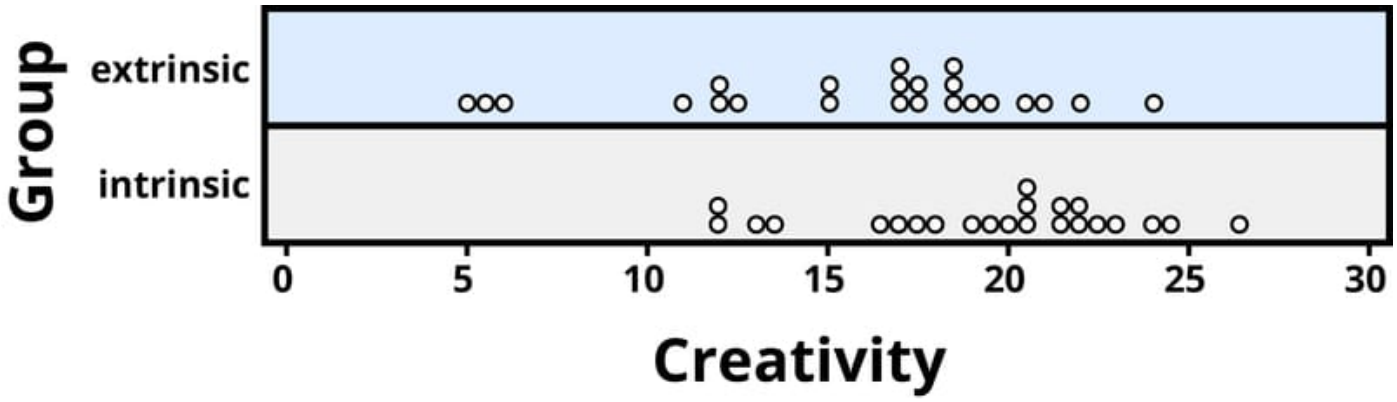



**Figure 2.6.5**. Creativity scores separated by type of motivation.

In this example, the key question is whether the type of motivation *affects* creativity scores. In particular, do subjects who were asked about intrinsic motivations tend to have higher creativity scores than subjects who were asked about extrinsic motivations?

Figure 2.6.5 reveals that both motivation groups saw considerable variability in creativity scores, and these scores have considerable overlap between the groups. In other words, it's certainly not always the case that those with extrinsic motivations have higher creativity than those with intrinsic motivations, but there may still be a statistical *tendency* in this direction. (Psychologist Keith Stanovich (2013) refers to people's difficulties with thinking about such probabilistic tendencies as "the Achilles heel of human cognition.")

The mean creativity score is 19.88 for the intrinsic group, compared to 15.74 for the extrinsic group, which supports the researchers' conjecture. Yet comparing only the means of the two groups fails to consider the variability of creativity scores in the groups. We can measure variability with statistics using, for instance, the standard deviation: 5.25 for the extrinsic group and 4.40 for the intrinsic group. The standard deviations tell us that most of the creativity scores are within about 5 points of the mean score in each group. We see that the mean score for the intrinsic group lies within one standard deviation of the mean score for extrinsic group. So, although there is a tendency for the creativity scores to be higher in the intrinsic group, on average, the difference is not extremely large.

We again want to consider possible explanations for this difference. The study only involved individuals with extensive creative writing experience. Although this limits the population to which we can generalize, it does not explain why the mean creativity score was a bit larger for the intrinsic group than for the extrinsic group. Maybe women tend to receive higher creativity scores? Here is where we need to focus on how the individuals were assigned to the motivation groups. If only women were in the intrinsic motivation group and only men in the extrinsic group, then this would present a problem because we wouldn't know if the intrinsic group did better because of the different type of motivation or because they were women. However, the researchers guarded against such a problem by randomly assigning the individuals to the motivation groups. Like flipping a coin, each individual was just as likely to be assigned to either type of motivation. Why is this helpful? Because this **random assignment** tends to balance out all the variables related to creativity we can think of, and even those we don't think of in advance, between the two groups. So we should have a similar male/female split between the two groups; we should have a similar age distribution between the two groups; we should have a similar distribution of educational background between the two groups; and so on. Random assignment should produce groups that are as similar as possible except for the type of motivation, which presumably eliminates all those other variables as possible explanations for the observed tendency for higher scores in the intrinsic group.

But does this always work? No, so by "luck of the draw" the groups may be a little different prior to answering the motivation survey. So then the question is, is it possible that an unlucky random assignment is responsible for the observed difference in creativity scores between the groups? In other words, suppose each individual's poem was going to get the same creativity score no matter which group they were assigned to, that the type of motivation in no way impacted their score. Then how often would the random-assignment process alone lead to a difference in mean creativity scores as large (or larger) than 19.88 – 15.74 = 4.14 points?

We again want to apply to a probability model to approximate a **p-value**, but this time the model will be a bit different. Think of writing everyone's creativity scores on an index card, shuffling up the index cards, and then dealing out 23 to the extrinsic motivation group and 24 to the intrinsic motivation group, and finding the difference in the group means. We (better yet, the computer) can repeat this process over and over to see how often, when the scores don't change, random assignment leads to a difference in means at least as large as 4.41. Figure 2.6.6 shows the results from 1,000 such hypothetical random assignments

for these scores.

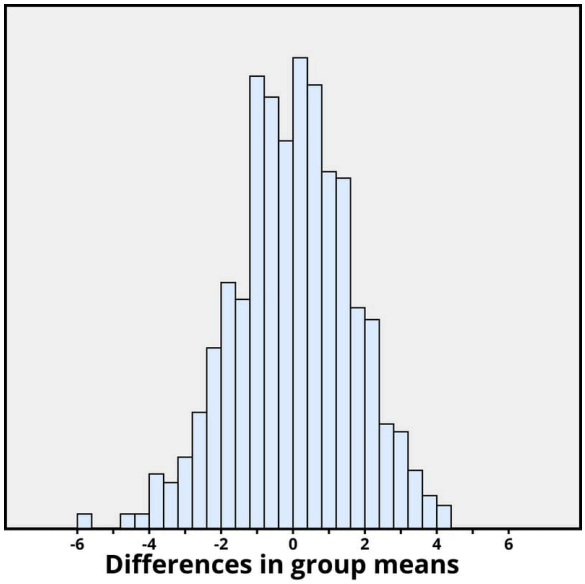



**Figure 2.6.6**. Differences in group means under random assignment alone.

Only 2 of the 1,000 simulated random assignments produced a difference in group means of 4.41 or larger. In other words, the approximate p-value is 2/1000 = 0.002. This small p-value indicates that it would be very surprising for the random assignment process alone to produce such a large difference in group means. Therefore, as with Example 4, we have strong evidence that focusing on intrinsic motivations tends to increase creativity scores, as compared to thinking about extrinsic motivations.

Notice that the previous statement implies a cause-and-effect relationship between motivation and creativity score; is such a strong conclusion justified? Yes, because of the random assignment used in the study. That should have balanced out any other variables between the two groups, so now that the small p-value convinces us that the higher mean in the intrinsic group wasn't just a coincidence, the only reasonable explanation left is the difference in the type of motivation. Can we generalize this conclusion to everyone? Not necessarily—we could cautiously generalize this conclusion to individuals with extensive experience in creative writing similar to the individuals in this study, but we would still want to know more about how these individuals were selected to participate.

https://assessments.lumenlearning.co...sessments/2709

# Conclusion



**Figure 2.6.7**. Researchers employ the scientific method that involves a great deal of statistical thinking: generate a hypothesis –> design a study to test that hypothesis –> conduct the study –> analyze the data –> report the results. [Image: widdowquinn]

Statistical thinking involves the careful design of a study to collect meaningful data to answer a focused research question, detailed analysis of patterns in the data, and drawing conclusions that go beyond the observed data. Random sampling is paramount to generalizing results from our sample to a larger population, and random assignment is key to drawing cause-and-effect conclusions. With both kinds of randomness, probability models help us assess how much random variation we can expect in our results, in order to determine whether our results could happen by chance alone and to estimate a margin of error.

So where does this leave us with regard to the coffee study mentioned previously (the Freedman, Park, Abnet, Hollenbeck, & Sinha, 2012 found that men who drank at least six cups of coffee a day had a 10% lower chance of dying (women 15% lower) than those who drank none)? We can answer many of the questions:

- This was a 14-year study conducted by researchers at the National Cancer Institute.
- The results were published in the June issue of the *New England Journal of Medicine*, a respected, peer-reviewed journal.
- The study reviewed coffee habits of more than 402,000 people ages 50 to 71 from six states and two metropolitan areas. Those with cancer, heart disease, and stroke were excluded at the start of the study. Coffee consumption was assessed once at the start of the study.
- About 52,000 people died during the course of the study.
- People who drank between two and five cups of coffee daily showed a lower risk as well, but the amount of reduction increased for those drinking six or more cups.
- The sample sizes were fairly large and so the p-values are quite small, even though percent reduction in risk was not extremely large (dropping from a 12% chance to about 10%–11%).
- Whether coffee was caffeinated or decaffeinated did not appear to affect the results.
- This was an observational study, so no cause-and-effect conclusions can be drawn between coffee drinking and increased longevity, contrary to the impression conveyed by many news headlines about this study. In particular, it's possible that those with chronic diseases don't tend to drink coffee.

This study needs to be reviewed in the larger context of similar studies and consistency of results across studies, with the constant caution that this was not a randomized experiment. Whereas a statistical analysis can still "adjust" for other potential confounding variables, we are not yet convinced that researchers have identified them all or completely isolated why this decrease in death risk is evident. Researchers can now take the findings of this study and develop more focused studies that address new questions.

## Learn More

Explore these outside resources to learn more about applied statistics:

- Video about p-values: P-Value Extravaganza
- Interactive web applets for teaching and learning statistics
- Inter-university Consortium for Political and Social Research where you can find and analyze data.
- The Consortium for the Advancement of Undergraduate Statistics

## Candela Citations

CC licensed content, Original

- Analyzing Data: Correlational and Experimental Research. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...ntal-research/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Psychology. **Provided by**: OpenStax. **Retrieved from**: https://openstax.org/details/books/psychology. **License**: CC BY: Attribution

CC licensed content, Specific attribution

- Types of Statistical Studies. **Authored by**: Sal Khan. **Provided by**: Khan Academy. **Retrieved from**: https://youtu.be/z-Qi4w6Xkuc. **License**: CC BY-NC-ND: Attribution-NonCommercial-NoDerivatives

This page titled 2.5: Analyzing Data- Correlational and Experimental Research is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 2.5: Analyzing Data- Correlational and Experimental Research by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 2.6: Correlational Research

**Correlation** means that there is a relationship between two or more variables (such as ice cream consumption and crime), but this relationship does not necessarily imply cause and effect. When two variables are correlated, it simply means that as one variable changes, so does the other. We can measure correlation by calculating a statistic known as a correlation coefficient. A **correlation coefficient** is a number from -1 to +1 that indicates the strength and direction of the relationship between variables. The correlation coefficient is usually represented by the letter *r*.

The number portion of the correlation coefficient indicates the strength of the relationship. The closer the number is to 1 (be it negative or positive), the more strongly related the variables are, and the more predictable changes in one variable will be as the other variable changes. The closer the number is to zero, the weaker the relationship and the less predictable the relationship between the variables becomes. For instance, a correlation coefficient of 0.9 indicates a far stronger relationship than a correlation coefficient of 0.3. If the variables are not related to one another at all, the correlation coefficient is 0. The example above about ice cream and crime is an example of two variables that we might expect to have no relationship to each other.

https://assessments.lumenlearning.co...essments/16503

The sign—positive or negative—of the correlation coefficient indicates the direction of the relationship (Figure 2.7.1). A **positive correlation** means that the variables move in the same direction. Put another way, it means that as one variable increases so does the other, and conversely, when one variable decreases so does the other. A **negative correlation** means that the variables move in opposite directions. If two variables are negatively correlated, a decrease in one variable is associated with an increase in the other and vice versa.

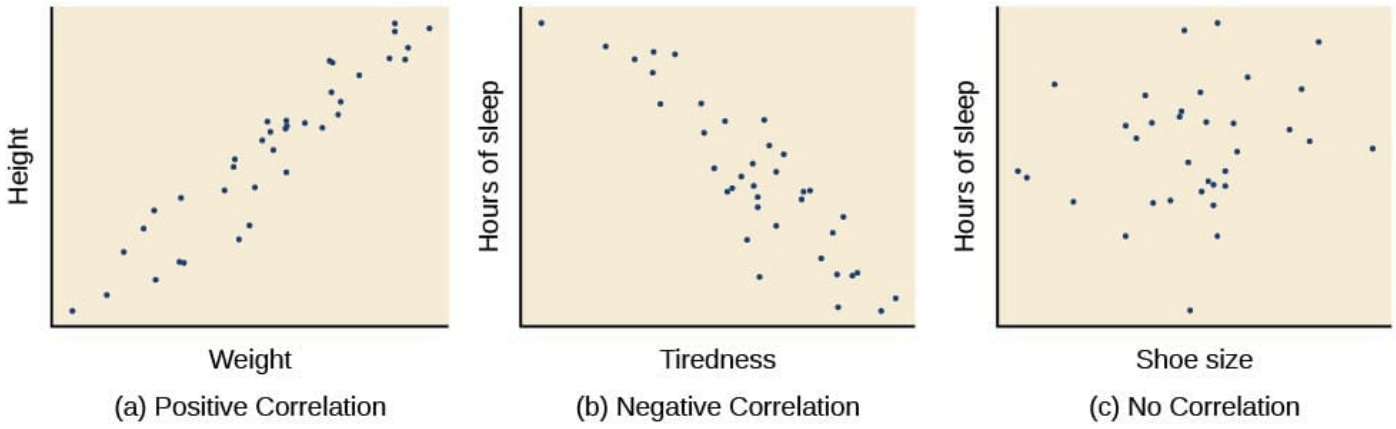



**Figure 2.7.1.** Scatterplots are a graphical view of the strength and direction of correlations. The stronger the correlation, the closer the data points are to a straight line. In these examples, we see that there is (a) a positive correlation between weight and height, (b) a negative correlation between tiredness and hours of sleep, and (c) no correlation between shoe size and hours of sleep.

The example of ice cream and crime rates is a positive correlation because both variables increase when temperatures are warmer. Other examples of positive correlations are the relationship between an individual's height and weight or the relationship between a person's age and number of wrinkles. One might expect a negative correlation to exist between someone's tiredness during the day and the number of hours they slept the previous night: the amount of sleep decreases as the feelings of tiredness increase. In a real-world example of negative correlation, student researchers at the University of Minnesota found a weak negative correlation ($r$ = -0.29) between the average number of days per week that students got fewer than 5 hours of sleep and their GPA (Lowry, Dean, & Manders, 2010). Keep in mind that a negative correlation is not the same as no correlation. For example, we would probably find no correlation between hours of sleep and shoe size.

Interactive Content

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this Interactive Content online

**Video 2.7.1.** Correlational Research Design provides explanation and examples for correlational research. A closed-captioned version of this video is available here.

Exercise

Manipulate this interactive scatterplot to practice your understanding of positive and negative correlations.

https://assessments.lumenlearning.co...sessments/2725

As mentioned earlier, correlations have predictive value. Imagine that you are on the admissions committee of a major university. You are faced with a massive number of applications, but you are able to accommodate only a small percentage of the applicant pool. How might you decide who should be admitted? You might try to correlate your current students' college GPA with their scores on standardized tests like the SAT or ACT. By observing which correlations were strongest for your current students, you could use this information to predict the relative success of those students who have applied for admission into the university.

## Correlation Does Not Indicate Causation

Correlational research is useful because it allows us to discover the strength and direction of relationships that exist between two variables. However, correlation is limited because establishing the existence of a relationship tells us little about **cause and effect**. While variables are sometimes correlated because one does cause the other, it could also be that some other factor, a **confounding variable**, is actually causing the systematic movement in our variables of interest. In the ice cream/crime rate example mentioned earlier, temperature is a confounding variable that could account for the relationship between the two variables.

Even when we cannot point to clear confounding variables, we should not assume that a correlation between two variables implies that one variable causes changes in another. This can be frustrating when a cause-and-effect relationship seems clear and intuitive. Think back to our discussion of the research done by the American Cancer Society and how their research projects were some of the first demonstrations of the link between smoking and cancer. It seems reasonable to assume that smoking causes cancer, but if we were limited to correlational research, we would be overstepping our bounds by making this assumption.

Unfortunately, people mistakenly make claims of causation as a function of correlations all the time. Such claims are especially common in advertisements and news stories. For example, recent research found that people who eat cereal on a regular basis achieve healthier weights than those who rarely eat cereal (Frantzen, Treviño, Echon, Garcia-Dominic, & DiMarco, 2013; Barton et al., 2005). Guess how the cereal companies report this finding. Does eating cereal really cause an individual to maintain a healthy weight, or are there other possible explanations, such as, someone at a healthy weight is more likely to regularly eat a healthy breakfast than someone who is obese or someone who avoids meals in an attempt to diet? While correlational research is invaluable in identifying relationships among variables, a significant limitation is the inability to establish causality. Psychologists want to make statements about cause and effect, but the only way to do that is to conduct an experiment to answer a research question. The next section describes how scientific experiments incorporate methods that eliminate or control for alternative explanations, which allow researchers to explore how changes in one variable cause changes in another variable.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 2.7.2.** *Correlation and Causality* provides explanation for why correlation does not imply causality.

https://assessments.lumenlearning.co...sessments/2730

## Illusory Correlations

The temptation to make erroneous cause-and-effect statements based on correlational research is not the only way we tend to misinterpret data. We also tend to make the mistake of illusory correlations, especially with unsystematic observations. **Illusory correlations**, or false correlations, occur when people believe that relationships exist between two things when no such relationship exists. One well-known illusory correlation is the supposed effect that the moon's phases have on human behavior. Many people passionately assert that human behavior is affected by the phase of the moon, and specifically, that people act strangely when the moon is full (Figure 2).



Figure 2. Many people believe that a full moon makes people behave oddly. (credit: Cory Zanker)

There is no denying that the moon exerts a powerful influence on our planet. The ebb and flow of the ocean's tides are tightly tied to the gravitational forces of the moon. Many people believe, therefore, that it is logical that we are affected by the moon as well. After all, our bodies are largely made up of water. A meta-analysis of nearly 40 studies consistently demonstrated, however, that the relationship between the moon and our behavior does not exist (Rotton & Kelly, 1985). While we may pay more attention to odd behavior during the full phase of the moon, the rates of odd behavior remain constant throughout the lunar cycle. Why are we so apt to believe in illusory correlations like this? Often we read or hear about them and simply accept the information as valid. Or, we have a hunch about how something works and then look for evidence to support that hunch, ignoring evidence that would tell us our hunch is false; this is known as **confirmation bias**. Other times, we find illusory correlations based on the information that comes most easily to mind, even if that information is severely limited. And while we may feel confident that we can use these relationships to better understand and predict the world around us, illusory correlations can have significant drawbacks. For example, research suggests that illusory correlations—in which certain behaviors are inaccurately attributed to certain groups—are involved in the formation of prejudicial attitudes that can ultimately lead to discriminatory behavior (Fiedler, 2004).

## Candela Citations

CC licensed content, Original

- Correlational Research. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...onal-research/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Psychology. **Provided by**: OpenStax. **Retrieved from**: https://openstax.org/details/books/psychology. **License**: CC BY: Attribution

CC licensed content, Specific attribution

- Correlation and Causation. **Authored by**: Sal Khan. **Provided by**: Khan Academy. **Retrieved from**: https://youtu.be/ROpbdO-gRUo. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike
- Correlational Research Design. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://hvcc.techsmithrelay.com/d0WN. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

This page titled 2.6: Correlational Research is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 2.6: Correlational Research by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 2.7: Experimental Research

As you've learned, the only way to establish that there is a cause-and-effect relationship between two variables is to conduct a scientific experiment. Experiment has a different meaning in the scientific context than in everyday life. In everyday conversation, we often use it to describe trying something for the first time, such as experimenting with a new hairstyle or new food. However, in the scientific context, an experiment has precise requirements for design and implementation.

Interactive Content

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this Interactive Content online

**Video 2.8.1.** Experimental Research Design provides explanation and examples for correlational research. A closed-captioned version of this video is available here.

## The Experimental Hypothesis

In order to conduct an experiment, a researcher must have a specific hypothesis to be tested. As you've learned, hypotheses can be formulated either through direct observation of the real world or after careful review of previous research. For example, if you think that children should not be allowed to watch violent programming on television because doing so would cause them to behave more violently, then you have basically formulated a hypothesis—namely, that watching violent television programs causes children to behave more violently. How might you have arrived at this particular hypothesis? You may have younger relatives who watch cartoons featuring characters using martial arts to save the world from evildoers, with an impressive array of punching, kicking, and defensive postures. You notice that after watching these programs for a while, your young relatives mimic the fighting behavior of the characters portrayed in the cartoon. Seeing behavior like this right after a child watches violent television programming might lead you to hypothesize that viewing violent television programming leads to an increase in the display of violent behaviors. These sorts of personal observations are what often lead us to formulate a specific hypothesis, but we cannot use limited personal observations and anecdotal evidence to test our hypothesis rigorously. Instead, to find out if real-world data supports our hypothesis, we have to conduct an experiment.

## Designing an Experiment

The most basic experimental design involves two groups: the experimental group and the control group. The two groups are designed to be the same except for one difference— experimental manipulation. The **experimental group** gets the experimental manipulation—that is, the treatment or variable being tested (in this case, violent TV images)—and the **control group** does not. Since experimental manipulation is the only difference between the experimental and control groups, we can be sure that any differences between the two are due to experimental manipulation rather than chance.

In our example of how violent television programming might affect violent behavior in children, we have the experimental group view violent television programming for a specified time and then measure their violent behavior. We measure the violent behavior in our control group after they watch nonviolent television programming for the same amount of time. It is important for the control group to be treated similarly to the experimental group, with the exception that the control group does not receive the experimental manipulation. Therefore, we have the control group watch non-violent television programming for the same amount of time as the experimental group.

We also need to define precisely, or operationalize, what is considered violent and nonviolent. An **operational definition** is a description of how we will measure our variables, and it is important in allowing others to understand exactly how and what a researcher measures in a particular experiment. In operationalizing violent behavior, we might choose to count only physical acts

like kicking or punching as instances of this behavior, or we also may choose to include angry verbal exchanges. Whatever we determine, it is important that we operationalize violent behavior in such a way that anyone who hears about our study for the first time knows exactly what we mean by violence. This aids peoples' ability to interpret our data as well as their capacity to repeat our experiment should they choose to do so.

Once we have operationalized what is considered violent television programming and what is considered violent behavior from our experiment participants, we need to establish how we will run our experiment. In this case, we might have participants watch a 30-minute television program (either violent or nonviolent, depending on their group membership) before sending them out to a playground for an hour where their behavior is observed and the number and type of violent acts are recorded.

https://assessments.lumenlearning.co...sessments/2732

Ideally, the people who observe and record the children's behavior are unaware of who was assigned to the experimental or control group, in order to control for experimenter bias. **Experimenter bias** refers to the possibility that a researcher's expectations might skew the results of the study. Remember, conducting an experiment requires a lot of planning, and the people involved in the research project have a vested interest in supporting their hypotheses. If the observers knew which child was in which group, it might influence how much attention they paid to each child's behavior as well as how they interpreted that behavior. By being blind to which child is in which group, we protect against those biases. This situation is a **single-blind study**, meaning that the participants are unaware as to which group they are in (experiment or control group) while the researcher knows which participants are in each group.

In a **double-blind study**, both the researchers and the participants are blind to group assignments. Why would a researcher want to run a study where no one knows who is in which group? Because by doing so, we can control for both experimenter and participant expectations. If you are familiar with the phrase **placebo effect**, you already have some idea as to why this is an important consideration. The placebo effect occurs when people's expectations or beliefs influence or determine their experience in a given situation. In other words, simply expecting something to happen can actually make it happen.




The placebo effect is commonly described in terms of testing the effectiveness of a new medication. Imagine that you work in a pharmaceutical company, and you think you have a new drug that is effective in treating depression. To demonstrate that your medication is effective, you run an experiment with two groups: The experimental group receives the medication, and the control group does not. But you don't want participants to know whether they received the drug or not.

Why is that? Imagine that you are a participant in this study, and you have just taken a pill that you think will improve your mood. Because you expect the pill to have an effect, you might feel better simply because you took the pill and not because of any drug actually contained in the pill—this is the placebo effect.

To make sure that any effects on mood are due to the drug and not due to expectations, the control group receives a placebo (in this case, a sugar pill). Now everyone gets a pill, and once again, neither the researcher nor the experimental participants know who got the drug and who got the sugar pill. Any differences in mood between the experimental and control groups can now be attributed to the drug itself rather than to experimenter bias or participant expectations.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 2.8.2.** Introduction to Experimental Design introduces fundamental elements for experimental research design.

https://assessments.lumenlearning.co...sessments/2731

## Independent and Dependent Variables

In a research experiment, we strive to study whether changes in one thing cause changes in another. To achieve this, we must pay attention to two important variables, or things that can be changed, in any experimental study: the independent variable and the dependent variable. An **independent variable** is manipulated or controlled by the experimenter. In a well-designed experimental study, the independent variable is the only important difference between the experimental and control groups. In our example of how violent television programs affect children's display of violent behavior, the independent variable is the type of program—violent or nonviolent—viewed by participants in the study (Figure 2.3). A **dependent variable** is what the researcher measures to see how much effect the independent variable had. In our example, the dependent variable is the number of violent acts displayed by the experimental participants.

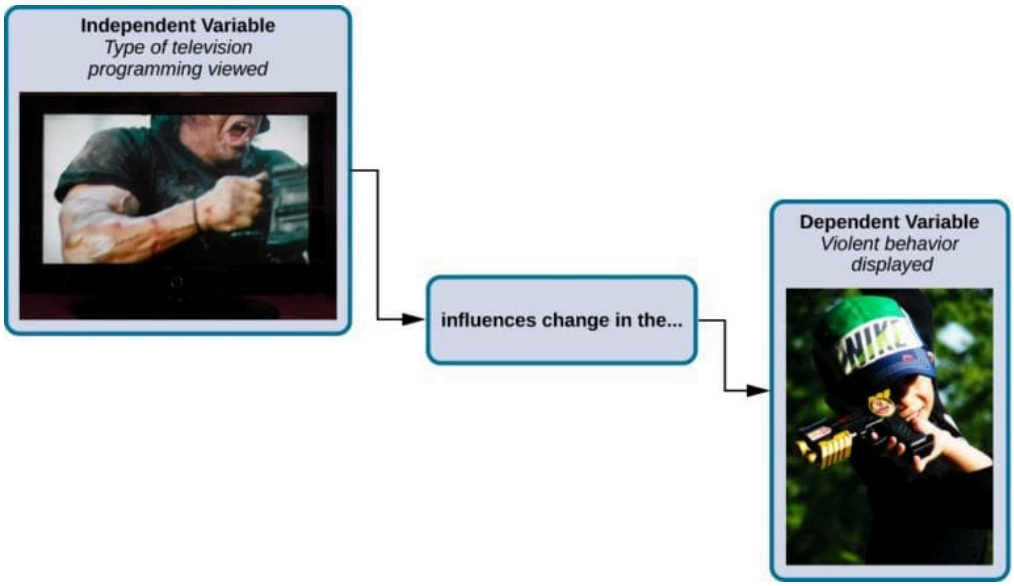



**Figure 2.8.1.** In an experiment, manipulations of the independent variable are expected to result in changes in the dependent variable.

We expect that the dependent variable will change as a function of the independent variable. In other words, the dependent variable *depends* on the independent variable. A good way to think about the relationship between the independent and dependent variables is with this question: What effect does the independent variable have on the dependent variable? Returning to our example, what effect does watching a half-hour of violent television programming or nonviolent television programming have on the number of incidents of physical aggression displayed on the playground?

https://assessments.lumenlearning.co...sessments/2734

## Selecting and Assigning Experimental Participants

Now that our study is designed, we need to obtain a sample of individuals to include in our experiment. Our study involves human participants, so we need to determine who to include. **Participants** are the subjects of psychological research, and as the name implies, individuals who are involved in psychological research actively participate in the process. Often, psychological research projects rely on college students to serve as participants. In fact, the vast majority of research in psychology subfields has historically involved students as research participants (Sears, 1986; Arnett, 2008). But are college students truly representative of the general population? College students tend to be younger, more educated, more liberal, and less diverse than the general population. Although using students as test subjects is an accepted practice, relying on such a limited pool of research participants can be problematic because it is difficult to generalize findings to the larger population.

Our hypothetical experiment involves children, and we must first generate a sample of child participants. Samples are used because populations are usually too large to reasonably involve every member in our particular experiment (Figure 2.4). If possible, we should use a random sample (there are other types of samples, but for the purposes of this chapter, we will focus on random samples). A **random sample** is a subset of a larger population in which every member of the population has an equal chance of being selected. Random samples are preferred because if the sample is large enough we can be reasonably sure that the participating individuals are representative of the larger population. This means that the percentages of characteristics in the sample—sex, ethnicity, socioeconomic level, and any other characteristics that might affect the results—are close to those percentages in the larger population.

In our example, let's say we decide our population of interest is fourth graders. But all fourth graders is a very large population, so we need to be more specific; instead, we might say our population of interest is all fourth graders in a particular city. We should include students from various income brackets, family situations, races, ethnicities, religions, and geographic areas of town. With this more manageable population, we can work with the local schools in selecting a random sample of around 200 fourth-graders that we want to participate in our experiment.

In summary, because we cannot test all of the fourth graders in a city, we want to find a group of about 200 that reflects the composition of that city. With a representative group, we can generalize our findings to the larger population without fear of our sample being biased in some way.

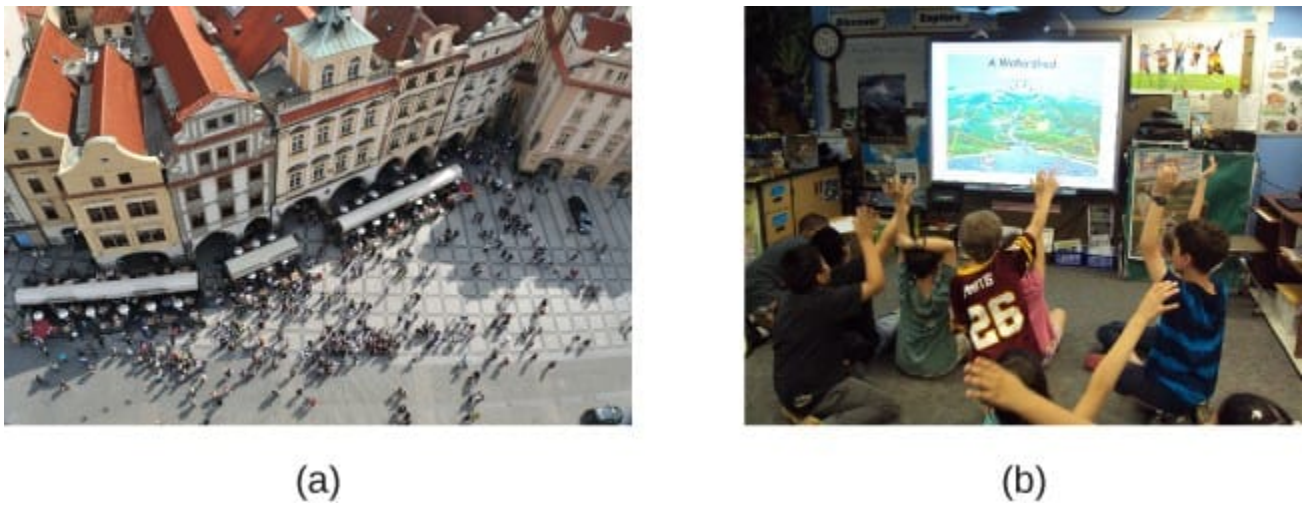



**Figure 2.8.2.** Researchers may work with (a) a large population or (b) a sample group that is a subset of the larger population.

Now that we have a sample, the next step of the experimental process is to split the participants into experimental and control groups through random assignment. With **random assignment**, all participants have an equal chance of being assigned to either group. There is statistical software that will randomly assign each of the fourth graders in the sample to either the experimental or the control group.

Random assignment is critical for sound experimental design. With sufficiently large samples, random assignment makes it unlikely that there are systematic differences between the groups. So, for instance, it would be improbable that we would get one group composed entirely of males, a given ethnic identity, or a given religious ideology. This is important because if the groups were systematically different before the experiment began, we would not know the origin of any differences we find between the

groups: Were the differences preexisting, or were they caused by manipulation of the independent variable? Random assignment allows us to assume that any differences observed between experimental and control groups result from the manipulation of the independent variable.

**Exercise**

Use this online tool to generate randomized numbers instantly and to learn more about random sampling and assignments.

## Issues to Consider

While experiments allow scientists to make cause-and-effect claims, they are not without problems. True experiments require the experimenter to manipulate an independent variable, and that can complicate many questions that psychologists might want to address. For instance, imagine that you want to know what effect sex (the independent variable) has on spatial memory (the dependent variable). Although you can certainly look for differences between males and females on a task that taps into spatial memory, you cannot directly control a person's sex. We categorize this type of research approach as quasi-experimental and recognize that we cannot make cause-and-effect claims in these circumstances.

Experimenters are also limited by ethical constraints. For instance, you would not be able to conduct an experiment designed to determine if experiencing abuse as a child leads to lower levels of self-esteem among adults. To conduct such an experiment, you would need to randomly assign some experimental participants to a group that receives abuse, and that experiment would be unethical.

## Interpreting Experimental Findings

Once data is collected from both the experimental and the control groups, a **statistical analysis** is conducted to find out if there are meaningful differences between the two groups. The statistical analysis determines how likely any difference found is due to chance (and thus not meaningful). In psychology, group differences are considered meaningful, or significant, if the odds that these differences occurred by chance alone are 5 percent or less. Stated another way, if we repeated this experiment 100 times, we would expect to find the same results at least 95 times out of 100.

The greatest strength of experiments is the ability to assert that any significant differences in the findings are caused by the independent variable. This occurs because random selection, random assignment, and a design that limits the effects of both experimenter bias and participant expectancy should create groups that are similar in composition and treatment. Therefore, any difference between the groups is attributable to the independent variable, and now we can finally make a causal statement. If we find that watching a violent television program results in more violent behavior than watching a nonviolent program, we can safely say that watching violent television programs causes an increase in the display of violent behavior.

https://assessments.lumenlearning.com/assessments/2736

https://assessments.lumenlearning.co...sessments/2731

## Candela Citations

CC licensed content, Original

- Experimental Research. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...ntal-research/. **License**: *CC BY-NC-SA: Attribution-NonCommercial-ShareAlike*

CC licensed content, Shared previously

- Psychology. **Provided by**: OpenStax. **Retrieved from**: https://openstax.org/details/books/psychology. **License**: *CC BY: Attribution*

CC licensed content, Specific attribution

- Introduction to Experimental Design. **Provided by**: Khan Academy. **Retrieved from**: https://youtu.be/ceWyayKg3QY. **License**: *CC BY-NC-SA: Attribution-NonCommercial-ShareAlike*
- Experimental Research Design. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://hvcc.techsmithrelay.com/0xPJ. **License**: *CC BY-NC-SA: Attribution-NonCommercial-ShareAlike*



This page titled 2.7: Experimental Research is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 2.7: Experimental Research by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 2.8: Developmental Research Designs

Sometimes, especially in developmental research, the researcher is interested in examining changes over time and will need to consider a research design that will capture these changes. Remember, *research methods* are tools that are used to collect information, while r**esearch design** is the strategy or blueprint for deciding how to collect and analyze information. Research design dictates which methods are used and how. There are three types of developmental research designs: cross-sectional, longitudinal, and sequential.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 2.9.1.** Developmental Research Design summarizes the benefits of challenges of the three developmental design models.

## Cross-Sectional Designs

The majority of developmental studies use cross-sectional designs because they are less time-consuming and less expensive than other developmental designs. **Cross-sectional research** designs are used to examine behavior in participants of different ages who are tested at the same point in time. Let's suppose that researchers are interested in the relationship between intelligence and aging. They might have a hypothesis that intelligence declines as people get older. The researchers might choose to give a particular intelligence test to individuals who are 20 years old, individuals who are 50 years old, and individuals who are 80 years old at the same time and compare the data from each age group. This research is cross-sectional in design because the researchers plan to examine the intelligence scores of individuals of different ages within the same study at the same time; they are taking a "cross-section" of people at one point in time. Let's say that the comparisons find that the 80-year-old adults score lower on the intelligence test than the 50-year-old adults, and the 50-year-old adults score lower on the intelligence test than the 20-year-old adults. Based on these data, the researchers might conclude that individuals become less intelligent as they get older. Would that be a valid (accurate) interpretation of the results?

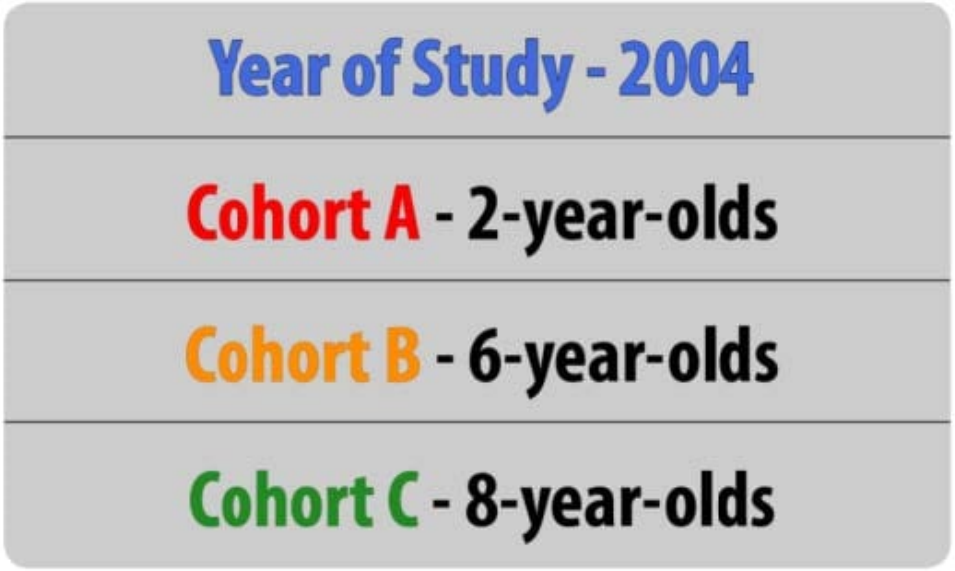


**Figure 2.9.1.** Example of cross-sectional research design

No, that would not be a valid conclusion because the researchers did not follow individuals as they aged from 20 to 50 to 80 years old. One of the primary limitations of cross-sectional research is that the results yield information about age *differences* not necessarily *changes* over time. That is, although the study described above can show that the 80-year-olds scored lower on the intelligence test than the 50-year-olds, and the 50-year-olds scored lower than the 20-year-olds, the data used for this conclusion were collected from different individuals (or groups). It could be, for instance, that when these 20-year-olds get older, they will still score just as high on the intelligence test as they did at age 20. Similarly, maybe the 80-year-olds would have scored relatively low on the intelligence test when they were young; the researchers don't know for certain because they did not follow the same individuals as they got older.

With each cohort being members of a different generation, it is also possible that the differences found between the groups are not due to age, per se, but due to cohort effects. Differences between these cohorts' IQ results could be due to differences in life experiences specific to their generation, such as differences in education, economic conditions, advances in technology, or changes in health and nutrition standards, and not due to age-related changes.

Another disadvantage of cross-sectional research is that it is limited to one time of measurement. Data are collected at one point in time, and it's possible that something could have happened in that year in history that affected all of the participants, although possibly each cohort may have been affected differently.

https://assessments.lumenlearning.com/assessments/16509

## Longitudinal Research Designs



**Longitudinal research** involves beginning with a group of people who may be of the same age and background (cohort) and measuring them repeatedly over a long period of time. One of the benefits of this type of research is that people can be followed through time and be compared with themselves when they were younger; therefore, changes with age over time are measured. What would be the advantages and disadvantages of longitudinal research? Problems with this type of research include being expensive, taking a long time, and subjects dropping out over time.

Longitudinal research designs are used to examine behavior in the same individuals over time. For instance, with our example of studying intelligence and aging, a researcher might conduct a longitudinal study to examine whether 20-year-olds become less intelligent with age over time. To this end, a researcher might give an intelligence test to individuals when they are 20 years old, again when they are 50 years old, and then again when they are 80 years old. This study is longitudinal in nature because the researcher plans to study the same individuals as they age. Based on these data, the pattern of intelligence and age might look different than from the cross-sectional research; it might be found that participants' intelligence scores are higher at age 50 than at age 20 and then remain stable or decline a little by age 80. How can that be when cross-sectional research revealed declines in intelligence with age?




**Figure 2.9.2.** Example of a longitudinal research design

Since longitudinal research happens over a period of time (which could be short term, as in months, but is often longer, as in years), there is a risk of attrition. **Attrition** occurs when participants fail to complete all portions of a study. Participants may move, change their phone numbers, die, or simply become disinterested in participating over time. Researchers should account for the possibility of attrition by enrolling a larger sample into their study initially, as some participants will likely drop out over time. There is also something known as **selective attrition—**this means that certain groups of individuals may tend to drop out. It is often the least healthy, least educated, and lower socioeconomic participants who tend to drop out over time. That means that the remaining participants may no longer be representative of the whole population, as they are, in general, healthier, better educated, and have more money. This could be a factor in why our hypothetical research found a more optimistic picture of intelligence and aging as the years went by. What can researchers do about selective attrition? At each time of testing, they could randomly recruit more participants from the same cohort as the original members to replace those who have dropped out.

https://assessments.lumenlearning.co...sessments/2719

The results from longitudinal studies may also be impacted by repeated assessments. Consider how well you would do on a math test if you were given the exact same exam every day for a week. Your performance would likely improve over time, not necessarily because you developed better math abilities, but because you were continuously practicing the same math problems. This phenomenon is known as a practice effect. Practice effects occur when participants become better at a task over time because they have done it again and again (not due to natural psychological development). So our participants may have become familiar with the intelligence test each time (and with the computerized testing administration).

Another limitation of longitudinal research is that the data are limited to only one cohort. As an example, think about how comfortable the participants in the 2010 cohort of 20-year-olds are with computers. Since only one cohort is being studied, there is no way to know if findings would be different from other cohorts. In addition, changes that are found as individuals age over time could be due to age or to time of measurement effects. That is, the participants are tested at different periods in history, so the variables of age and time of measurement could be confounded (mixed up). For example, what if there is a major shift in workplace training and education between 2020 and 2040, and many of the participants experience a lot more formal education in adulthood, which positively impacts their intelligence scores in 2040? Researchers wouldn't know if the intelligence scores increased due to growing older or due to a more educated workforce over time between measurements.

## Sequential Research Designs

**Sequential research** designs include elements of both longitudinal and cross-sectional research designs. Similar to longitudinal designs, sequential research features participants who are followed over time; similar to cross-sectional designs, sequential research includes participants of different ages. This research design is also distinct from those that have been discussed previously in that individuals of different ages are enrolled into a study at various points in time to examine age-related changes, development within the same individuals as they age, and to account for the possibility of cohort and/or time of measurement effects

Consider, once again, our example of intelligence and aging. In a study with a sequential design, a researcher might recruit three separate groups of participants (Groups A, B, and C). Group A would be recruited when they are 20 years old in 2010 and would be tested again when they are 50 and 80 years old in 2040 and 2070, respectively (similar in design to the longitudinal study described previously). Group B would be recruited when they are 20 years old in 2040 and would be tested again when they are 50 years old in 2070. Group C would be recruited when they are 20 years old in 2070, and so on.

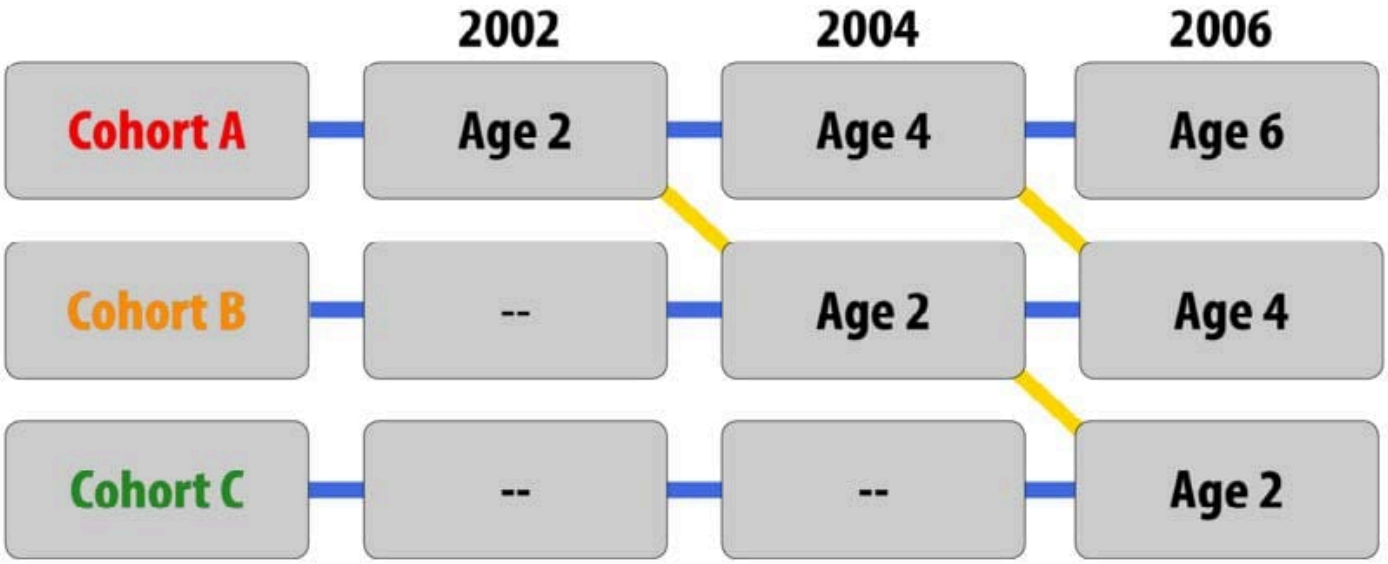



**Figure 2.9.3.** Example of sequential research design

Studies with sequential designs are powerful because they allow for both longitudinal and cross-sectional comparisons—changes and/or stability with age over time can be measured and compared with differences between age and cohort groups. This research design also allows for the examination of cohort and time of measurement effects. For example, the researcher could examine the intelligence scores of 20-year-olds at different times in history and different cohorts (follow the yellow diagonal lines in figure 3). This might be examined by researchers who are interested in sociocultural and historical changes (because we know that lifespan development is multidisciplinary). One way of looking at the usefulness of the various developmental research designs was described by Schaie and Baltes (1975): cross-sectional and longitudinal designs might reveal change patterns while sequential designs might identify developmental origins for the observed change patterns.

Since they include elements of longitudinal and cross-sectional designs, sequential research has many of the same strengths and limitations as these other approaches. For example, sequential work may require less time and effort than longitudinal research (if data are collected more frequently than over the 30-year spans in our example) but more time and effort than cross-sectional research. Although practice effects may be an issue if participants are asked to complete the same tasks or assessments over time, attrition may be less problematic than what is commonly experienced in longitudinal research since participants may not have to remain involved in the study for such a long period of time.

## Comparing Developmental Research Designs

When considering the best research design to use in their research, scientists think about their main research question and the best way to come up with an answer. A table of advantages and disadvantages for each of the described research designs is provided here to help you as you consider what sorts of studies would be best conducted using each of these different approaches.

*Table 2.9.1. Advantages and disadvantages of different research designs*

| | Advantages | Disadvantages |
|---|---|---|
| Cross-Sectional | • Examines changes between participants of different ages at the same point in time<br>• Provides information on age differences | • Cannot examine change over time<br>• Limited to one time in history<br>• Cohort differences confounded with age differences |

| | Advantages | Disadvantages |
|---|---|---|
| Longitudinal | • Examines changes within individuals over time<br>• Provides a developmental analysis | • Expensive<br>• Takes a long time<br>• Participant attrition<br>• Possibility of practice effects<br>• Limited to one cohort<br>• Time in history effects confounded with age changes |
| Sequential | • Examines changes within individuals over time<br>• Examines changes between participants of different ages at the same point in time<br>• Can be used to examine cohort effects<br>• Can be used to examine time in history effects | • May be expensive<br>• May take a long time<br>• Possibility of practice effects<br>• Some participant attrition |

https://assessments.lumenlearning.co...sessments/2718

## Candela Citations

CC licensed content, Original

- Developmental Research Design. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...search-design/. **License**: CC BY-SA: Attribution-ShareAlike

CC licensed content, Shared previously

- Developmental Research Design. **Authored by**: Margaret Clark-Plaskie . **Provided by**: Lumen Learning. **Retrieved from**: https://courses.lumenlearning.com/wm...earch-designs/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

This page titled 2.8: Developmental Research Designs is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 2.8: Developmental Research Designs by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 2.9: Challenges in Conducting Developmental Research

The previous sections describe research tools to assess development across the lifespan, as well as the ways that research designs can be used to track age-related changes and development over time. Before you begin conducting developmental research, however, you must also be aware that testing individuals of certain ages (such as infants and children) or making comparisons across ages (such as children compared to teens) comes with its own unique set of challenges. In the final section of this module, let's look at some of the main issues that are encountered when conducting developmental research, namely ethical concerns, recruitment issues, and participant attrition.

## Ethical Concerns

As a student of the social sciences, you may already know that **Institutional Review Boards (IRBs)** must review and approve all research projects that are conducted at universities, hospitals, and other institutions (each broad discipline or field, such as psychology or social work, often has its own code of ethics that must also be followed, regardless of institutional affiliation). An IRB is typically a panel of experts who read and evaluate proposals for research. IRB members want to ensure that the proposed research will be carried out ethically and that the potential benefits of the research outweigh the risks and potential harm (psychological as well as physical harm) for participants.

What you may not know though, is that the IRB considers some groups of participants to be more vulnerable or at-risk than others. Whereas university students are generally not viewed as vulnerable or at-risk, infants and young children commonly fall into this category. What makes infants and young children more vulnerable during research than young adults? One reason infants and young children are perceived as being at increased risk is due to their limited cognitive capabilities, which makes them unable to state their willingness to participate in research or tell researchers when they would like to drop out of a study. For these reasons, infants and young children require special accommodations as they participate in the research process. Similar issues and accommodations would apply to adults who are deemed to be of limited cognitive capabilities.

When thinking about special accommodations in developmental research, consider the **informed consent** process. If you have ever participated in scientific research, you may know through your own experience that adults commonly sign an informed consent statement (a contract stating that they agree to participate in research) after learning about a study. As part of this process, participants are informed of the procedures to be used in the research, along with any expected risks or benefits. Infants and young children cannot verbally indicate their willingness to participate, much less understand the balance of potential risks and benefits. As such, researchers are oftentimes required to obtain written informed consent from the parent or legal guardian of the child participant, an adult who is almost always present as the study is conducted. In fact, children are not asked to indicate whether they would like to be involved in a study at all (a process known as assent) until they are approximately seven years old. Because infants and young children cannot easily indicate if they would like to discontinue their participation in a study, researchers must be sensitive to changes in the state of the participant (determining whether a child is too tired or upset to continue) as well as to parent desires (in some cases, parents might want to discontinue their involvement in the research). As in adult studies, researchers must always strive to protect the rights and well-being of the minor participants and their parents when conducting developmental research.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 2.10.1.** How IRBs Protect Human Research Participants explains the purpose of IRBs in assuring the health and safety of participants in research.

## Recruitment

An additional challenge in developmental science is participant recruitment. Recruiting university students to participate in adult studies is typically easy. Many colleges and universities offer extra credit for participation in research and have locations such as bulletin boards and school newspapers where research can be advertised. Unfortunately, young children cannot be recruited by making announcements in Introduction to Psychology courses, by posting ads on campuses, or through online platforms such as Amazon Mechanical Turk. Given these limitations, how do researchers go about finding infants and young children to be in their studies?

The answer to this question varies along multiple dimensions. Researchers must consider the number of participants they need and the financial resources available to them, among other things. Location may also be an important consideration. Researchers who need large numbers of infants and children may attempt to recruit them by obtaining infant birth records from the state, county, or province in which they reside. Some areas make this information publicly available for free, whereas birth records must be purchased in other areas (and in some locations birth records may be entirely unavailable as a recruitment tool). If birth records are available, researchers can use the obtained information to call families by phone or mail them letters describing possible research opportunities. All is not lost if this recruitment strategy is unavailable, however. Researchers can choose to pay a recruitment agency to contact and recruit families for them. Although these methods tend to be quick and effective, they can also be quite expensive. More economical recruitment options include posting advertisements and fliers in locations frequented by families, such as mommy-and-me classes, local malls, and preschools or daycare centers. Researchers can also utilize online social media outlets like Facebook, which allows users to post recruitment advertisements for a small fee. Of course, each of these different recruitment techniques requires IRB approval. And if children are recruited and/or tested in school settings, permission would need to be obtained ahead of time from teachers, schools, and school districts (as well as informed consent from parents or guardians).

And what about the recruitment of adults? While it is easy to recruit young college students to participate in research, some would argue that it is too easy and that college students are samples of convenience. They are not randomly selected from the wider population, and they may not represent all young adults in our society (this was particularly true in the past with certain cohorts, as college students tended to be mainly white males of high socioeconomic status). In fact, in the early research on aging, this type of convenience sample was compared with another type of convenience sample—young college students tended to be compared with residents of nursing homes! Fortunately, it didn't take long for researchers to realize that older adults in nursing homes are not representative of the older population; they tend to be the oldest and sickest (physically and/or psychologically). Those initial studies probably painted an overly negative view of aging, as young adults in college were being compared to older adults who were not healthy, had not been in school nor taken tests in many decades, and probably did not graduate high school, let alone college. As we can see, recruitment and random sampling can be significant issues in research with adults, as well as infants and children. For instance, how and where would you recruit middle-aged adults to participate in your research?

## Attrition



Another important consideration when conducting research with infants and young children is **attrition**. Although attrition is quite common in longitudinal research in particular (see the previous section on longitudinal designs for an example of high attrition rates and selective attrition in lifespan developmental research), it is also problematic in developmental science more generally, as studies with infants and young children tend to have higher attrition rates than studies with adults. For example, high attrition rates in ERP (event-related potential, which is a technique to understand brain function) studies oftentimes result from the demands of the task: infants are required to sit still and have a tight, wet cap placed on their heads before watching still photographs on a computer screen in a dark, quiet room. In other cases, attrition may be due to motivation (or a lack thereof). Whereas adults may be motivated to participate in research in order to receive money or extra course credit, infants and young children are not as easily enticed. In addition, infants and young children are more likely to tire easily, become fussy, and lose interest in the study procedures than are adults. For these reasons, research studies should be designed to be as short as possible – it is likely better to break up a large study into multiple short sessions rather than cram all of the tasks into one long visit to the lab. Researchers should also allow time for breaks in their study protocols so that infants can rest or have snacks as needed. Happy, comfortable participants provide the best data.

# Conclusions

Lifespan development is a fascinating field of study – but care must be taken to ensure that researchers use appropriate methods to examine human behavior, use the correct experimental design to answer their questions, and be aware of the special challenges that are part-and-parcel of developmental research. After reading this module, you should have a solid understanding of these various issues and be ready to think more critically about research questions that interest you. For example, what types of questions do you have about lifespan development? What types of research would you like to conduct? Many interesting questions remain to be examined by future generations of developmental scientists – maybe you will make one of the next big discoveries!

https://assessments.lumenlearning.co...essments/16510

## Candela Citations

CC licensed content, Shared previously

- Research in Lifespan Development. **Authored by**: Lumen. **Provided by**: Lumen Learning. **Retrieved from**: https://courses.lumenlearning.com/su...n-development/. **License**: CC BY: Attribution

This page titled 2.9: Challenges in Conducting Developmental Research is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 2.9: Challenges in Conducting Developmental Research by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

**attrition:** reduction in the number of research participants as some drop out over time

**case study:** exploring a single case or situation in great detail. Information may be gathered with the use of observation, interviews, testing, or other methods to uncover as much as possible about a person or situation

**cohort:** a group of people who are born at roughly the same period in a particular society. Cohorts share histories and contexts for living

**content analysis:** involves looking at media such as old texts, pictures, commercials, lyrics or other materials to explore patterns or themes in culture

**control group:** a comparison group that is equivalent to the experimental group, but is not given the independent variable

**correlation:** the relationship between two or more variables; when two variables are correlated, one variable changes as the other does

**correlation coefficient:** number from -1 to +1, indicating the strength and direction of the relationship between variables, and usually represented by r

**correlational research:** research that formally tests whether a relationship exists between two or more variables, however, correlation does not imply causation

**cross-sectional research:** used to examine behavior in participants of different ages who are tested at the same point in time; may confound age and cohort differences

**dependent variable:** the outcome or variable that is supposedly affected by the independent variable

**descriptive studies:** research focused on describing an occurrence

**double-blind:** a research design in which neither the participants nor the researchers know whether an individual is assigned to the experimental group or the control group

**experimental group:** the group of participants in an experiment who receive the independent variable

**experimental research:** research that involves randomly assigning people to different conditions and using hypothesis testing to make inferences about how these conditions affect behavior; the only method that measures cause and effect between variables

**experiments:** designed to test hypotheses in a controlled setting in efforts to explain how certain factors or events produce outcomes; the only research method that measures cause and effect relationships between variables

**explanatory studies:** research that tries to answer the question “why”

**Hawthorne effect:** individuals tend to change their behavior when they know they are being watched

**hypotheses:** specific statements or predictions about the relationship between variables

**independent variable:** something that is manipulated or introduced by the researcher to the experimental group; treatment or intervention

**longitudinal research:** studying a group of people who may be of the same age and background (cohort), and measuring them repeatedly over a long period of time; may confound age and time of measurement effects

**negative correlation:** two variables change in different directions, with one becoming larger as the other becomes smaller; a negative correlation is not the same thing as no correlation

**observational studies:** also called naturalistic observation, involves watching and recording the actions of participants

**operationalized:** concepts transformed into variables that can be measured in research

**positive correlation:** two variables change in the same direction, both becoming either larger or smaller

**qualitative research:** theoretical ideas are “grounded” in the experiences of the participants, who answer open-ended questions

**quantitative research:** involves numerical data that are quantified using statistics to understand and report what has been studied

**reliability:** when something yields consistent results

**research design:** the strategy or blueprint for deciding how to collect and analyze information; dictates which methods are used and how

**scatterplot:** a plot or mathematical diagram consisting of data points that represent two variables

**secondary content analysis:** archival research, involves analyzing information that has already been collected or examining documents or media to uncover attitudes, practices or preferences

**selective attrition:** certain groups of individuals may tend to drop out more frequently resulting in the remaining participants longer being representative of the whole population

**sequential research design:** combines aspects of cross-sectional and longitudinal designs, but also adding new cohorts at different times of measurement; allows for analyses to consider effects of age, cohort, time of measurement, and socio-historical change

**survey:** asking a standard set of questions to a group of subjects

**validity:** when something yields accurate results

**variables:** factors that change in value

This page titled 2.10: Glossary is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 2.10: Glossary by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 3: PSYCHOLOGICAL APPROACHES

## Learning Objectives

- Describe theories as they relate to lifespan development
- Describe the historical foundations leading to the development of theories about lifespan development
- Describe Freud's theory of psychosexual development
- Describe Erikson's eight stages of psychosocial development
- Describe the principles of classical conditioning
- Describe the principles of operant conditioning
- Describe social learning theory
- Describe Piaget's theory of cognitive development
- Describe information processing approaches to cognitive development
- Describe the major concepts of humanistic theory (unconditional positive regard, the good life), as developed by Carl Rogers
- Explain Maslow's hierarchy of needs
- Describe Vygotsky's sociocultural theory of cognitive development
- Explain Bronfenbrenner's bioecological model
- Describe the evolutionary perspective
- Contrast the main psychological theories that apply to human development



Attitudes towards children and adolescents have evolved. Before the 17th century, children were generally considered weaker, more insignificant versions of adults. They were assumed to be subject to the same needs and desires as adults and to have the same vices and virtues as adults. Therefore they dressed the same, were not warranted more privileges, and they worked the same hours and received the same punishments for misdeeds. If they stole, they were hanged. If they worked hard and did well, they could achieve prosperity. Children were considered adults as soon as they could live alone.

Society, and especially psychologists, now reject this medieval view; but how do we go about formulating contemporary theories of development? Our personal theories about development are based on experiences, folklore, stories in the media, or built haphazardly on unverified observation. However, the theories presented in this course are more formal. They are based on prior empirical evidence and observations by psychologists and other researchers and provide a framework through which we can draw conclusions and make predictions about human behavior. These theories are subject to rigorous testing through research and are based on a psychological approach. A **psychological approach** is a perspective, based on certain assumptions, about behavior. Each approach holds shared ideas about how to describe, predict, and explain behavior.

In this chapter, we will discuss the major psychological approaches that pertain to development. But first, we will briefly review some of the early founders of the field of developmental psychology. We will then examine the major characteristics of the contemporary approaches: psychodynamic, behavioral, humanistic, cognitive, contextual, biological, and evolutionary psychology.


3.1: Understanding Theories

3.2: History of Developmental Psychology

3.3: Contemporary Psychological Approaches

3.4: Psychodynamic Approach

3.5: Behavioral Approach

3.6: Humanistic Approach

3.7: Cognitive Approach

3.8: Contextual Approach

3.9: Biopsychology and Evolutionary Psychology

3.10: Comparing Contemporary Approaches

3.11: Glossary



This page titled 3: Psychological Approaches is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 3: Psychological Approaches by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 3.1: Understanding Theories

Scientific knowledge is advanced through a process known as the scientific method. Basically, ideas (in the form of theories and hypotheses) are tested against the real world (in the form of empirical observations), and those empirical observations lead to more ideas that are tested against the real world, and so on. In this sense, the scientific process is circular. The types of reasoning within the circle are called deductive and inductive. In **deductive reasoning**, ideas are tested against the empirical world; in **inductive reasoning**, empirical observations lead to new ideas (Figure 2.4). These processes are inseparable, like inhaling and exhaling, but different research approaches place different emphasis on the deductive and inductive aspects.

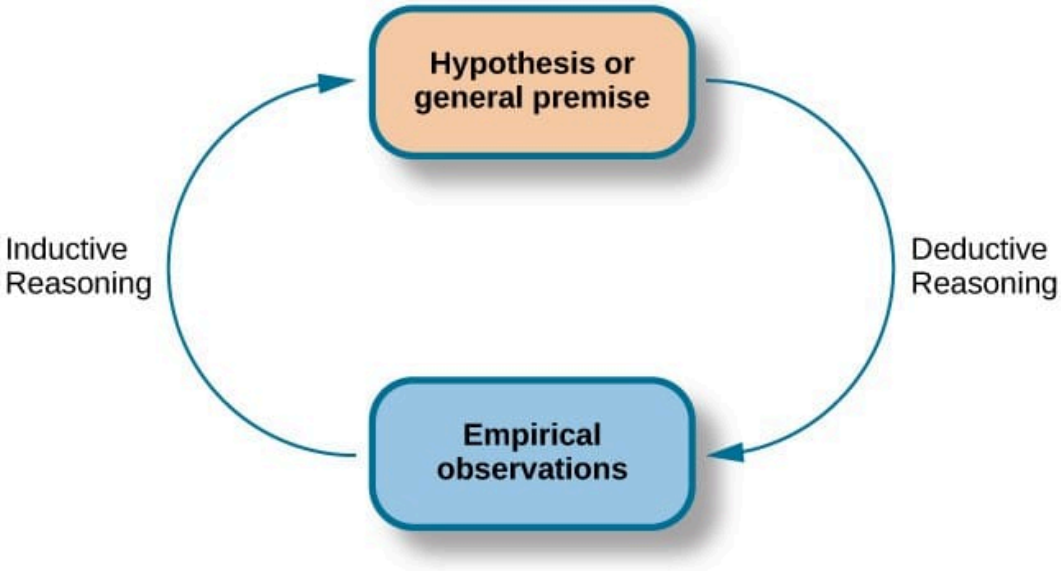



**Figure 3.2.1.** Psychological research relies on both inductive and deductive reasoning.

In the scientific context, deductive reasoning begins with a generalization—one hypothesis—that is then used to reach logical conclusions about the real world. If the hypothesis is correct, then the logical conclusions reached through deductive reasoning should also be correct. A deductive reasoning argument might go something like this: All living things require energy to survive (this would be your hypothesis). Ducks are living things. Therefore, ducks require energy to survive (logical conclusion). In this example, the hypothesis is correct; therefore, the conclusion is correct as well. Sometimes, however, an incorrect hypothesis may lead to a logical but incorrect conclusion. Consider this argument: all ducks are born with the ability to see. Quackers is a duck. Therefore, Quackers was born with the ability to see. Scientists use deductive reasoning to test their hypotheses empirically. Returning to the example of the ducks, researchers might design a study to test the hypothesis that if all living things require energy to survive, then ducks will be found to require energy to survive.

Deductive reasoning starts with a generalization that is tested against real-world observations; however, inductive reasoning moves in the opposite direction. Inductive reasoning uses empirical observations to construct broad generalizations. Unlike deductive reasoning, conclusions drawn from inductive reasoning may or may not be correct, regardless of the observations on which they are based. For instance, you may notice that your favorite fruits—apples, bananas, and oranges—all grow on trees; therefore, you assume that all fruit must grow on trees. This would be an example of inductive reasoning, and the existence of strawberries, blueberries, and kiwi demonstrate that this generalization is not correct despite it being based on several direct observations. Scientists use inductive reasoning to formulate theories, which in turn generate hypotheses that are tested with deductive reasoning. In the end, science involves both deductive and inductive processes.

For example, case studies are heavily weighted on the side of empirical observations. Thus, case studies are closely associated with inductive processes as researchers gather massive amounts of observations and seek interesting patterns (new ideas) in the data. Experimental research, on the other hand, puts great emphasis on deductive reasoning.

# What is a Theory?

We have stated that theories and hypotheses are ideas, but what sort of ideas are they, exactly? A **theory** is a well-developed set of ideas that propose an explanation for observed phenomena. Theories are repeatedly checked against the world, but they tend to be too complex to be tested all at once; instead, researchers create hypotheses to test specific aspects of a theory.

A **hypothesis** is a testable prediction about how the world will behave if our idea is correct, and it is often worded as an if-then statement (e.g., if I study all night, I will get a passing grade on the test). The hypothesis is critical because it bridges the gap between the realm of ideas and the real world. As specific hypotheses are tested, theories are modified and refined to reflect and incorporate the result of these tests (Figure 3.2).

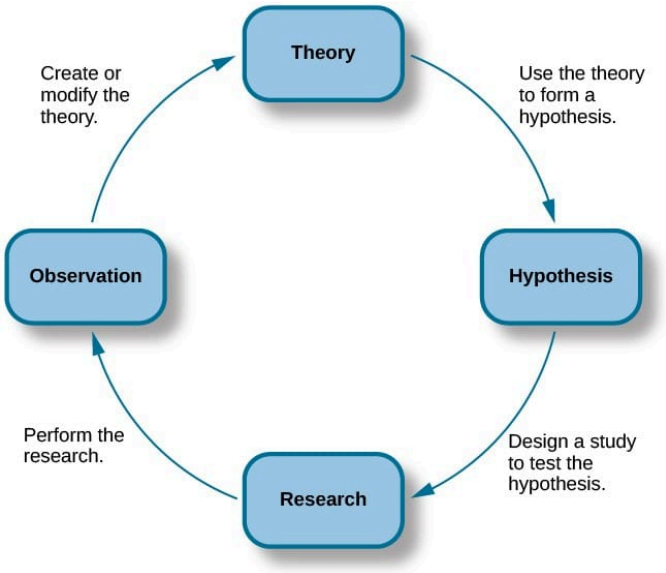



**Figure 3.2.2.** The scientific method of research includes proposing hypotheses, conducting research, and creating or modifying theories based on results.

https://assessments.lumenlearning.co...essments/16511

To see how this process works, let us consider a specific theory and a hypothesis that might be generated from that theory. The James-Lange theory of emotion asserts that emotional experience relies on the physiological arousal associated with the emotional state. If you walked out of your home and discovered a very aggressive snake waiting on your doorstep, your heart would begin to race and your stomach churn. According to the James-Lange theory, these physiological changes would result in your feeling of fear. A hypothesis that could be derived from this theory might be that a person who is unaware of the physiological arousal that the sight of the snake elicits will not feel fear.

A scientific hypothesis is also **falsifiable** or capable of being shown to be incorrect. For example, Sigmund Freud had lots of interesting ideas to explain various human behaviors; however, a major criticism of Freud's theories is that many of his ideas cannot be empirically tested and thus are not falsifiable. Despite this, Freud's theories are widely taught in introductory psychology texts because of their historical significance for personality psychology and psychotherapy, and these remain the root of all modern forms of therapy.

In contrast, the James-Lange theory does generate falsifiable hypotheses, such as the one described above. Some individuals who suffer significant injuries to their spinal columns are unable to feel the bodily changes that often accompany emotional experiences. Therefore, we could test the hypothesis by determining how emotional experiences differ between individuals who can detect these changes in their physiological arousal and those who do not. In fact, this research has been conducted, and while the emotional experiences of people deprived of an awareness of their physiological arousal may be less intense, they still experience emotion (Chwalisz, Diener, & Gallagher, 1988).

Scientific research's dependence on falsifiability allows for high confidence in the information that it produces. Typically, by the time information is accepted by the scientific community, it has been tested repeatedly. However, in the early years of studying

development, theories were often based on philosophy and inductive reasoning, and could not always provide empirical evidence to support these ideas. In the late 1800s, a transformation occurred when philosophy met physiology and adopted the scientific methods used by the physical sciences to explore questions about behavior and the mind.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 3.2.1.** Hypothesis vs Theory explains the differences between the two.

https://assessments.lumenlearning.co...sessments/2697

## Candela Citations

CC licensed content, Original

- Understanding Theories. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...ding-theories/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Psychology. **Provided by**: OpenStax. **Retrieved from**: https://openstax.org/details/books/psychology. **License**: CC BY: Attribution
- Understanding Theories. **Authored by**: Sonja Ann Miller. **Provided by**: Lumen Learning. **Retrieved from**: https://courses.lumenlearning.com/wm...ding-theories/. **License**: CC BY-SA: Attribution-ShareAlike

All rights reserved content

- Hypothesis vs Theory. **Provided by**: Udacity. **Retrieved from**: https://youtu.be/DRDhDo2dDtg. **License**: *All Rights Reserved*

This page titled 3.1: Understanding Theories is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 3.1: Understanding Theories by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 3.2: History of Developmental Psychology



**Figure 3.3.1.** Some key figures in the early development of psychology. Front row: Sigmund Freud, G. Stanley Hall, Carl Jung. Back row: Abraham A. Brill, Ernest Jones, Sándor Ferenczi, at Clark University in Worcester, Massachusetts. Date: September 1909.

The scientific study of children and adolescents began in the late nineteenth century and blossomed in the early twentieth century as pioneering psychologists sought to uncover the secrets of human behavior by studying its development. Three early scholars, John Locke, Jean-Jacques Rousseau, and Charles Darwin, proposed theories of human behavior that are the "direct ancestors of the three major theoretical traditions" of developmental psychology today" (Vasta et al., 1998, p. 10). Locke, a British empiricist, adhered to a strict environmentalist position, that the mind of the newborn as a tabula rasa ("blank slate") on which knowledge is written through experience and learning. Rousseau, a Swiss philosopher who spent much of his life in France, proposed a nativistic model in his famous novel, *Emile*, in which development occurs according to innate processes progressing through three stages: Infans (infancy), puer (childhood), and adolescence. Rousseau detailed some of the necessary progression through these stages in order to develop into an ideal citizen. Although some aspects of his text were controversial, Rousseau's ideas were powerfully influential on educators at the time. Finally, the work of Darwin, the British biologist famous for his theory of evolution, led others to suggest that development proceeds through evolutionary recapitulation, with many human behaviors having their origins in successful adaptations in the past as "ontogeny recapitulates phylogeny."

## G. Stanley Hall

Darwin's theories greatly influenced G. Stanley Hall, who believed that children developed over their lifetime much in the same way that a species evolved throughout time. His interests focused on childhood development, adolescence, and evolutionary theory. His significant contributions to the field are that he taught the first courses in child development, several of his students becoming leading researchers in the field, and he established scientific journals for the publication of child development research. He was also the first president of the American Psychological Association.

## James Mark Baldwin

Another early contributor to the study of development was James Mark Baldwin (1861-1934), a Princeton-educated American philosopher and psychologist who did quantitative and experimental research on infant development. He made important contributions to early psychology, psychiatry, and the theory of evolution. Baldwin wrote essays such as "Mental Development in the Child and the Race: Methods and Processes," which made a vivid impression on Jean Piaget (who later developed the most popular theory of cognitive development) and Lawrence Kohlberg (who developed a theory about moral judgment and development).

## John B. Watson

The 20th century marked the formation of qualitative distinctions between children and adults. When John Watson wrote the book *Psychological Care Of Infant And Child,* in 1928, he sought to add clarification surrounding behaviorists' views on child care and development. Watson was the founder of the field of behaviorism, which emphasized the role of nurture, or the environment, in human development. He believed, based on Locke's environmentalist position, that human behavior can be understood in terms of experiences and learning. He believed that all behaviors are learned, or conditioned, as evidenced by his famous "Little Albert" study, in which he conditioned an infant to fear a white rat. In Watson's book on the care of the infant and child, Watson explained that children should be treated as a young adult—with respect, but also without emotional attachment. In the book, he warned against the inevitable dangers of a mother providing too much love and affection. Watson explained that love, along with all things observable behavior, is conditioned. Watson supported his warnings by mentioning invalidism, saying that society does not overly comfort children as they become young adults in the real world, so parents should not set up these unrealistic expectations. His book was highly criticized but was still influential in promoting more research into early childhood behavior and development.

https://assessments.lumenlearning.co...sessments/2669

## Sigmund Freud

Another name you are probably familiar with who was influential in the study of development is Sigmund Freud. Sigmund Freud's model of 'psychosexual development' grew out of his psychoanalytic approach to human personality and psychopathology. In sharp contrast to the objective approach espoused by Watson, Freud based his model of child development on his own and his patients' recollections of their childhood. He developed a stage model of development in which the libido, or sexual energy, of the child focuses on different "zones" or areas of the body as the child grows to adulthood. Freud's model is an "interactionist" one since he believed that although the sequence and timing of these stages are biologically determined, successful personality development depends on the experiences the child has during each stage. Although the details of Freud's developmental theory have been widely criticized, his emphasis on the importance of early childhood experiences, prior to five years of age, has had a lasting impact.

https://assessments.lumenlearning.co...sessments/2664

## Arnold Gesell

Arnold Gesell, a student of G. Stanley Hall, carried out the first large-scale detailed study of children's behavior, authoring several books on the topic in the 1920s, 30s, and 40s. His research revealed consistent patterns of development, supporting his view that human development depends on biological "maturation," with the environment providing only minor variations in the age at which a skill might emerge but never affecting the sequence or pattern. Gesell's research produced norms, such as the order and the average age range in which a variety of early behaviors such as sitting, crawling, and walking emerge. In conducting his studies, Gesell developed sophisticated observational techniques, including one-way viewing screens and recording methods that did not disturb the child.

## Jean Piaget

Jean Piaget (1896-1980) is considered one of the most influential psychologists of the twentieth century, and his stage theory of cognitive development revolutionized our view of children's thinking and learning. His work inspired more research than any other theorist, and many of his concepts are still foundational to developmental psychology. His interest lay in children's knowledge, their thinking, and the qualitative differences in their thinking as it develops. Although he called his field "genetic epistemology," stressing the role of biological determinism, he also assigned great importance to experience. In his view, children "construct" their knowledge through processes of "assimilation," in which they evaluate and try to understand new information, based on their existing knowledge of the world, and "accommodation," in which they expand and modify their cognitive structures based on new experiences.

https://assessments.lumenlearning.co...essments/16512

## Candela Citations

CC licensed content, Original

- History of Developmental Psychology. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...al-psychology/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Developmental Psychology. **Provided by**: New World Encyclopedia. **Retrieved from**: https://www.newworldencyclopedia.org...tal_psychology. **License**: CC BY-SA: Attribution-ShareAlike

CC licensed content, Specific attribution

- Schemas, Assimilation, and Accommodation. **Provided by**: Khan Academy . **Retrieved from**: https://www.newworldencyclopedia.org...tal_psychology. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

This page titled 3.2: History of Developmental Psychology is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 3.2: History of Developmental Psychology by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 3.3: Contemporary Psychological Approaches

Many of the early psychological theories and approaches changed over the years, as new evidence shed light on behavior and development. Some of these approaches have remained a constant influence, some have changed significantly over the years, and some have faded into history. Currently, several major contemporary approaches apply to development: psychodynamic, behavioral, humanistic, cognitive, contextual, biological, and evolutionary approaches.

Regardless of changes to these psychological approaches, throughout history and still in the present day, key issues remain among which developmental theorists often disagree. Particularly oft-disputed is the role of early experiences on later development in opposition to current behavior reflecting present experiences–namely the *passive versus active issue*. Likewise, whether or not development is best viewed as occurring in stages or rather as a gradual and cumulative process of change has traditionally been up for debate – a question of *continuity versus discontinuity.* Also, consider whether the pattern of change the same for everyone, or are there different patterns of change—one course of development versus many courses. Further, the role of heredity and the environment in shaping human development is a much-contested topic of discussion – also referred to as *nature versus nurture debate*. We will examine each of these issues in more detail throughout the chapter.

## Candela Citations

CC licensed content, Original

- Contemporary Psychological Approaches. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...al-approaches/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Psychodynamic Theories. **Authored by**: Jessica Traylor . **Provided by**: Lumen Learning. **Retrieved from**: https://courses.lumenlearning.com/wm...amic-theories/. **License**: CC BY: Attribution

This page titled 3.3: Contemporary Psychological Approaches is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 3.3: Contemporary Psychological Approaches by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 3.4: Psychodynamic Approach

## Freud's Psychoanalytic Approach

As previously mentioned, Sigmund Freud (1856-1939), an Austrian neurologist, is probably the most recognized name in psychology, His psychodynamic approach **to** development and psychopathology dominated the field of psychiatry until the growth of behaviorism in the 1930s and beyond. The **psychodynamic approach** emphasizes unconscious psychological processes (for example, wishes and fears of which we are not fully aware), and contends that childhood experiences are crucial in shaping adult personality (Thorne & Henley, 2005). Freud theorized that many of his patients' problems arose from the unconscious mind. In Freud's view, the unconscious mind was a repository of feelings and urges of which we have no awareness. Gaining access to the unconscious, then, was crucial to the successful resolution of the patient's problems. According to Freud, the unconscious mind could be accessed through dream analysis, by examinations of the first words that came to people's minds, and through seemingly innocent slips of the tongue.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

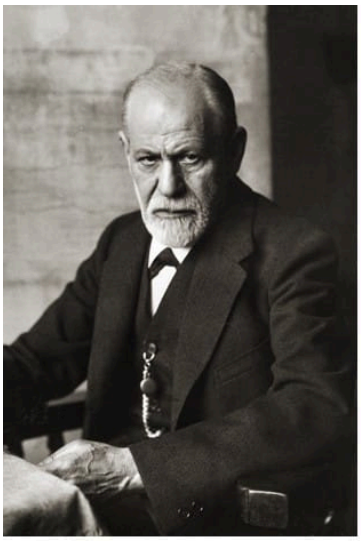
View this YouTube Video online

**Video 3.5.1.** Psychoanalytic Theory explains the various levels of the mind and how we develop and behave based on the influences of these various levels.

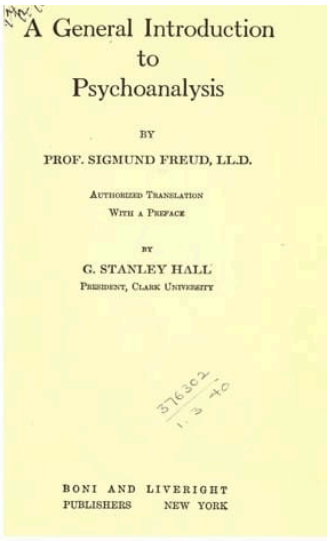
https://assessments.lumenlearning.co...essments/16513

https://assessments.lumenlearning.co...essments/16514

Freud also made contributions to the advancement of psychotherapy. He began working with 'hysterical' patients and discovered that when they began to talk about some of their life experiences, particularly those that took place in early childhood, their symptoms disappeared. This led him to suggest the first purely psychological explanation for physical problems and mental illness. What he proposed was that unconscious motives, desires, fears, and anxieties drive our actions. When upsetting memories or thoughts begin to find their way into our consciousness, we develop defenses to shield us from these painful realities, called defense mechanisms. Freud believed that many mental illnesses are a result of a person's inability to accept reality.



(a)




(b)

**Figure 3.5.1.** (a) Sigmund Freud was highly influential in the history of psychology. (b) One of his many books, *A General Introduction To Psychoanalysis*, shared his ideas about psychoanalytical therapy; it was published in 1922.

While many of Freud's theories have lost favor, he is still considered to be a very influential figure in the area of development. Freud was the first to systematically study and theorize the workings of the unconscious mind in the manner that we associate with modern psychology. Because psychodynamic theories are difficult to prove wrong, evaluating those theories, in general, is difficult in that we cannot make definite predictions about a given individual's behavior using the theories. The theory is also considered to be sexist in suggesting that women who do not accept an inferior position in society are somehow psychologically flawed. Freud focused on the darker side of human nature and suggested that much of what determines our actions are unknown to us. Others criticize that the psychodynamic approach is too deterministic, relating to the idea that all events, including human action, are ultimately determined by causes regarded as external to the will, thereby leaving little room for the idea of free will (De St Aubin, 2004).

The psychodynamic perspective has evolved considerably since Freud's time, encompassing all the theories in psychology that see human functioning based upon the interaction of conscious and unconscious drives and forces within the person, and between the different structures of the personality.

## Erickson's Psychosocial Theory

Now, let us turn to a less controversial psychodynamic theorist, the father of developmental psychology, Erik Erikson (1902-1994). Erikson was a student of Freud's and expanded on his theory of psychosexual development by emphasizing the importance of culture in parenting practices and motivations and adding stages of adult development (Erikson, 1950; 1968).



**Figure 3.5.2.** Erik Erikson

As an art school dropout with an uncertain future, young Erik Erikson met Freud's daughter, Anna Freud, while he was tutoring the children of an American couple undergoing psychoanalysis in Vienna. It was Anna Freud who encouraged Erikson to study psychoanalysis. Erikson received his diploma from the Vienna Psychoanalytic Institute in 1933, and as Nazism spread across Europe, he fled the country and immigrated to the United States that same year. Erikson later proposed a psychosocial theory of development, suggesting that an individual's personality develops throughout the lifespan—a departure from Freud's view that personality is fixed in early life. In his theory, Erikson emphasized the social relationships that are important at each of the eight-stage of psychosocial development, each of which includes a conflict or developmental task. The development of a healthy personality and a sense of competence depend on the successful completion of each task. His stage theory was also different than his predecessor in that he emphasized development throughout the lifespan, not just until adulthood.

**Table 3.5.1.** Erikson's Psychosocial Stage Theory

| Stage | Approximate Age (years) | Virtue: Developmental Task | Description |
|---|---|---|---|
| 1 | 0–1 | **Hope: Trust vs. Mistrust** | Trust (or mistrust) that basic needs, such as nourishment and affection, will be met |
| 2 | 1–3 | **Will: Autonomy vs. Shame** | Sense of independence in many tasks develops |
| 3 | 3–6 | **Purpose: Initiative vs. Guilt** | Take initiative on some activities, may develop guilt when success not met or boundaries overstepped |
| 4 | 7–11 | **Competence: Industry vs. Inferiority** | Develop self-confidence in abilities when competent or sense of inferiority when not |
| 5 | 12–18 | **Fidelity: Identity vs. Role Confusion** | Experiment with and develop identity and roles |
| 6 | 19–39 | **Love: Intimacy vs. Isolation** | Establish intimacy and relationships with others |
| 7 | 40–64 | **Care: Generativity vs. Stagnation** | Contribute to society and be part of a family |
| 8 | 65+ | **Wisdom: Integrity vs. Despair** | Assess and make sense of life and meaning of contributions |

Erikson's eight stages form a foundation for discussions on emotional and social development during the lifespan. Keep in mind, however, that these stages or crises can occur more than once or at different times of life. For instance, a person may struggle with a lack of trust beyond infancy. Erikson's theory is criticized for focusing so heavily on stages and assuming that the completion of one stage is a prerequisite for the next crisis of development. His theory also focuses on the social expectations found in certain cultures, but not in all. For instance, the idea that adolescence is a time of searching for identity might translate well in the

middle-class culture of the United States, but not as well in cultures where the transition into adulthood coincides with puberty through rites of passage and where adult roles offer fewer choices.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 3.5.2.** Erikson's Psychosocial Development explains how humans progress through various stages.

By and large, Erikson's view that development continues throughout the lifespan is very significant and has received great recognition. However, like Freud's theory, it has been criticized for focusing on more men than women and also for its vagueness, making it difficult to test rigorously.

https://assessments.lumenlearning.co...essments/16517

https://assessments.lumenlearning.co...essments/16518

## Candela Citations

CC licensed content, Original

- Psychodynamic Approach. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...amic-approach/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Psychodynamic Theories. **Authored by**: Jessica Traylor . **Provided by**: Lumen Learning. **Retrieved from**: https://courses.lumenlearning.com/wm...amic-theories/. **License**: CC BY: Attribution

CC licensed content, Specific attribution

- Psychoanalysis Theory. **Authored by**: Shreena Desai. **Provided by**: Khan Academy . **Retrieved from**: https://youtu.be/jdawTFsCNtc. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike
- Erikson's Psychosocial Development. **Authored by**: Shreena Desai. **Provided by**: Khan Academy. **Retrieved from**: https://youtu.be/jdawTFsCNtc. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

This page titled 3.4: Psychodynamic Approach is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 3.4: Psychodynamic Approach by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 3.5: Behavioral Approach

Behaviorism emerged early in the 20th century and became a significant force in American psychology. The **behavioral approach** suggests that the keys to understanding development are observable behavior and external stimuli in the environment. Behaviorism is a theory of learning, and learning theories focus on how we are conditioned to respond to events or stimuli. These theories explain how experience determines behavior.

Championed by psychologists such as John B. Watson (1878–1958) and B. F. Skinner (1904–1990), behaviorism rejected any reference to mind and viewed overt and observable behavior as the proper subject matter of psychology. Through the scientific study of behavior, it was hoped that laws of learning could be derived that would promote the prediction and control of behavior. Russian physiologist Ivan Pavlov (1849–1936) influenced early behaviorism in America. His work on conditioned learning, popularly referred to as classical conditioning, provided support for the notion that learning and behavior were controlled by events in the environment and could be explained with no reference to mind or consciousness (Fancher, 1987).

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 3.6.1.** *How to Train a Brain* explains behaviorist theories of classical and operant conditioning.

https://assessments.lumenlearning.co...essments/16519

## Pavlov's Classical Conditioning

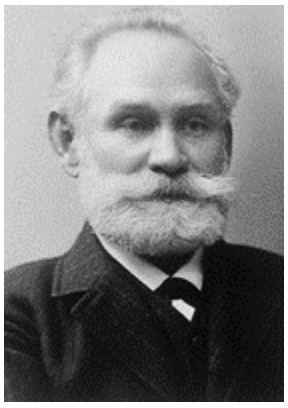


**Figure 3.6.1.** Ivan Pavlov

Early work in the field of behavior was conducted by the Russian physiologist Ivan Pavlov (1849–1936). Pavlov studied a form of learning behavior called a conditioned reflex, in which an animal or human produced a reflex (unconscious) response to a stimulus and, over time, was conditioned to produce the response to a different stimulus that the experimenter associated with the original stimulus. The reflex Pavlov worked with was salivation in response to the presence of food. The salivation reflex could be elicited using a second stimulus, such as a specific sound, that was presented in association with the initial food stimulus several times. Once the response to the second stimulus was "learned," the food stimulus could be omitted. Pavlov's "classical conditioning" is only one form of learning behavior studied by behaviorists.

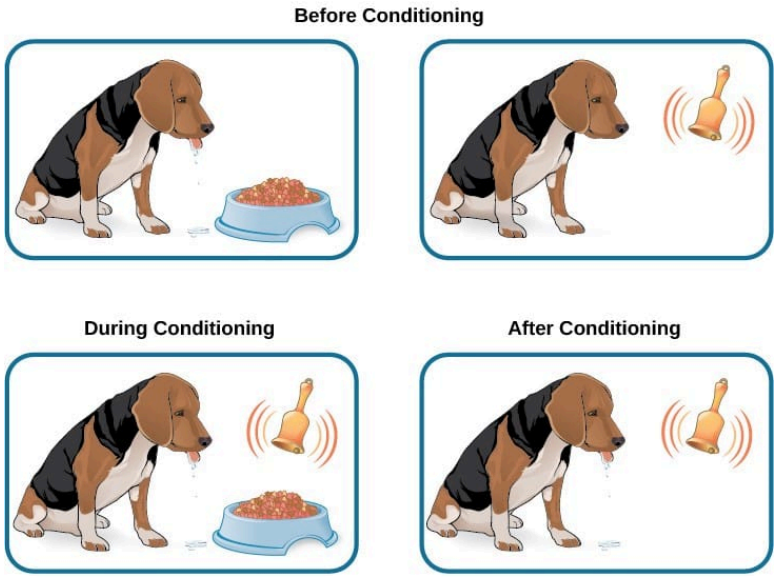



**Figure 3.6.2.** Before conditioning, an unconditioned stimulus (food) produces an unconditioned response (salivation), and a neutral stimulus (bell) does not produce a response. During conditioning, the unconditioned stimulus (food) is presented repeatedly just after the presentation of the neutral stimulus (bell). After conditioning, the neutral stimulus alone produces a conditioned response (salivation), thus becoming a conditioned stimulus.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 3.6.2.** Classical Conditioning explains the process used in classical learning.

https://assessments.lumenlearning.co...essments/16520

## Watson and Behaviorism



**Figure 3.6.3.** John B. Watson

John B. Watson (1878–1958) was an influential American psychologist whose most famous work occurred during the early 20th century at Johns Hopkins University. Watson thought that the study of consciousness was flawed because objective analysis of the mind was impossible. Watson preferred to focus directly on observable behavior and try to bring that behavior under control. Watson was a major proponent of shifting the focus of psychology from the mind to behavior, and this approach of observing and controlling behavior, and is considered the father of **behaviorism**. A significant object of study by behaviorists was learned behavior and its interaction with inborn qualities of the organism. Behaviorism commonly used animals in experiments under the assumption that what was learned using animal models could, to some degree, be applied to human behavior. Indeed, Tolman (1938) stated, "I believe that everything important in psychology (except … such matters as involve society and words) can be investigated in essence through the continued experimental and theoretical analysis of the determiners of rat behavior at a choice-point in a maze."

Behaviorism dominated experimental psychology for several decades, and its influence can still be felt today (Thorne & Henley, 2005). Behaviorism is largely responsible for establishing psychology as a scientific discipline through its objective methods and especially experimentation. In addition, this approach is used in behavioral and cognitive-behavioral therapy. Behavior modification is commonly used in classroom settings. Behaviorism has also led to research on environmental influences on human behavior.

## Skinner and Operant Conditioning

B. F. Skinner (1904–1990) was an American psychologist. Like Watson, Skinner was a behaviorist, and he concentrated on how behavior was affected by its consequences. Therefore, Skinner spoke of reinforcement and punishment as major factors in driving behavior. As a part of his research, Skinner developed a chamber that allowed the careful study of the principles of modifying behavior through reinforcement and punishment. This device, known as an operant conditioning chamber (or more familiarly, a Skinner box), has remained a crucial resource for researchers studying behavior (Thorne & Henley, 2005).

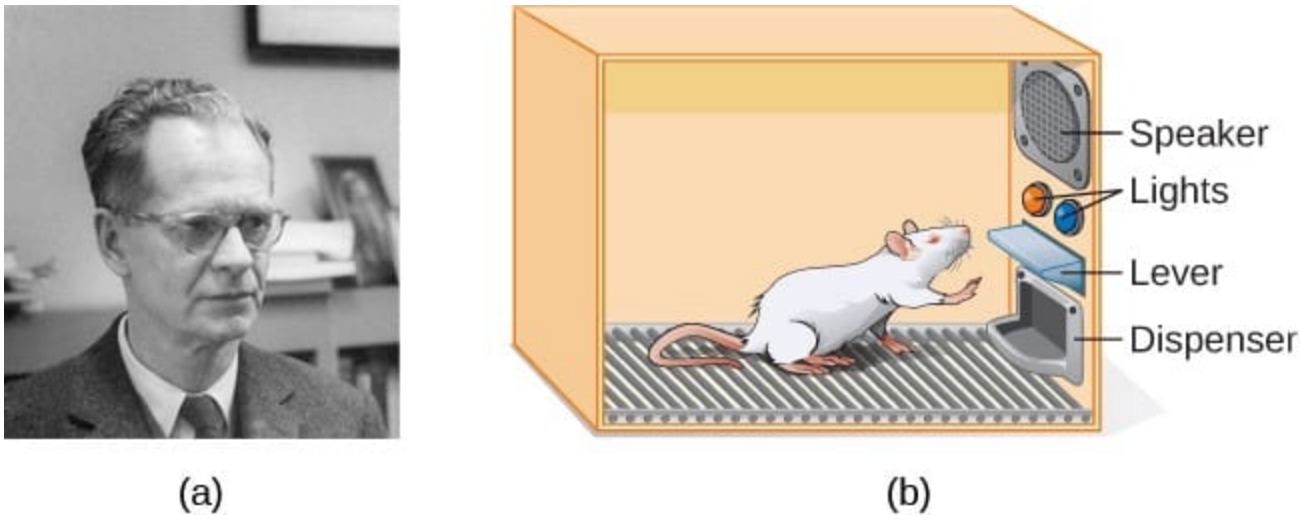



**Figure 3.6.4.** (a) B. F. Skinner is famous for his research on operant conditioning. (b) Modified versions of the operant conditioning chamber, or Skinner box, are still widely used in research settings today.

The Skinner box is a chamber that isolates the subject from the external environment and has a behavior indicator such as a lever or a button. When the animal pushes the button or lever, the box can deliver a positive reinforcement of the behavior (such as food) or a punishment (such as noise) or a token conditioner (such as a light) that is correlated with either the positive reinforcement or punishment.

Skinner's focus on positive and negative reinforcement of learned behaviors had a lasting influence in psychology that has waned somewhat since the growth of research in cognitive psychology. Despite this, conditioned learning is still used in human behavioral modification. Skinner's two widely read and controversial popular science books about the value of operant conditioning for creating happier lives remain as thought-provoking arguments for his approach (Greengrass, 2004).

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 3.6.3.** Operant Conditioning explains the various types of consequences that influence behavior.

https://assessments.lumenlearning.co...essments/16521

## Social Learning Theory: Observational Learning

Albert Bandura's ideas about learning were different from those of strict behaviorists. Bandura proposed a brand of behaviorism called **social learning theory**, which took cognitive processes and social contexts into account; it takes into consideration the dynamic and reciprocal interaction of the person, environment, and behavior. According to Bandura, pure behaviorism could not explain why learning can take place in the absence of external reinforcement. He felt that internal mental processes, like thinking and motivation, must also have a role in learning.

Observational learning is a component of Albert Bandura's Social Learning Theory (Bandura, 1977). In **observational learning**, we learn by watching others and then imitating, or modeling, what they do or say. The individuals performing the imitated behavior are called **models**. Bandura identified three kinds of models: live, verbal, and symbolic. A live model demonstrates a behavior in person. A verbal instructional model does not perform the behavior but instead explains or describes the behavior. A symbolic

model demonstrates behavior in forms of media.

Of course, we do not learn a behavior by merely observing a model. Bandura described specific steps in the process of modeling that must be followed if learning is to be successful: attention, retention, reproduction, and motivation. First, you must be focused on what the model is doing—you have to pay attention. Next, you must be able to retain, or remember, what you observed; this is retention. Then, you must be able to perform the behavior that you observed and committed to memory; this is reproduction. Finally, you must have motivation. You need to want to copy the behavior, and whether or not you are motivated depends on what happened to the model. If you saw that the model was reinforced for her behavior, you will be more motivated to copy her. This is known as **vicarious reinforcement**. On the other hand, if you observed the model being punished, you would be less motivated to copy her. This is called **vicarious punishment**.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 3.6.4.** Albert Bandura Bobo Doll Experiment explains how learning occurs through observation and demonstrates this through his Bobo doll experiment with preschool children.

https://assessments.lumenlearning.co...essments/16522

https://assessments.lumenlearning.co...sessments/4418

## Candela Citations

CC licensed content, Original

- Behavioral Approach. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...oral-approach/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Psychology. **Authored by**: Rose M. Spielman, Kathryn Dumper, William Jenkins, Arlene Lacombe, Marilyn Lovett, Marion Perlmutter. **Provided by**: Open Stax. **Retrieved from**: https://openstax.org/details/books/psychology. **License**: CC BY: Attribution

CC licensed content, Specific attribution

- Albert Bandura Bobo Doll Experiment. **Authored by**: kpharden. **Retrieved from**: https://youtu.be/Z0iWpSNu3NU. **License**: All Rights Reserved
- How to Train a Brain: Crash Course Psychology #11. **Provided by**: CrashCourse. **Retrieved from**: https://youtu.be/qG2SwE_6uVM. **License**: All Rights Reserved
- Classical Conditioning. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://youtu.be/sXvAJZjoSOw. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike
- Operant Conditioning. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://youtu.be/Bdvu2DvSKh4. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

---

This page titled 3.5: Behavioral Approach is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 3.5: Behavioral Approach by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 3.6: Humanistic Approach

During the early 20th century, American psychology was dominated by behaviorism and psychoanalysis. However, some psychologists were uncomfortable with what they viewed as limited perspectives being so influential to the field. They objected to the pessimism and determinism (all actions driven by the unconscious) of Freud. They also disliked the reductionism, or simplifying nature, of behaviorism. Behaviorism is also deterministic at its core because it sees human behavior as entirely determined by a combination of genetics and the environment. Some psychologists began to form their own ideas that emphasized personal control, intentionality, and a true predisposition for "good" as necessary for our self-concept and our behavior. Thus, humanism emerged. **Humanism** is a perspective within psychology that emphasizes the potential for good that is innate to all humans. Two of the most well-known proponents of humanistic psychology are Abraham Maslow and Carl Rogers (O'Hara, n.d.).

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 3.7.1.** Humanistic Theory explained.

https://assessments.lumenlearning.co...essments/16528

## Maslow's Hierarchy of Needs

Abraham Maslow (1908–1970) was an American psychologist who is best known for proposing a hierarchy of human needs in motivating behavior (figure below). Maslow asserted that so long as basic needs necessary for survival were met (e.g., food, water, shelter), higher-level needs (e.g., social needs) would begin to motivate behavior. According to Maslow, the highest-level needs relate to self-actualization, a process by which we achieve our full potential. The focus on the positive aspects of human nature that are characteristic of the humanistic perspective is evident (Thorne & Henley, 2005).

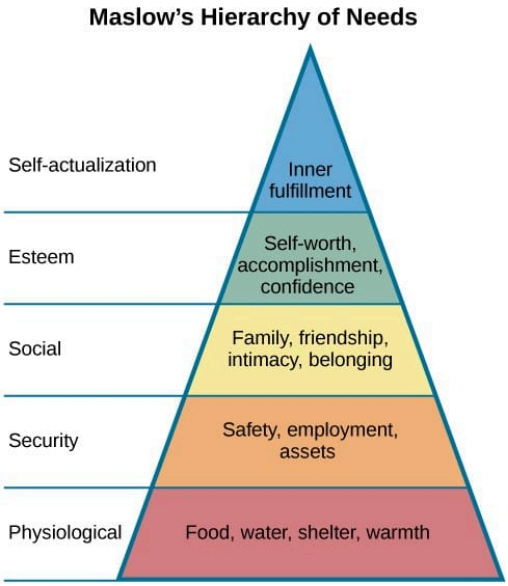


**Figure 3.7.1.** Maslow's hierarchy of needs.

Humanistic psychologists rejected, on principle, the research approach based on reductionist experimentation in the tradition of the physical and biological sciences, because it missed the "whole" human being. Beginning with Maslow and Rogers, there was an insistence on a humanistic research program. This program has been mostly qualitative (not measurement-based), but there exist a number of quantitative research strains within humanistic psychology, including research on happiness, self-concept, meditation, and the outcomes of humanistic psychotherapy (Friedman, 2008).

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 3.7.2.** Maslow's Hierarchy of Needs explained.

https://assessments.lumenlearning.co...sessments/2670

https://assessments.lumenlearning.co...essments/16529

## Candela Citations

CC licensed content, Original

- Humanistic Approach. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...stic-approach/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Psychology. **Authored by**: Rose M. Spielman, Kathryn Dumper, William Jenkins, Arlene Lacombe, Marilyn Lovett, Marion Perlmutter. **Provided by**: OpenStax. **Retrieved from**: https://openstax.org/details/books/psychology. **License**: CC BY: Attribution

CC licensed content, Specific attribution

- Humanistic Theory. **Authored by**: Shreena Desai. **Provided by**: Khan Academy. **Retrieved from**: https://youtu.be/Bdvu2DvSKh4. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike
- Maslow's Hierarchy of Needs. **Authored by**: Shreena Desai. **Provided by**: Khan Academy . **Retrieved from**: https://youtu.be/Bdvu2DvSKh4. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

This page titled 3.6: Humanistic Approach is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 3.6: Humanistic Approach by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 3.7: Cognitive Approach

Behaviorism's emphasis on objectivity and focus on external behavior had pulled psychologists' attention away from the mind for a prolonged time. The early work of the humanistic psychologists redirected attention to the individual human as a whole, and as a conscious and self-aware being. By the 1950s, new disciplinary perspectives in linguistics, neuroscience, and computer science were emerging, and these areas revived interest in the mind as a focus of scientific inquiry. This particular perspective has come to be known as the cognitive revolution (Miller, 2003). By 1967, Ulric Neisser published the first textbook entitled *Cognitive Psychology*, which served as a core text in cognitive psychology courses around the country (Thorne & Henley, 2005).

Although no one person is entirely responsible for starting the cognitive revolution, Noam Chomsky was very influential in the early days of this movement. Chomsky (1928–), an American linguist, was dissatisfied with the influence that behaviorism had had on psychology. He believed that psychology's focus on behavior was short-sighted and that the field had to re-incorporate mental functioning into its purview if it were to offer any meaningful contributions to understanding behavior (Miller, 2003).

European psychology had never really been as influenced by behaviorism as had American psychology, and thus, the cognitive revolution helped reestablish lines of communication between European psychologists and their American counterparts. Furthermore, psychologists began to cooperate with scientists in other fields, like anthropology, linguistics, computer science, and neuroscience, among others. This interdisciplinary approach often was referred to as the cognitive sciences, and the influence and prominence of this particular perspective resonates in modern-day psychology (Miller, 2003). Today, the **cognitive approach** is the area of psychology that focuses on studying cognitions, or thoughts, and their relationship to our experiences and our actions.

Cognitive psychologists have research interests that span a spectrum of topics, ranging from attention to problem-solving to language to memory. The approaches used in studying these topics are equally diverse. Given such diversity, cognitive psychology is not captured in one chapter of this text per se; rather, various concepts related to cognitive psychology will be covered in relevant portions of the chapters in this text on sensation and perception, thinking and intelligence, memory, lifespan development, social psychology, and therapy.

https://assessments.lumenlearning.co...sessments/2674

## Piaget's Psychological Constructivism

Jean Piaget (1896–1980) is another stage theorist who studied childhood development. Instead of approaching development from a psychoanalytical or psychosocial perspective, Piaget focused on children's cognitive growth. He believed that thinking is a central aspect of development and that children are naturally inquisitive. However, he said that children do not think and reason like adults (Piaget, 1930, 1932). His theory of cognitive development holds that our cognitive abilities develop through specific stages, which exemplifies the discontinuity approach to development. As we progress to a new stage, there is a distinct shift in how we think and reason.



**Figure 3.8.1.** Jean Piaget

Piaget believed that we are continuously trying to maintain cognitive equilibrium or a balance or cohesiveness in what we see and what we know. Children have much more of a challenge in maintaining this balance because they are continually being confronted with new situations, new words, new objects, etc. When faced with something new, a child may either fit it into an existing framework (**schema**) and match it with something known (**assimilation**) such as calling all animals with four legs "doggies" because he or she knows the word doggie, or expand the framework of knowledge to accommodate the new situation (**accommodation**) by learning a new word to more accurately name the animal. This is the underlying dynamic in our cognition. Even as adults, we continue to try and make sense of new situations by determining whether they fit into our old way of thinking or whether we need to modify our thoughts.

As we mature and develop our schemas, we move through four distinct stages of cognitive development. Piaget proposed that specific developmental tasks were to be mastered during each stage, and as children progressed, they became more cognitively sophisticated.

https://assessments.lumenlearning.co...essments/16524

*Table 3.8.1. Piaget's stages of cognitive development*

| Age | Stage | Description of Cognitive Development | Major Developmental Tasks |
|---|---|---|---|
| Infancy(0-2 years) | Sensorimotor | Take in sensory information and respond through motor activity. Motor responses begin as reflexes, become purposeful, and then become more sophisticated in response to sensory information. | • Master object permanence·<br>• Learn to use symbols, images, and words to represent objects and thoughts·<br>• Develop a sense of "self" separate from others |
| Preschool(2-7 years) | Pre-Operational | Display of intelligent thought. Children attempt to understand and explain their world but will make many errors in their assessments. | • Correct errored thinking·<br>• Overcome egocentric perspective |

| Age | Stage | Description of Cognitive Development | Major Developmental Tasks |
|---|---|---|---|
| Elementary School(7-11 years) | Concrete Operational | Children use operations (internal operations) to think logically and systematically. Operations allow the mental manipulation of information. | • Master conservation· • Understand reversibility· • Spontaneously classify information/objects· • Understand deception |
| Adolescence (11+ years) | Formal Operational | Teens and adults develop systematic, logical algorithms for thinking through problems. | • Capable of abstract thought· • Thinking about hypotheticals· • Tends to be idealistic |

As with other major contributors to theories of development, several of Piaget's ideas have come under criticism based on the results of further research. For example, several contemporary studies support a model of development that is more continuous than Piaget's discrete stages (Courage & Howe, 2002; Siegler, 2005, 2006). Many others suggest that children reach cognitive milestones earlier than Piaget describes (Baillargeon, 2004; de Hevia & Spelke, 2010). Looking across cultures reveals considerable variation in what children are able to do at various ages, and Piaget may have underestimated what children are capable of given the right circumstances.

According to Piaget, the highest level of cognitive development is formal operational thought, which develops between 11 and 20 years old. However, many developmental psychologists disagree with Piaget, suggesting a fifth stage of cognitive development, known as the postformal stage (Basseches, 1984; Commons & Bresette, 2006; Sinnott, 1998). In postformal thinking, decisions are made based on situations and circumstances, and logic is integrated with emotion as adults develop principles that depend on contexts. One way that we can see the difference between an adult in postformal thought and an adolescent (or adult) in formal operations is in terms of how they handle emotionally charged issues or integrate systems of thought.

## Information-Processing Theories

**Information-processing theories** have become an influential alternative to Piaget's approach. The theory assumes that even complex behavior such as learning, remembering, categorizing, and thinking can be broken down into a series of individual, specific steps, and as a person develops strategies for processing information, they can learn more complex information. This perspective equates the mind to a computer, which is responsible for analyzing information from the environment.

The most common information-processing model is applied to an understanding of memory and the way that information is encoded, stored, and then retrieved from the brain (Atkinson & Shiffrin, 1968), but information processing approaches also apply to cognitive processing in general. According to the standard information-processing model for mental development, the mind's machinery includes attention mechanisms for bringing information in, working memory for actively manipulating information, and long-term memory for passively holding information so that it can be used in the future.

This theory addresses how, as children grow, their brains likewise mature, leading to advances in their ability to process and respond to the information they received through their senses. The theory emphasizes a continuous pattern of development, in contrast with cognitive-developmental theorists such as Piaget, who thought development occurred in stages. Developmental psychologists who adopt the information-processing perspective account for mental development in terms of maturational changes in basic components of a child's mind. At the same time, they do not offer a complete explanation of behavior. For example, they have paid little attention to behavior such as creativity, in which the most profound ideas often are developed in a seemingly not logical, nonlinear manner. Moreover, they do not take into account the social context in which development takes place.

https://assessments.lumenlearning.co...essments/16526

link to learning

View a brief video recapping some of the major concepts explored by cognitive psychologists.

## Candela Citations

CC licensed content, Original

- Cognitive Approach. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...tive-approach/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Piaget's Stages of Cognitive Development. **Authored by**: Carole Yule. **Provided by**: Khan Academy. **Retrieved from**: https://youtu.be/Jt3-PIC2nCs. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike
- Psychology. **Authored by**: Rose M. Spielman, Kathryn Dumper, William Jenkins, Arlene Lacombe, Marilyn Lovett, & Marion Perlmutter. **Provided by**: OpenStax. **Retrieved from**: https://openstax.org/details/books/psychology. **License**: CC BY: Attribution

This page titled 3.7: Cognitive Approach is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 3.7: Cognitive Approach by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 3.8: Contextual Approach

The **contextual approach** considered the relationship between individuals and their physical, cognitive, and social worlds. They also examine socio-cultural and environmental influences on development. We will focus on two influential theorists who pioneered this perspective: Lev Vygotsky and Urie Bronfenbrenner. Lev Vygotsky was a Russian psychologist who is best known for his sociocultural theory. He believed that social interaction plays a critical role in children's learning; through such social interactions, children go through a continuous process of scaffolded learning. Urie Bronfenbrenner developed the ecological systems theory to explain how everything in a child and the child's environment affects how a child grows and develops. He labeled different aspects or levels of the environment that influence children's development.

https://assessments.lumenlearning.co...essments/16530

## Vygotsky's Sociocultural Theory



**Figure 3.8.1**. Lev Vygotsky, founder of the sociocultural theory, which emphasizes contextual factors in cognitive development

Modern social learning theories stem from the work of Russian psychologist Lev Vygotsky (Kozulin, 1990). Vygotsky's ideas are most recognized for identifying the role of social interactions and culture in the development of higher-order thinking skills. His theory is especially valuable for the insights it provides about the dynamic "interdependence between individual and social processes in the construction of knowledge" (John-Steiner & Mahn, 1996, p. 192). Vygotsky's views are often considered primarily as cognitive development theories, focusing on qualitative changes in the development of thought, language, and higher-order thinking skills. Although Vygotsky's intent was mainly to understand higher psychological processes in children, his ideas have many implications and practical applications for learners of all ages.

Three themes are often identified with Vygotsky's ideas of sociocultural learning: (1) human development and learning originate in social, historical, and cultural interactions, (2) use of psychological tools, particularly language, mediate development of higher mental functions, and (3) learning occurs within the Zone of Proximal Development. While we discuss these ideas separately, they are closely interrelated, non-hierarchical, and connected.

Vygotsky's **sociocultural theory** emphasizes the importance of culture and interaction in the development of cognitive abilities. Vygotsky contended that thinking has social origins, social interactions play a critical role, especially in the development of higher-order thinking skills, and cognitive development cannot be fully understood without considering the social and historical context within which it is embedded. He explained, "Every function in the child's cultural development appears twice: first, on the social level, and later, on the individual level; first between people (interpsychological) and then inside the child (intrapsychological)" (Vygotsky, 1978, p. 57). It is through working with others on a variety of tasks that a learner adopts socially shared experiences and associated effects and acquires useful strategies and knowledge (Scott & Palincsar, 2013).

Rogoff (1990) refers to this process as guided participation, where a learner actively acquires new culturally valuable skills and capabilities through a meaningful, collaborative activity with an assisting, more experienced other. It is critical to notice that these culturally mediated functions are viewed as being embedded in sociocultural activities rather than being self-contained. Development is a "transformation of participation in a sociocultural activity," not a transmission of discrete cultural knowledge or skills (Matusov, 2015, p. 315).

https://assessments.lumenlearning.co...essments/16531

## Scaffolding and the Zone of Proximal Development

Vygotsky differed with Piaget in that he believed that a person has not only a set of abilities but also a set of potential abilities that can be realized if given the proper guidance from others. He believed that through guided participation known as **scaffolding**, with a teacher or capable peer, a child could learn cognitive skills within a certain range known as the **zone of proximal development**. While Piaget's ideas of cognitive development assume that development through certain stages is biologically determined, originates in the individual, and precedes cognitive complexity, Vygotsky presents a different view in which learning drives development. The idea of learning driving development, rather than being determined by the developmental level of the learner, fundamentally changes our understanding of the learning process and has significant instructional and educational implications (Miller, 2011).

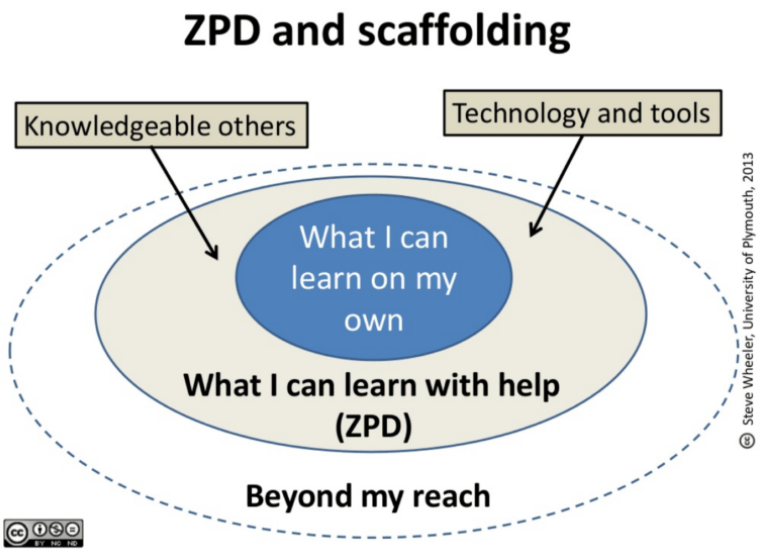



**Figure 3.8.2.** Model of zone of proximal development.

Have you ever taught a child to perform a task? Maybe it was brushing their teeth or preparing food. Chances are you spoke to them and described what you were doing while you demonstrated the skill and let them work along with you throughout the process. You assisted them when they seemed to need it, but once they knew what to do-you stood back and let them go. This is scaffolding. Educators have also adopted this approach to teaching. Rather than assessing students on what they are doing, they should be understood in terms of what they are capable of doing with the proper guidance.

This difference in assumptions has significant implications for the design and development of learning experiences. If we believe as Piaget did that development precedes learning, then we will make sure that new concepts and problems are not introduced until learners have developed innate capabilities to understand them. On the other hand, if we believe as Vygotsky did that learning drives development and that development occurs as we learn a variety of concepts and principles, recognizing their applicability to new tasks and new situations, then our instructional design will look very different.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 3.8.1.** Vygotsky's Sociocultural Development explains the influence of the social environment on cognition and how more knowledgeable others help us learn within our zone of proximal development.

## Bronfenbrenner's Ecological Systems Theory

Another psychologist who recognized the importance of the environment on development was American psychologist Urie Bronfenbrenner (1917-2005), who formulated the **ecological systems theory** to explain how the inherent qualities of a child and their environment interact to influence how they will grow and develop. The term "ecological" refers to a natural environment; human development is understood through this model as a long-lasting transformation in the way one perceives and deals with the environment. Bronfenbrenner's ecological theory stresses the importance of studying children in the context of multiple environments because children typically find themselves enmeshed simultaneously in different ecosystems. Each of these systems inevitably interacts with and influence each other in every aspect of the child's life, from the most intimate level to the broadest. Furthermore, he eventually renamed his theory the **bioecological model** in order to recognize the importance of biological processes in development. However, he only recognized biology as producing a person's potential, with this potential being realized or not via environmental and social forces.

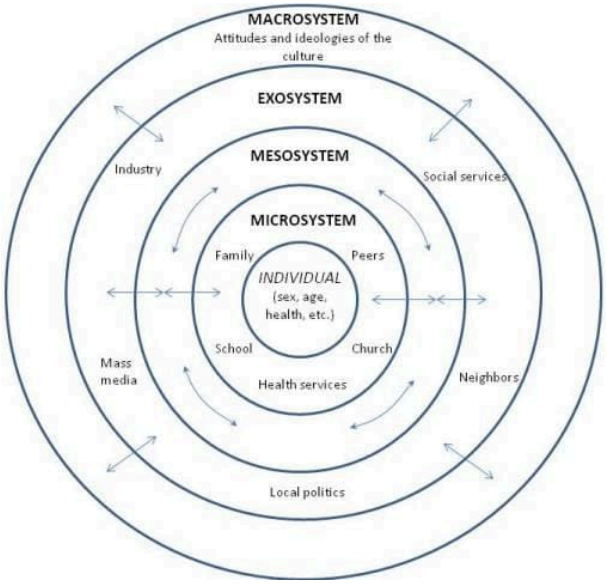



**Figure 3.8.3**. Bronfenbrenner's ecological theory emphasizes the influence of microsystems, mesosystems, exosystems, and macrosystems on an individual. Not pictured is the chronosystem, or the historical context and timeframe which provides the context for all the other systems. The chronosystem includes environmental events, major life transitions, and historical events.

An individual is impacted by **microsystems** such as parents or siblings–those who have direct, significant contact with the person. The input of those people is modified by the cognitive and biological state of the individual as well. These influence the person's actions, which in turn influence systems operating on them. The **mesosystem** includes larger organizational structures such as school, the family, or religion. These institutions impact the microsystems just described. For example, the religious teachings and traditions of a family may create a climate that makes the family feel stigmatized, and this indirectly impacts the child's view of themself and others. The philosophy of the school system, daily routine, assessment methods, and other characteristics can affect the child's self-image, growth, sense of accomplishment, and schedule, thereby impacting the child

physically, cognitively, and emotionally. These mesosystems both influence and are influenced by the broader contexts of the community, referred to as the **exosystem**. A community's values, history, and economy can impact the organizational structures it houses. Furthermore, the community is influenced by **macrosystems**, which are cultural elements such as global economic conditions, war, technological trends, values, philosophies, and society's responses to the global community. In sum, a child's experiences are shaped by larger forces such as family, school, religion, and culture. All of this occurs within the relevant historical context and timeframe, or **chronosystem**. The chronosystem is made up of the environmental events and transitions that occur throughout a child's life, including any socio-historical events. This system consists of all the experiences that a person has had during their lifetime.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 3.8.1.** Bronfenbrenner's Ecological Theory explains the various layers, the interactions between them, and the influence this has on individual development.

https://assessments.lumenlearning.co...essments/16532

## Candela Citations

CC licensed content, Original

- Contextual Approach. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...tual-approach/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Contextual Perspective. **Authored by**: Sonja Ann Miller. **Provided by**: Lumen Learning. **Retrieved from**: https://courses.lumenlearning.com/wm...-perspectives/. **License**: CC BY: Attribution

CC licensed content, Specific attribution

- Vygotsky's Sociocultural Development. **Authored by**: Shreena Desai. **Provided by**: Khan Academy . **Retrieved from**: https://youtu.be/-p_-0n2f35o. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

This page titled 3.8: Contextual Approach is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 3.8: Contextual Approach by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 3.9: Biopsychology and Evolutionary Psychology

## Biopsychology

As the name suggests, **biopsychology** explores how our biology influences our behavior. While biological psychology is a broad field, many biological psychologists want to understand how the structure and function of the nervous system are related to behavior (figure below). As such, they often combine the research strategies of both psychologists and physiologists to accomplish this goal (as discussed in Carlson, 2013). A developmental psychologist would be interested in how these physiological systems impact development and how these systems grow and change over time.

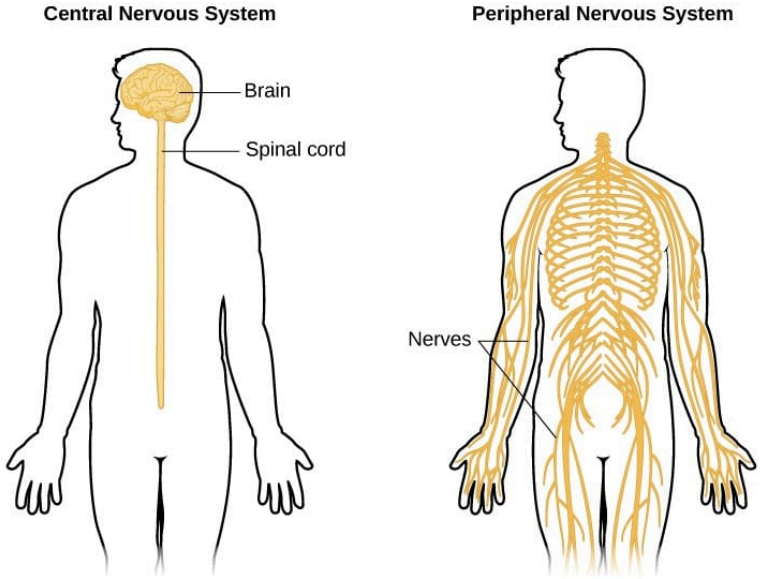



**Figure 3.9.1.** Biological psychologists study how the structure and function of the nervous system generate behavior.

## Evolutionary Psychology

While biopsychology typically focuses on the immediate causes of behavior based on the physiology of a human or other animals, evolutionary psychology seeks to study the ultimate biological causes of behavior. To the extent that behavior is impacted by genetics, a behavior, like any anatomical characteristic of a human or animal, will demonstrate adaption to its surroundings. These surroundings include the physical environment, and since interactions between organisms can be critical to survival and reproduction, the social environment. The study of behavior in the context of evolution has its origins with Charles Darwin, the co-discoverer of the theory of evolution by natural selection. Darwin predicted that psychology would develop an evolutionary basis and that a process of natural selection creates traits in a species that are adaptive to its environment. For example, some evolutionary developmental psychologists suggest that behavior such as shyness and jealousy may be produced in part by genetic causes, presumably because they helped increase the survival rates of human's ancient relatives (Buss, 2012; Easton et al., 2007).

Evolutionary psychology has seen a resurgence in recent decades. To be subject to evolution by natural selection, behavior must have a significant genetic cause. In general, we expect all human cultures to express a behavior if it is caused genetically since the genetic differences among human groups are small. The approach taken by most evolutionary psychologists is to predict the outcome of a behavior in a particular situation based on evolutionary theory and then to make observations, or conduct experiments, to determine whether the results match the theory. It is important to recognize that these types of studies are not strong evidence that a behavior is adaptive since they lack information that the behavior is, in some part, genetic and not entirely cultural (Endler, 1986). Demonstrating that a trait, especially in humans, is naturally selected is extraordinarily challenging; perhaps, for this reason, some evolutionary psychologists are content to assume the behaviors they study have genetic determinants (Confer et al., 2010).

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 3.9.1.** Evolution and Human Culture explains how evolutionary theory can be applied to behavior and society.

https://assessments.lumenlearning.co...essments/16533

https://assessments.lumenlearning.co...essments/16534

## Candela Citations

CC licensed content, Original

- Biopsychology and Evolutionary Psychology . **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...ry-psychology/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- uf0a7tThe Evolutionary Perspective : Genetic Inheritance from our Ancestors. **Authored by**: Sonja Ann Miller. **Provided by**: Lumen Learning. **Retrieved from**: https://courses.lumenlearning.com/wm...-our-ancestors. **License**: CC BY-SA: Attribution-ShareAlike

CC licensed content, Specific attribution

- Evolution and Human Culture. **Authored by**: Brooke Miller. **Provided by**: Khan Academy . **Retrieved from**: https://youtu.be/xlmruDxY48Y. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

This page titled 3.9: Biopsychology and Evolutionary Psychology is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 3.9: Biopsychology and Evolutionary Psychology by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 3.10: Comparing Contemporary Approaches

Developmental theories provide a set of guiding principles that describe, predict, and explain development. Some developmental theories focus on the formation of a particular quality, such as Piaget's theory of cognitive development. Other theories focus on growth that happens throughout the lifespan, such as Erikson's theory of psychosocial development. It would be natural to wonder which of the perspectives provides the most accurate account of human development, but clearly, each perspective is based on its specific premises and focuses on different aspects of development. Many developmentalists use an eclectic approach, drawing on several perspectives at the same time because the same developmental phenomenon can be looked at from several perspectives. In Table 3.10.1, we will review major contemporary approaches that you learned about in this chapter and compare their perspectives on some of the key issues in developmental psychology.

*Table 3.10.1. Comparison of major contemporary approaches in development*

| Theory | Major ideas | Continuous or discontinuous development? | One course of development or many? | More influenced by nature or nurture? | Major Theorist(s) |
|---|---|---|---|---|---|
| Psychodynamic Approach | Behavior is motivated by inner forces, memories, and conflicts, influenced by unconscious mind and early childhood experiences. | Discontinuous; there are distinct stages of development | One course; stages are universal for everyone | Both; natural impulses & early childhood/ sociocultural experiences | Sigmund Freud, Erik Erikson |
| Behavioral Approach | Learning by the association of a response with a stimulus; a person comes to respond in a particular way through conditioning | Continuous; learning is ongoing without distinct stages | Many courses; learned behaviors vary by person | Mostly nurture; behavior is conditioned | Ivan Pavlov, John Watson, B.F. Skinner, Albert Bandura |
| Cognitive Approach | People gradually acquire, construct, and use knowledge and information, influencing behavior and development. | Both; stage theories like Piaget are discontinuous & information processing is continuous | One course; stages are universal for everyone | Both; natural maturation combined with experiences that grow skills | Jean Piaget, Richard Atkinson, Richard Shiffrin |
| Humanistic Approach | Individual's inherent drive towards self-actualization & contend that people have a natural capacity to make decisions about their lives and control their own behavior. | Continuous; development is ongoing and multidirectional depending on environmental circumstances | Mostly one course; Maslow's hierarchy is universally applied, but self-actualization is individualized | Mostly nurture; development is influenced by environmental circumstances and social interactions | Carl Rogers, Abraham Maslow |
| Contextual or Sociocultural Approach | Development occurs within a social context as part of a cultural system. | Both, but mostly continuous as an individual learns and progresses | Many courses; there are variations between individuals and cultures | Both; development is influenced by biological preparation and social experiences | Lev Vygotsky, Uri Brofenbrenner |

| Theory | Major ideas | Continuous or discontinuous development? | One course of development or many? | More influenced by nature or nurture? | Major Theorist(s) |
|---|---|---|---|---|---|
| Biological Approach | Physiological functions, like the central nervous system and hormones, affect behavior and development. | Continuous; constant changes to the body affect changes in development | Both; there are universal milestones for growth, but variations due to environment | Both; nature provides a foundation for development and nurture supports or inhibits changes | |
| Evolutionary psychology Approach | Identify behavior that is a result of our genetic inheritance from our ancestors. | Continuous; current behaviors have been shaped over multiple generations based on successful survival and reproduction | Both; behavioral genetics show similarities across the species, but our unique family history also plays a role in development | Both; our genetic history and biological impulses interact with life experiences to produce individual development and development across the history and future of the species | Charles Darwin, David Buss, Konrad Lorenz, Robert Sapolsky |

https://lumenlearning.h5p.com/content/1290798217292106038/embed

https://lumenlearning.h5p.com/content/1290798196103649038/embed

## Candela Citations

CC licensed content, Original

- Comparing Contemporary Approaches. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...ry-approaches/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Comparing and Evaluating Lifespan Theories. **Provided by**: Lumen Learning. **Retrieved from**: https://courses.lumenlearning.com/wm...span-theories/. **License**: CC BY: Attribution

This page titled 3.10: Comparing Contemporary Approaches is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 3.10: Comparing Contemporary Approaches by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

**accommodation:** a term developed by psychologist Jean Piaget to describe what occurs when new information or experiences cause you to modify your existing schemas

**assimilation:** a cognitive process that manages how we take in new information and incorporate that new information into our existing knowledge

**behavioral approach:** the approach that suggests that the keys to understanding development are observable behavior and outside stimuli in the environment

**bioecological model:** the perspective suggesting that multiple levels of the environment interact with biological potential to influence development

**chronosystem:** the environmental events and transitions that occur throughout a child's life, including any socio-historical events

**classical conditioning:** a type of learning in which an organism responds in a particular way to a neutral stimulus that normally does not bring about that type of response

**cognitive approach:** an approach that focuses on the process that allows people to know, understand and think about the world

**concrete operational stage:** the stage in which children can think logically about real (concrete) events, have a firm grasp on the use of numbers and start to employ memory strategies, lasts from about 7 to 11 years old

**conservation:** the idea that even if you change the appearance of something, it is still equal in size as long as nothing has been removed or added, usually develops during the concrete operational stage

**contextual approach:** a theory that considers the relationship between individuals and their physical, cognitive, and social worlds

**ecological systems theory:** Urie Bronfenbrenner's theory stressing the importance of studying a child in the context of multiple environments, organized into five levels of external influence: microsystem, mesosystem, exosystem, macrosystem, and chronosystem

**exosystem:** the larger contexts of the community, including the values, history, and economy

**evolutionary psychology:** a field of study that seeks to identify behavior that is a result of our genetic inheritance from our ancestors

**formal operational stage:** the fourth, and last, stage in Piaget's theory and lasts from about age 11 to adulthood. Children in the formal operational stage can deal with abstract ideas and hypothetical situations

**humanism:** a psychological theory that emphasizes an individual's inherent drive towards self-actualization and contends that people have a natural capacity to make decisions about their lives and control their own behavior

**hypothesis:** a testable prediction

**information-processing approach:** an alternative to Piagetian approaches, a model that seeks to identify the ways individual take in, use, and store information

**law of effect:** behavior that is followed by consequences satisfying to the organism will be repeated, and behaviors that are followed by unpleasant consequences will be discouraged

**macrosystem:** cultural elements such as global economic conditions, war, technological trends, values, philosophies, and a society's responses to the global community which impact a community

**Maslow's hierarchy of needs:** a motivational theory in psychology comprising a five-tier model of human needs, often depicted as hierarchical levels within a pyramid. Needs lower down in the hierarchy must be satisfied before individuals are motivated to attend to needs higher up

**mesosystem:** larger organizational structures such as school, the family, or religion

**microsystem:** immediate surrounds including those who have direct, significant contact with the person, such as parents or siblings

**neurosis:** a tendency to experience negative emotions

**operant conditioning:** a form of learning in which a voluntary response is strengthened or weekend by its association with positive or negative consequences

**Piaget theory of cognitive development:** a description of cognitive development as four distinct stages in children: sensorimotor, preoperational, concrete, and formal

**psychodynamic approach:** the perspective that behavior is motivated by inner forces, memories, and conflicts that are generally beyond people's awareness and control

**psychosocial theory:** the theory that emphasizes that social relationships that are important at each stage of personality development

**reciprocal determinism:** the interplay between our personality and the way we interpret events and how they influence us

**reversibility:** objects can be changed and then returned to their original form or condition, typically observed during the concrete operational stage

**scaffolding:** a process in which adults or capable peers model or demonstrate how to solve a problem, and then step back, offering support as needed

**schemas:** an existing framework for an object or concept

**self-actualization:** according to humanistic theory, the realizing of one's full potential can include creative expression, a quest for spiritual enlightenment, the pursuit of knowledge, or the desire to contribute to society. For Maslow, it is a state of self-fulfillment in which people achieve their highest potential in their own unique way

**social learning theory:** learning by observing the behavior of another person, called a model

**sociocultural theory:** Vygotsky's theory that emphasizes how cognitive development proceeds as a result of social interactions between members of a culture

**theory:** a well-developed set of ideas that propose an explanation for observed phenomena that can be used to make predictions about future observations

**theory-of-mind (TOM):** explains how children come to understand that people have thoughts, feelings, and beliefs that are different from their own, develops during the preoperational stage

**zone of proximal development (ZPD):** the difference between what a learner can do without help, and what they can do with help

This page titled 3.11: Glossary is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 3.11: Glossary by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 4: PHYSICAL DEVELOPMENT DURING ADOLESCENCE

## Learning Objectives

- Describe the physical changes that occur during puberty
- Identify ways in which the timing of puberty impacts other aspects of development
- Describe the changes and risks associated with sexual development
- Identify health concerns during adolescence
- Compare the symptoms and risks of eating disorders

Physical changes of puberty mark the onset of adolescence (Lerner & Steinberg, 2009). For both boys and girls, these changes include a growth spurt in height, growth of pubic and underarm hair, and skin changes (e.g., pimples). Boys also experience growth in facial hair and a deepening of their voice. Girls experience breast development and begin menstruating. These pubertal changes are driven by hormones, particularly an increase in testosterone for boys and estrogen for girls. The physical changes that occur during adolescence are greater than those of any other time of life, with the exception of infancy. In some ways, however, the changes in adolescence are more dramatic than those that occur in infancy—unlike infants, adolescents are aware of the changes that are taking place and of what the changes mean. In this chapter, you will learn about the pubertal changes in body size, proportions, and sexual maturity, the social and emotional attitudes and reactions toward puberty, and some of the health concerns during adolescence.


4.1: Puberty Begins

4.2: Sexual Development

4.3: Health Concerns during Adolescence

4.4: Glossary



This page titled 4: Physical Development during Adolescence is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 4: Physical Development during Adolescence by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 4.1: Puberty Begins

**Puberty** is the period of rapid growth and sexual development that begins in adolescence and starts at some point between ages 8 and 14. While the sequence of physical changes in puberty is predictable, the onset and pace of puberty vary widely. Every person's individual timetable for puberty is different and is primarily influenced by heredity; however, environmental factors—such as diet and exercise—also exert some influence.

Adolescence has evolved historically, with evidence indicating that this stage is lengthening as individuals start puberty earlier and transition to adulthood later than in the past. Puberty today begins, on average, at age 10–11 years for girls and 11–12 years for boys. This average age of onset has decreased gradually over time since the 19th century by 3–4 months per decade, which has been attributed to a range of factors including better nutrition, obesity, increased father absence, and other environmental factors (Steinberg, 2013). Completion of formal education, financial independence from parents, marriage, and parenthood have all been markers of the end of adolescence and beginning of adulthood, and all of these transitions happen, on average, later now than in the past. In fact, the prolonging of adolescence has prompted the introduction of a new developmental period called emerging adulthood that captures these developmental changes out of adolescence and into adulthood, occurring approximately from ages 18 to 29 (Arnett, 2000).

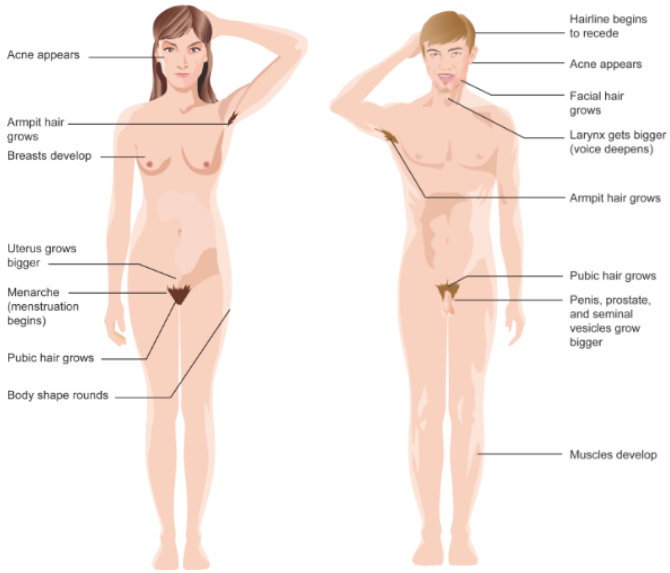



**Figure 4.2.1**. Major physical changes during puberty.

## Hormonal Changes

Puberty involves distinctive physiological changes in an individual's height, weight, body composition, and circulatory and respiratory systems, and during this time, both the adrenal glands and sex glands mature. These changes are primarily influenced by hormonal activity. Many hormones contribute to the beginning of puberty, but most notably, a significant rush of **estrogen** for girls and **testosterone** for boys. Hormones play an *organizational role* (priming the body to behave in a certain way once puberty begins) and an *activational role* (triggering certain behavioral and physical changes). During puberty, the adolescent's hormonal balance shifts sharply towards an adult state; the process is triggered by the pituitary gland, which secretes a surge of hormonal agents into the bloodstream and initiates a chain reaction.

Puberty occurs over two distinct phases, and the first phase, **adrenarche**, begins at 6 to 8 years of age and involves increased production of adrenal androgens that contribute to a number of pubertal changes—such as skeletal growth. The second phase of puberty, **gonadarche**, begins several years later and involves increased production of hormones governing physical and sexual maturation.

## Sexual Maturation

During puberty, primary and secondary sex characteristics develop and mature. **Primary sex characteristics** are organs specifically needed for reproduction—the uterus and ovaries in females and testes in males. **Secondary sex characteristics** are physical signs of sexual maturation that do not directly involve sex organs, such as the development of breasts and hips in girls, and growth of facial hair and a deepened voice in boys. Both sexes experience the development of pubic and underarm hair, as well as increased development of sweat glands.

The male and female **gonads** are activated by the surge of the hormones discussed earlier, which puts them into a state of rapid growth and development. The testes primarily release testosterone, and the ovaries release estrogen; the production of these hormones increases gradually until sexual maturation is met.

For girls, observable changes begin with nipple growth and pubic hair. Then the body increases in height while fat forms, particularly on the breasts and hips. The first menstrual period (**menarche**) is followed by more growth, which is usually completed by four years after the first menstrual period began. Girls experience menarche usually around 12–13 years old. For boys, the usual sequence is growth of the testes, initial pubic-hair growth, growth of the penis, first ejaculation of seminal fluid (**spermarche**), appearance of facial hair, a peak growth spurt, deepening of the voice, and final pubic-hair growth. (Herman-Giddens et al., 2012). Boys experience spermarche, the first ejaculation, around 13–14 years old.

## Physical Growth: The Growth Spurt

During puberty, both sexes experience a rapid increase in height and weight (referred to as a **growth spurt**) over about 2-3 years resulting from the simultaneous release of growth hormones, thyroid hormones, and androgens. Males experience their growth spurt about two years later than females. For girls, the growth spurt begins between 8 and 13 years old (average 10-11), with adult height reached between 10 and 16 years old. Boys begin their growth spurt slightly later, usually between 10 and 16 years old (average 12-13), and reach their adult height between 13 and 17 years old. Both nature (i.e., genes) and nurture (e.g., nutrition, medications, and medical conditions) can influence both height and weight.

Before puberty, there are nearly no differences between males and females in the distribution of fat and muscle. During puberty, males grow muscle much faster than females, and females experience a higher increase in body fat, and bones become harder and more brittle. An adolescent's heart and lungs increase in both size and capacity during puberty; these changes contribute to increased strength and tolerance for exercise.

https://assessments.lumenlearning.co...essments/16607

https://assessments.lumenlearning.co...essments/16608

## Reactions Toward Puberty and Physical Development

The accelerated growth in different body parts happens at different times, but for all adolescents, it has a fairly regular sequence. The first places to grow are the extremities (head, hands, and feet), followed by the arms and legs, and later the torso and shoulders. This non-uniform growth is one reason why an adolescent body may seem out of proportion. Additionally, because rates of physical development vary widely among teenagers, puberty can be a source of pride or embarrassment.

Most adolescents want nothing more than to fit in and not be distinguished from their peers in any way, shape, or form (Mendle, 2015). So when a child develops earlier or later than his or her peers, there can be long-lasting effects on mental health. Simply put, beginning puberty earlier than peers presents significant challenges, particularly for girls. The picture for early-developing boys isn't as clear, but evidence suggests that they, too, eventually might suffer ill effects from maturing ahead of their peers. The biggest challenges for boys, however, seem to be more related to late development.

Early maturing boys tend to be stronger, taller, and more athletic than their later maturing peers. They are usually more popular, confident, and independent, but they are also at a greater risk for substance abuse and early sexual activity (Flannery, Rowe, & Gulley, 1993; Kaltiala-Heino, Rimpela, Rissanen, & Rantanen, 2001). Additionally, more recent research found that while early-maturing boys initially had lower levels of depression than later-maturing boys, over time, they showed signs of increased anxiety, negative self-image, and interpersonal stress. (Rudolph, Troop-Gordon, Lambert, & Natsuaki, 2014).

Early maturing girls may be teased or overtly admired, which can cause them to feel self-conscious about their developing bodies.

These girls are at increased risk of a range of psychosocial problems, including depression, substance use, and early sexual behavior (Graber, 2013).These girls are also at a higher risk for eating disorders, which we will discuss in more detail later in this module (Ge, Conger, & Elder, 2001; Graber, Lewinsohn, Seeley, & Brooks-Gunn, 1997; Striegel-Moore & Cachelin, 1999).

Late maturing boys and girls (i.e., they develop more slowly than their peers) may feel self-conscious about their lack of physical development. Negative feelings are particularly a problem for late maturing boys, who are at a higher risk for depression and conflict with parents (Graber et al., 1997) and more likely to be bullied (Pollack & Shuster, 2000).

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 4.2.1.** Development in Adolescence provides an overview of physical changes during adolescence and psychosocial impacts.

https://assessments.lumenlearning.co...essments/16609

## Candela Citations

CC licensed content, Original

- Puberty Begins. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...puberty-begins. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Lifespan Development. **Provided by**: Lumen Learning. **Retrieved from**: https://courses.lumenlearning.com/wm...pandevelopment. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Specific attribution

- Development in Adolescence. **Authored by**: Brooke Miller. **Provided by**: Khan Academy. **Retrieved from**: https://youtu.be/DWKWjpVsGng. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

This page titled 4.1: Puberty Begins is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 4.1: Puberty Begins by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 4.2: Sexual Development

Developing sexually is an expected and natural part of growing into adulthood. Healthy sexual development involves more than sexual behavior. It is the combination of physical sexual maturation (puberty, age-appropriate sexual behaviors), the formation of a positive sexual identity, and a sense of sexual well-being (discussed more in-depth later in this module). During adolescence, teens strive to become comfortable with their changing bodies and to make healthy, safe decisions about which sexual activities, if any, they wish to engage in.

Earlier in the physical development section, we discussed **primary and secondary sex characteristics**. During puberty, every primary sex organ (the ovaries, uterus, penis, and testes) increases dramatically in size and matures in function. During puberty, reproduction becomes possible. Simultaneously, secondary sex characteristics develop. These characteristics are not required for reproduction, but they do signify masculinity and femininity. At birth, boys and girls have similar body shapes, but during puberty, males widen at the shoulders, and females widen at the hips and develop breasts (examples of secondary sex characteristics). Sexual development is impacted by a dynamic mixture of physical and cognitive change, coupled with social expectations. With physical maturation, adolescents may become alternately fascinated with and chagrined by their changing bodies, and often compare themselves to the development they notice in their peers or see in the media. For example, many adolescent girls focus on their breast development, hoping their breasts will conform to an ideal body image.

As sex hormones cause biological changes, they also affect the brain and trigger sexual thoughts. Culture, however, shapes actual sexual behaviors. Emotions regarding sexual experience, like the rest of puberty, are strongly influenced by cultural norms regarding what is expected at what age, with peers being the most influential. Simply put, the most important influence on adolescents' sexual activity is not their bodies, but their close friends, who have more influence than do sex or ethnic group norms (van de Bongardt et al., 2015).

Sexual interest and interaction are a natural part of adolescence. Sexual fantasy and **masturbation** episodes increase between the ages of 10 and 13. Masturbation is very ordinary—even young children have been known to engage in this behavior. As the bodies of children mature, powerful sexual feelings begin to develop, and masturbation helps release sexual tension. For adolescents, masturbation is a common way to explore their erotic potential, and this behavior can continue throughout adult life.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 4.3.1.** "What Happens When?" Child and Adolescent Sexual Development explains major milestones in sexual development throughout childhood and adolescence, as well as how to support kids during these stages.

## Sexual Interactions

Many early social interactions tend to be nonsexual—text messaging, phone calls, email—but by the age of 12 or 13, some young people may pair off and begin dating and experimenting with kissing, touching, and other physical contact, such as oral sex. The vast majority of young adolescents are not prepared emotionally or physically for oral sex and sexual intercourse. If adolescents this young do have sex, they are highly vulnerable to sexual and emotional abuse, **sexually transmitted infections (STIs)**, HIV, and early pregnancy. For STI's in particular, adolescents are slower to recognize symptoms, tell partners, and get medical treatment, which puts them at risk of infertility and even death.

Adolescents ages 14 to 16 understand the consequences of unprotected sex and teen parenthood, if properly taught, but cognitively they may lack the skills to integrate this knowledge into everyday situations or consistently to act responsibly in the heat of the moment. By the age of 17, many adolescents have willingly experienced sexual intercourse. Teens who have early

sexual intercourse report strong peer pressure as a reason behind their decision. Some adolescents are just curious about sex and want to experience it.

Becoming a sexually healthy adult is a developmental task of adolescence that requires integrating psychological, physical, cultural, spiritual, societal, and educational factors. It is particularly important to understand the adolescent in terms of his or her physical, emotional, and cognitive stage. Additionally, healthy adult relationships are more likely to develop when adolescent impulses are not shamed or feared. Guidance is certainly needed, but acknowledging that adolescent sexuality development is both normal and positive would allow for more open communication so adolescents can be more receptive to education concerning the risks (Tolman & McClelland, 2011).

Adolescents are receptive to their culture, to the models they see at home, in school, and in the mass media. These observations influence moral reasoning and moral behavior, which we discuss in more detail later in this module. Decisions regarding sexual behavior are influenced by teens' ability to think and reason, their values, and their educational experience. Helping adolescents recognize all aspects of sexual development encourages them to make informed and healthy decisions about sexual matters.

## Teenage Sexual Activity Trends

Teenagers are much more sexually active today than they were before the sexual revolution of the 1960s and 70s. About 43 percent of never-married teens ages 15–19 of both sexes have had sexual intercourse (Martinez et al., 2011); this percentage represents a drop from its highest point, in 1988, of 51 percent for females and of 60 percent for males. About three-fourths of girls in today's sexually experienced group and 85 percent of boys in this group use contraception, most often a condom, the first time they ever have sex. In their most recent act of sexual intercourse, almost 86 percent of girls and 93 percent of boys used contraception, again most often a condom.

If 43 percent of teens have had sexual intercourse, that means the majority of teens, 57 percent, have never had intercourse. It is interesting to examine their reasons. The table below identifies the main reason given for never having sexual intercourse. The top reason for both sexes is religion and morals, followed by concern about a possible pregnancy and not having found the right person with whom to have sex (Martinez et al., 2011).

*Table 4.3.1. Main Reason Given for Never Having Sexual Intercourse, Ages 15–19 (%)*

| | Females | Males |
|---|---|---|
| Against religion or morals | 38 | 31 |
| Don't want to get (a female) pregnant | 19 | 25 |
| Haven't found the right person yet | 17 | 21 |
| Don't want to get an STI | 7 | 10 |
| In a relationship, but waiting for the right time | 7 | 5 |
| Other reason | 12 | 8 |

https://assessments.lumenlearning.co...essments/16611

## The Problem of Teenage Pregnancy

Most teenage pregnancies and births are unplanned and are part of a more general problem for all women in their childbearing years. Almost 700,000 unplanned teenage pregnancies occur annually; another 50,000 teenage pregnancies are planned. These 750,000 teenage pregnancies annually result in some 400,000 births (Kost, Henshaw, & Carlin, 2010). Altogether, about 18 percent of women, or one of every six females, become teen mothers, and in several southern and southwestern states, this percentage is as high as 25–30 percent (Perper & Manlove, 2009).

The birth rate for females aged 15–19 in 2009 was 39.1 births per 1,000 females. This rate represented a substantial decline from the early 1990s when the rate reached a peak of almost 60. However, it was still twice as high as Canada's rate and much higher yet than other Western democracies (Figure 4.3.1).

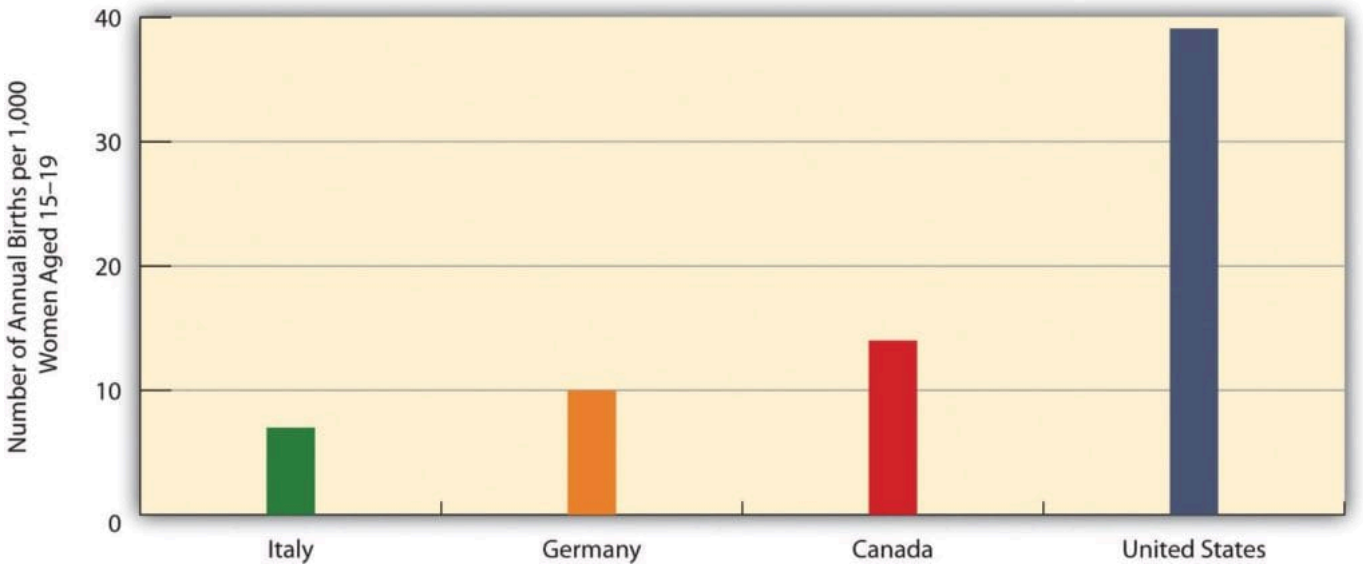



**Figure 4.3.1.** Teenage Birth Rates in Selected Western Democracies

Although teenaged pregnancies (and births from these pregnancies) are far from the majority of all pregnancies, unplanned or planned, they pose special problems (American College of Obstetricians and Gynecologists, 2011; Anderson, 2011). On the individual level, pregnant teenagers are more at risk than older pregnant women for high blood pressure and anemia, and they are also more likely to experience early labor, premature birth, and low birth weight. In addition, because teenagers are more likely than adults to have STIs, pregnant teenagers are more likely than older pregnant women to have an STI while they are pregnant, either because they already had an STI when they conceived or because they contract an STI from having sex during pregnancy.

Many pregnant teenagers decide to drop out of school. If they stay in school, they often must deal with the embarrassment of being pregnant, and the physical and emotional difficulties accompanying their teenage pregnancy can affect their school performance. Once the baby is born, child care typically becomes an enormous problem, whether or not the new mother is in school. Because pregnant teenagers disproportionately come from families that are poor or near-poor, they have few financial resources and often have weak social support networks, either before or after the baby is born (Andrews & Moore, 2011).

At the societal level, teenage pregnancy and motherhood are very costly in at least two important respects. First, because pregnancy and childbirth complications are more common among teenagers, their health-care expenses during and after pregnancy and childbirth are often higher than the expenses incurred by older women. Medicaid, the federal government's national health plan for poor families, often covers much of these expenses, and the premiums that private health insurance companies charge are higher than otherwise because of their expenses when they insure the families of pregnant teenagers.

Second, the children of teenage mothers are at risk for several kinds of behavioral and developmental problems. Teenage parents may be unprepared emotionally or practically to raise a child. Children of teen parents may receive less cognitive stimulation and proper emotional support. In addition, the stress they experience as young parents put them at risk of neglecting or abusing their children. Teenage parents also tend to come from low-income families and continue to live in poverty or near poverty after they become mothers compounds all these problems. For all these reasons, the children of teenage mothers are at greater risk for several kinds of issues. These problems include impaired neurological development, behavioral problems, poor school performance, and chronic health problems.

## Reducing Teenage Pregnancy

In an effort to reduce teenage pregnancies, two approaches have been used: (1) Emphasize abstinence, convincing teens to hold off on having sex until adulthood or marriage, and (2) comprehensive sex education, including teaching the effective use of contraception if they do have sex. Most sexual behavior researchers believe that pleas for abstinence, as well as sex education programs that focus solely or almost entirely on abstinence, do not help to reduce teen sex and pregnancy (Ball & Moore, 2008).

Comprehensive sex education is based on the strategy of harm reduction. A harm reduction approach recognizes that because certain types of harmful behavior are inevitable, our society should do its best to minimize the various kinds of harm that these

various behaviors generate. In regard to teenage sex and pregnancy, a harm reduction approach has two goals: (1) to help reduce the risk for pregnancy among sexually active teens and (2) to help teenage parents and their children.

To achieve the first goal, parents, sex education classes, family planning clinics, youth development programs, and other parties must continue to emphasize the importance of waiting to have sex but also the need for teenagers to use contraception if they are sexually active. In addition, effective contraception (birth control pills, other hormonal control, and even condoms, which protect against STIs) must be made available for teenagers at little or no cost. Studies indicate that these two contraception strategies do not lead to more teenage sex, and they also indicate that consistent contraceptive use dramatically reduces the risk of teenage pregnancy. As one writer has summarized these studies' conclusions, "Contraceptives no more cause sex than umbrellas cause rain...When contraception is unavailable, the likely consequences is not less sex, but more pregnancy" (Kristof, 2011, p. A31).

In this regard, a recent report of the Guttmacher Institute called contraception a "proven, cost-effective strategy" (Gold, 2011, p. 7). It added, "Contraception is almost universally accepted as a way to reduce the risk of unintended pregnancy...Contraceptive use reduces the risk of unintended pregnancy significantly, and consistent contraceptive use virtually eliminates it." The report noted that government-funded family planning agencies prevent 2 million unintended pregnancies annually by providing contraception to 9 million young and low-income women each year. Because most of the women who would have these prevented pregnancies would be eligible for Medicaid, the Medicaid savings from these prevented pregnancies amount to about $7 billion annually. An expansion of family planning services would almost certainly be an effective strategy for reducing teenage pregnancies as well as unplanned pregnancies among older women.

Another strategy to prevent teenage pregnancy involves the use of early childhood intervention (ECI) programs. Many such programs exist, but they generally include visits by social workers, nurses, and other professionals to the homes of children who are at risk for neurological, emotional, and/or behavioral problems during their first several years and also as they grow into adolescents and young adults (Kahn & Moore, 2010). It might sound like a stereotype, but these children are disproportionately born to single, teenage mothers and/or to slightly older parents who live in poverty or near poverty. Long-term evaluation studies show that the best of these programs reduce the likelihood that the very young children they help will become pregnant or have children of their own after they become teenagers (Ball & Moore, 2008). In effect, assisting young children to today helps prevent teenage pregnancy tomorrow.

The second prong to this harm reduction strategy targets teenage parents and their children. Because teen pregnancies occur despite the best prevention efforts, the second goal of a harm reduction approach is to help teens during their pregnancy and after childbirth. This strategy has the immediate aim of providing practical and emotional support for these very young mothers; it also has the longer-term goals of reducing repeat pregnancies and births and of preventing developmental and behavior problems among their children.

To achieve these aims, Early Childhood Intervention programs have again been shown to be helpful (Ball & Moore, 2008). Another type of program to help teen mothers involves the use of second-chance homes, which are maternity group homes for unmarried teen mothers (Andrews & Moore, 2011). One of the many sad facts of teenage motherhood is that teen mothers often have nowhere to live. A teen mother's parent(s) may refuse to let her and her infant live with them, either because they are angry at her pregnancy or because they simply do not have the room or financial means to house and take care of a baby. Or a pregnant teen may decide to leave her parents' home because of the parents' anger or because they refuse to let her continue seeing the child's father. In another possibility, a teen mother may begin living with the father, but these unions are typically unstable and often end, again leaving her and her child without a home. As well, many teen mothers were runaways from home before they became pregnant or were living in foster care. Because of all these situations, many teen mothers find themselves without a place to live.

In second-chance homes (which, depending on the program, are in reality one large house, a set of apartments, or a network of houses), mothers and children (as well as pregnant teens) receive shelter and food, but they also receive essential services, such as childrearing help, educational and vocational counseling and training, family planning counseling, and parenting classes. Although rigorous evaluation studies do not yet exist on the effectiveness of second-chance homes, they do seem to offer a valuable resource for teen mothers and their children (Andrews & Moore, 2011).

A final strategy for addressing the problem of teenage sex and pregnancy is to address a more general societal condition that helps produce teenage sex and pregnancy. This condition is poverty. As noted earlier, children who grow up in poor families and in disadvantaged neighborhoods—those with high rates of poverty, unemployment, high school dropouts, and so forth—are more likely to have sex earlier as teens and to become pregnant (Harding, 2003; Scott, Steward-Streng, Barry, & Manlove, 2011).

# Sexually Transmitted Infections

In addition to pregnancy and birth, another problem associated with teenage sexual activity is the transmission of sexually transmitted infections (STIs). This is a problem during the teenage years, but it is even more of a problem during young adulthood, when sexual activity is higher than during adolescence (Wildsmith, Schelar, Peterson, & Manlove, 2010). The STI rate in the United States is higher than in most other Western democracies. Almost 19 million new cases of STIs are diagnosed annually, and more than 65 million Americans have an incurable STI, such as herpes. Although teens and young adults ages 15–24 compose only one-fourth of sexually active people, they account for one-half of all new STIs. Despite this fact, most young adults who test positive for an STI did not believe they were at risk of getting an STI (Wildsmith et al., 2010).

In any one year, 15 percent of young adults ages 18 and 26 have an STI. This figure masks a significant gender difference: 20 percent of young women have had an STI in the past year, compared to 10 percent of young men. It also masks important racial/ethnic differences: 34 percent of young African Americans have had an STI in the past year, compared to 10 percent of Asians, 15 percent of Hispanics, and 10 percent of whites.

Three types of sexual behaviors increase the risk of transmitting or contracting an STI: having sex with at least three partners during the past year, having a sex partner with a known STI, and not using a condom regularly. About 17 percent of sexually active young adults have had at least three partners during the past year, and 8 percent have had a partner with a known STI. Three-fourths of unmarried sexually active young adults do not use a condom regularly. Combining all these risk factors, 39 percent have engaged in one risk factor in the past year, 14 percent have engaged in at least two risk factors, and the remainder, 48 percent, have engaged in no risk factors (Wildsmith et al., 2010).

**Think About It**

1. Imagine that you became a parent at age 17. How would your life have been different from what it is now?
2. Many sexually active teenagers do not use contraception regularly. Why do you think they do not use it more often?

## Candela Citations

CC licensed content, Original

- Sexual Development. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...l-development/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Teen Sex and Pregnancy. **Provided by**: Lumen Learning. **Retrieved from**: https://courses.lumenlearning.com/su...-pregnancy/%20. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

This page titled 4.2: Sexual Development is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 4.2: Sexual Development by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 4.3: Health Concerns during Adolescence

Adequate adolescent nutrition is necessary for optimal growth and development. Dietary choices and habits established during adolescence greatly influence future health, yet many studies report that teens consume few fruits and vegetables and are not receiving the calcium, iron, vitamins, or minerals necessary for healthy development

One of the reasons for poor nutrition is anxiety about **body image,** which is a person's idea of how his or her body looks. The way adolescents feel about their bodies can affect the way they feel about themselves as a whole. Few adolescents welcome their sudden weight increase, so they may adjust their eating habits to lose weight. Adding to the rapid physical changes, they are simultaneously bombarded by messages, and sometimes teasing, related to body image, appearance, attractiveness, weight, and eating that they encounter in the media, at home, and from their friends/peers (both in-person and via social media).

Much research has been conducted on the psychological ramifications of body image on adolescents. Modern-day teenagers are exposed to more media on a daily basis than any generation before them. Recent studies have indicated that the average teenager watches roughly 1500 hours of television per year, and 70% use social media multiple times a day. As such, adolescents are exposed to many representations of ideal, societal beauty. The concept of a person being unhappy with their own image or appearance has been defined as "**body dissatisfaction**." In teenagers, body dissatisfaction is often associated with body mass, low self-esteem, and atypical eating patterns. Scholars continue to debate the effects of media on body dissatisfaction in teens. What we do know is that two-thirds of U.S. high school girls are trying to lose weight, and one-third think they are overweight, while only one-sixth are actually overweight (MMWR, June 10, 2016).

https://assessments.lumenlearning.co...essments/16612

## Obesity

Although at the peak of physical health, a concern for early adults is the current rate of obesity. Results from the 2015 National Center for Health Statistics indicate that an estimated 70.7% of U.S. adults aged 20 and over are overweight, and 37.9% are obese (CDC, 2015b). **Body mass index (BMI)**, *expressed as weight in kilograms divided by height in meters squared (kg/m2)*, is commonly used to classify overweight (BMI 25.0–29.9), obesity (BMI greater than or equal to 30.0), and extreme obesity (BMI greater than or equal to 40.0). The 2015 statistics show an increase from the 2013-2014 statistics that indicated that an estimated 35.1% were obese, and 6.4% extremely obese (Fryar, Carroll, & Ogden, 2014). In 2003-2004, 32% of American adults were identified as obese. The CDC also indicated that one's 20s are the prime time to gain weight as the average person gains one to two pounds per year from early adulthood into middle adulthood. The average man in his 20s weighs around 185 pounds and by his 30s, weighs approximately 200 pounds. The average American woman weighs 162 pounds in her 20s and 170 pounds in her 30s.

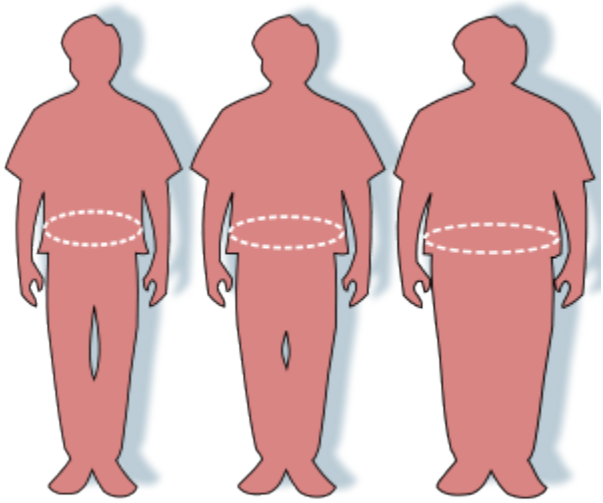


**Figure 4.4.1.** Waist circumference.

The American obesity crisis is also reflected worldwide (Wighton, 2016). In 2014, global obesity rates for men were measured at 10.8% and among women 14.9%. This translates to 266 million obese men and 375 million obese women in the world, and more people were identified as obese than underweight. Although obesity is seen throughout the world, more obese men and women live in China and the USA than in any other country. Figure 4.3 illustrates how waist circumference is also used as a measure of obesity. Figure 4.4 demonstrates the percentage of growth for males and females identified as obese between 1960 and 2012.

## Causes of Obesity

According to the Centers for Disease Control and Prevention (CDC) (2016), obesity originates from a complex set of contributing factors, including one's environment, behavior, and genetics. Societal factors include culture, education, food marketing and promotion, the quality of food, and the physical activity environment available. Behaviors leading to obesity include diet, the amount of physical activity, and medication use. Lastly, there does not appear to be a single gene responsible for obesity. Rather, research has identified variants in several genes that may contribute to obesity by increasing hunger and food intake. Another genetic explanation is the mismatch between today's environment and "energy-thrifty genes" that multiplied in the distant past when food sources were unpredictable. The genes that helped our ancestors survive occasional famines are now being challenged by environments in which food is plentiful all the time. Overall, obesity most likely results from complex interactions among the environment and multiple genes.

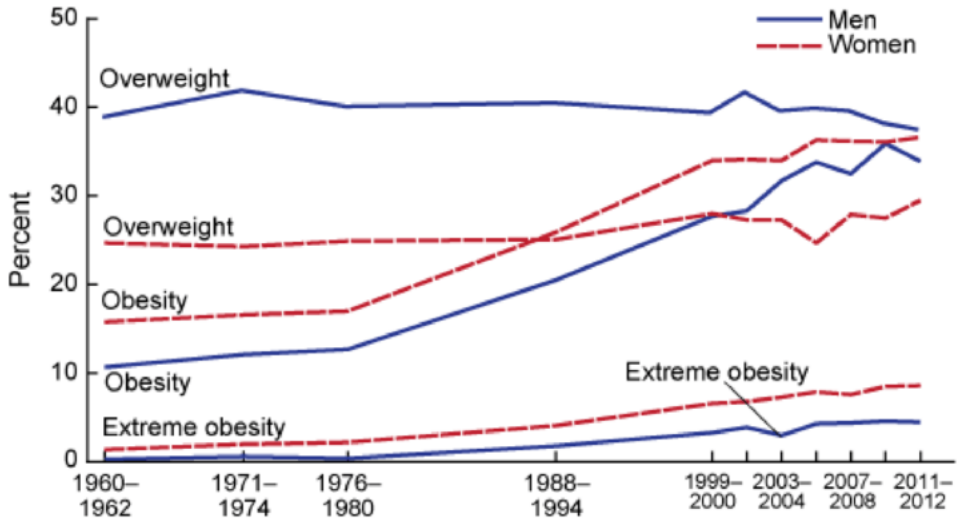



**Figure 4.4.2.** Adult obesity trends *Notes*: Age-adjusted by the direct method to the year 2000 U.S. Census Bureau estimates using age groups 20–39, 40–59, and 60–74. Pregnant females were excluded. Overweight is body mass index (BMI) of 25 or greater but less 30; obesity is BMI greater than or equal to 30; and extreme obesity is BMI greater than or equal to 40. SOURCE: CDC/NCHS, National Health Examination Survey 1960–1962; and National Health and Nutrition Examination Surveys 1971–1974; 1976–1980; 1988–1994; 1999–2000, 2001–2002, 2003–2004, 2005–2006, 2007–2008, 2009–2010, and 2011–2012.

## Obesity Health Consequences

Obesity is considered to be one of the leading causes of death in the United States and worldwide. Additionally, the medical care costs of obesity in the United States were estimated to be $147 billion in 2008. According to the CDC (2016) compared to those with a normal or healthy weight, people who are obese are at increased risk for many serious diseases and health conditions, including:

- All-causes of death (mortality)
- High blood pressure (Hypertension)
- High LDL cholesterol, low HDL cholesterol, or high levels of triglycerides (Dyslipidemia)
- Type 2 diabetes
- Coronary heart disease
- Stroke

- Gallbladder disease
- Osteoarthritis (a breakdown of cartilage and bone within a joint)
- Sleep apnea and breathing problems
- Some cancers (endometrial, breast, colon, kidney, gallbladder, and liver)
- Low quality of life
- Mental illness such as clinical depression, anxiety, and other mental disorders
- Body pain and difficulty with physical functioning

## Eating Disorders

Dissatisfaction with body image can explain why many teens, mostly girls, eat erratically or ingest diet pills to lose weight and why boys may take steroids to increase their muscle mass. Although eating disorders can occur in children and adults, they frequently appear during the teen years or young adulthood (NIMH, 2019). Eating disorders affect both genders, although rates among women are 2½ times greater than among men. Similar to women who have eating disorders, some men also have a distorted sense of body image, including **muscle dysmorphia** or an extreme concern with becoming more muscular.

Because of the high mortality rate, researchers are looking into the etiology of the disorder and associated risk factors. Researchers are finding that eating disorders are caused by a complex interaction of genetic, biological, behavioral, psychological, and social factors (NIMH, 2019). Eating disorders appear to run in families, and researchers are working to identify DNA variations that are linked to the increased risk of developing eating disorders. Researchers have also found differences in patterns of brain activity in women with eating disorders in comparison with healthy women. The main criteria for the most common eating disorders: **anorexia nervosa**, **bulimia nervosa**, and **binge-eating disorder** are described in the Diagnostic and Statistical Manual of Mental Disorders-Fifth Edition, DSM-5 (American Psychiatric Association, 2013).

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 4.4.1.** Eating Disorders explains the symptoms of anorexia nervosa, bulimia nervosa, and binge-eating disorder, as well as common treatments.

## Anorexia Nervosa

People with anorexia nervosa may see themselves as overweight, even when they are dangerously underweight. People with anorexia nervosa typically weigh themselves repeatedly, severely restrict the amount of food they eat, often exercise excessively, and/or may force themselves to vomit or use laxatives to lose weight. Anorexia nervosa has the highest mortality rate of any mental disorder. While many people with this disorder die from complications associated with starvation, others die of suicide.

Symptoms of anorexia nervosa include:

- Extremely restricted eating
- Extreme thinness (emaciation)
- A relentless pursuit of thinness and unwillingness to maintain a normal or healthy weight
- Intense fear of gaining weight
- Distorted body image, a self-esteem that is heavily influenced by perceptions of body weight and shape, or a denial of the seriousness of low body weight

Other symptoms may develop over time, including:

- Thinning of the bones (osteopenia or osteoporosis)
- Mild anemia and muscle wasting and weakness

- Brittle hair and nails
- Dry and yellowish skin
- Growth of fine hair all over the body (lanugo)
- Severe constipation
- Low blood pressure slowed breathing and pulse
- Damage to the structure and function of the heart
- Brain damage
- Multiorgan failure
- Drop-in internal body temperature, causing a person to feel cold all the time
- Lethargy, sluggishness, or feeling tired all the time
- Infertility

For those suffering from anorexia, health consequences include an abnormally slow heart rate and low blood pressure, which increases the risk of heart failure. Additionally, there is a reduction in bone density (osteoporosis), muscle loss and weakness, severe dehydration, fainting, fatigue, and overall weakness. Anorexia nervosa has the highest mortality rate of any psychiatric disorder. Individuals with this disorder may die from complications associated with starvation, while others die of suicide. In women, suicide is much more common in those with anorexia than with most other mental disorders.

## Bulimia Nervosa

People with bulimia nervosa have recurrent and frequent episodes of eating unusually large amounts of food and feeling a lack of control over these episodes. This binge-eating is followed by behavior that compensates for overeating such as forced vomiting, excessive use of laxatives or diuretics, fasting, excessive exercise, or a combination of these behaviors. People with bulimia nervosa may be slightly underweight, normal weight, or overweight.

Symptoms of bulimia nervosa include:

- Chronically inflamed and sore throat
- Swollen salivary glands in the neck and jaw area
- Worn tooth enamel and increasingly sensitive and decaying teeth as a result of exposure to stomach acid
- Acid reflux disorder and other gastrointestinal problems
- Intestinal distress and irritation from laxative abuse
- Severe dehydration from purging of fluids
- Electrolyte imbalance (too low or too high levels of sodium, calcium, potassium, and other minerals) which can lead to stroke or heart attack

The binging and purging cycle of bulimia can affect the digestive system and lead to electrolyte and chemical imbalances that can affect the heart and other major organs. Frequent vomiting can cause inflammation and possible rupture of the esophagus, as well as tooth decay and staining from stomach acids. Lastly, binge eating disorder results in similar health risks to obesity, including high blood pressure, high cholesterol levels, heart disease, Type II diabetes, and gall bladder disease (National Eating Disorders Association, 2016).

## Binge-Eating Disorder

People with binge-eating disorder lose control over his or her eating. Unlike bulimia nervosa, periods of binge-eating are not followed by purging, excessive exercise, or fasting. As a result, people with binge-eating disorder often are overweight or obese. Binge-eating disorder is the most common eating disorder in the U.S.

Symptoms of binge-eating disorder include:

- Eating unusually large amounts of food in a specific amount of time, such as a 2-hour period
- Eating even when you're full or not hungry
- Eating fast during binge episodes
- Eating until you're uncomfortably full
- Eating alone or in secret to avoid embarrassment
- Feeling distressed, ashamed, or guilty about your eating
- Frequently dieting, possibly without weight loss

## Eating Disorders Treatment

To treat eating disorders, getting adequate nutrition, and stopping inappropriate behaviors, such as purging, are the foundations of treatment. Treatment plans are tailored to individual needs and include medical care, nutritional counseling, medications (such as antidepressants), and individual, group, and/or family psychotherapy (NIMH, 2019). For example, the Maudsley Approach has parents of adolescents with anorexia nervosa be actively involved in their child's treatment, such as assuming responsibility for feeding their child. To eliminate binge eating and purging behaviors, cognitive behavioral therapy (CBT) assists sufferers by identifying distorted thinking patterns and changing inaccurate beliefs.

**Links to Learning**

Visit the National Eating Disorders Association to learn more about eating disorders.

# Exercise and Sports

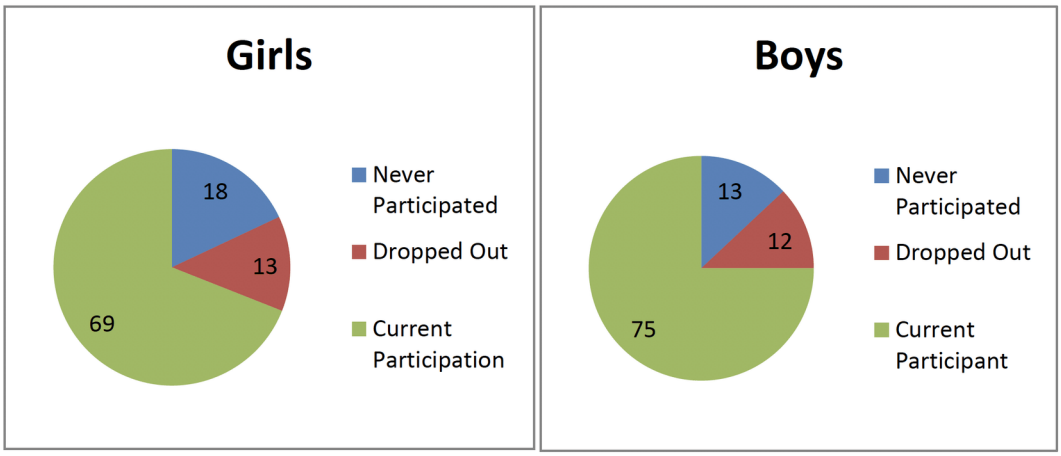
Middle childhood seems to be a great time to introduce children to organized sports, and in fact, many parents do. Nearly 3 million children play soccer in the United States (United States Youth Soccer, 2012). This activity promises to help children build social skills, improve athletically, and learn a sense of competition. However, it has been suggested that the emphasis on competition and athletic abilities can be counterproductive and lead children to grow tired of the game and want to quit. In many respects, it appears that children's activities are no longer children's activities once adults become involved and approach the games as adults rather than children. The U. S. Soccer Federation recently advised coaches to reduce the amount of drilling engaged in during practice and to allow children to play more freely and to choose their own positions. The hope is that this will build on their love of the game and foster their natural talents.

Sports are important for children. Children's participation in sports has been linked to:

- Higher levels of satisfaction with family and overall quality of life in children
- Improved physical and emotional development
- Better academic performance

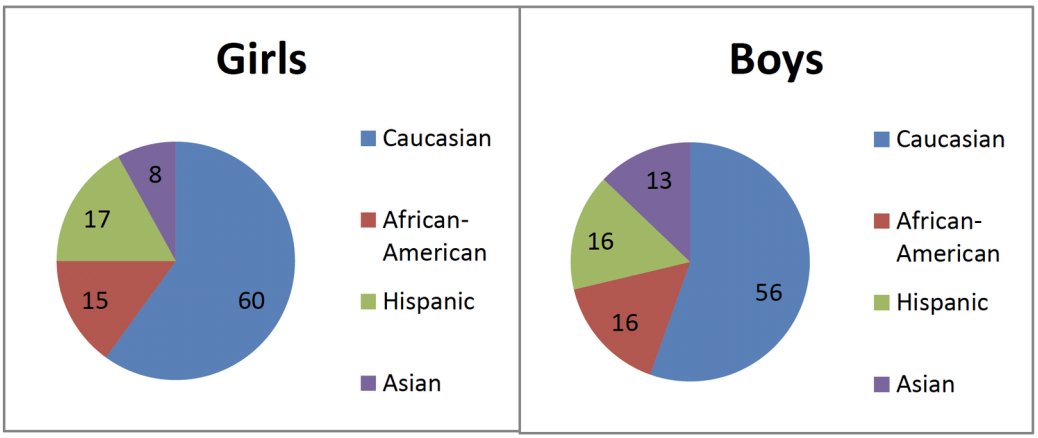
Yet, a study on children's sports in the United States (Sabo & Veliz, 2008) has found that gender, poverty, location, ethnicity, and disability can limit opportunities to engage in sports. Girls were more likely to have never participated in any type of sport (see Figure 4.4.3). They also found that fathers may not be providing their daughters as much support as they do their sons.

While boys rated their fathers as their biggest mentor who taught them the most about sports, girls rated coaches, and physical education teachers as their key mentors. Sabo and Veliz also found that children in suburban neighborhoods had much higher participation in sports than boys and girls living in rural or urban centers. In addition, Caucasian girls and boys participated in organized sports at higher rates than minority children (see Figure 4.4.4).




Total girls (n=1051). Total boys (n=1081)
t-test comparing gender and students who have never partcipated in sports. t=-3.038**, p=.002, df=2130

**Figure 4.4.3.**Participation in organized sports (%) by gender.




Girls – Caucasian (n=425); African-American (n=106); Hispanic (n=124); Asian (n=55)
Boys – Caucasian (n=435); African-American (n=127); Hispanic (n=123); Asian (n=99)

**Figure 4.4.4.** Participation in organized sports (%) by race and ethnicity.

Finally, Sabo and Veliz asked children who had dropped out of organized sports why they left. For both girls and boys, the number one answer was that it was no longer any fun (see Table 4.4.1). According to the Sports Policy and Research Collaborative (SPARC) (2013), almost 1 in 3 children drop out of organized sports, and while there are many factors involved in the decisions to drop out, one suggestion has been the lack of training that coaches of children's sports receive may be contributing to this attrition (Barnett, Smoll & Smith, 1992). Several studies have found that when coaches receive proper training, the drop-out rate is about 5% instead of the usual 30% (Fraser-Thomas, Côté, & Deakin, 2005; SPARC, 2013).

**Table 4.4.1.** Top reasons dropped out or stopped playing organized sports by gender

**Table 5.1 Top Reasons Dropped Out or Stopped Playing Organized/Team Sports**

| Girls | | Boys | |
|---|---|---|---|
| I was not having fun | 38% | I was not having fun | 39% |
| I wanted to focus more on studying and grades | 36% | I had a health problem or injury | 29% |
| I had a health problem or injury | 27% | I wanted to focus more on studying and grades | 26% |
| I wanted to focus more on other clubs or activities | 22% | I did not like or get along with the coach | 22% |
| I did not like or get along with the coach | 18% | I wanted to focus more on other clubs or activities | 18% |
| I did not like or get along with others on the team | 16% | I did not like or get along with others on the team | 16% |
| I was not a good enough player | 15% | I was not a good enough player | 15% |
| My family worried about me getting hurt or injured while playing sports | 14% | My family worried about me getting hurt or injured while playing sports | 12% |

Source: Sabo, D., & Veliz, P. (2008). Go Out and Play: Youth Sports in America. East Meadows, NY: Women's Sports

## Welcome to the World of E-Sports

The recent SPARC (2016) report on the "State of Play" in the United States highlights a disturbing trend. One in four children between the ages of 5 and 16 rate playing computer games with their friends as a form of exercise. In addition, **e-sports**, which as SPARC writes, is about as much a sport as poker, *involves children watching other children play video games*. over half of males, and about 20% of females, aged 12-19, say they are fans of e-sports.

Since 2008 there has also been a downward trend in the number of sports children are engaged in, despite a body of research evidence that suggests that specializing in only one activity can increase the chances of injury while playing multiple sports is protective (SPARC, 2016). A University of Wisconsin study found that 49% of athletes who specialized in a sport experienced an injury compared with 23% of those who played multiple sports (McGuine, 2016).

## Physical Education

For many children, physical education in school is a key component in introducing children to sports. After years of schools cutting back on physical education programs, there has been a turnaround, prompted by concerns over childhood obesity and related health issues. Despite these changes, currently, only the state of Oregon and the District of Columbia meet PE guidelines of a minimum of 150 minutes per week of physical activity in elementary school and 225 minutes in middle school (SPARC, 2016).

## Candela Citations

CC licensed content, Original

- Health Concerns during Adolescence. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...ng-adolescence. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Eating Disorders. **Provided by**: National Institute of Mental Health [NIMH]. **Retrieved from**: https://www.nimh.nih.gov/health/topi...rs/index.shtml. **License**: CC0: No Rights Reserved
- Lifespan Development. **Authored by**: Martha Lally and Suzanne Valentine-French. **Provided by**: College of Lake County Foundation . **Retrieved from**: http://dept.clcillinois.edu/psy/Life...evelopment.pdf. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

All rights reserved content

- Eating Disorders. **Provided by**: MedLecturesMadeEasy. **Retrieved from**: https://youtu.be/bD8KCcipGaY. **License**: *All Rights Reserved*

This page titled 4.3: Health Concerns during Adolescence is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 4.3: Health Concerns during Adolescence by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

**adolescent growth spurt:** rapid increase in the individual's height and weight during puberty resulting from simultaneous release of growth hormones, thyroid hormones, and androgens. Males experience their growth spurt about two years later, on average, than females

**adrenarche:** an increase in the production of androgens by the adrenal cortex that usually occurs during the eighth or ninth year of life and typically peaks at around 10 to 14 years of age and is eventually involved in the development of pubic hair, body odor, skin oiliness, and acne

**anorexia nervosa:** an eating disorder characterized by self-starvation. Affected individuals voluntarily undereat and often overexercise, depriving their vital organs of nutrition. Anorexia can be fatal

**binge-eating disorder:** an eating disorder characterized by recurrent episodes of eating large quantities of food (often very quickly and to the point of discomfort); a feeling of a loss of control during the binge; experiencing shame, distress or guilt afterward; and not regularly using unhealthy compensatory measures (e.g., purging) to counter the binge eating. It is the most common eating disorder in the United States

**body dissatisfaction:** negative subjective evaluation of the weight and shape of one's own body, which may predict the onset, severity, and treatment outcomes of eating disorders

**body image:** a person's idea of how his or her body looks

**bulimia nervosa:** an eating disorder characterized by binge eating and subsequent purging, usually by induced vomiting and/or use of laxatives

**estrogen:** primary female sex hormone that is responsible for the development and regulation of the female reproductive system and secondary sex characteristics

**gonad:** a sex organ that produces gametes; specifically, a testicle or ovary

**gonadarche:** refers to the earliest gonadal changes of puberty. In response to pituitary gonadotropins, the ovaries in girls and the testes in boys begin to grow and increase the production of the sex steroids, especially estradiol and testosterone

**masturbation:** sexual self-stimulation, usually achieved by touching, stroking, or massaging the male or female genitals until this triggers an orgasm

**menarche:** a girl's first menstrual period, signaling that she has begun ovulation. Pregnancy is biologically possible, but ovulation and menstruation are often irregular for years after menarche

**muscle dysmorphia:** sometimes called "reverse anorexia" this is an obsession with being small and underdeveloped; extreme concern with becoming more muscular

**primary sex characteristics:** the parts of the body that are directly involved in reproduction, including the vagina, uterus, ovaries, testicles, and penis

**puberty:** the period of rapid growth and sexual development that begins in adolescence

**secondary sex characteristics:** physical traits that are not directly involved in reproduction but that indicate sexual maturity, such as a man's beard or a woman's breasts

**sexually transmitted infections (STIs):** diseases that are spread by sexual contact, including syphilis, gonorrhea, genital herpes, chlamydia, and HIV/AIDS

**spermarche:** a boy's first ejaculation of sperm. Erections can occur as early as infancy, but ejaculation signals sperm production. Spermarche may occur during sleep (nocturnal emission or "wet dream") or via direct stimulation

**testosterone:** the primary male sex hormone that plays a key role in the development of male reproductive tissues such as testes and prostate, as well as promoting secondary sexual characteristics such as increased muscle and bone mass, and the growth of body hair. Females also produce testosterone, but at a lower level than males

This page titled 4.4: Glossary is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 4.4: Glossary by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 5: BRAIN DEVELOPMENT DURING ADOLESCENCE

## Learning Objectives

- Describe brain development during adolescence
- Explain how brain changes impact risk-taking behaviors
- Explain behavioral and psychological adjustment in adolesces and how they impact development

The human brain is not fully developed by the time a person reaches puberty. Between the ages of 10 and 25, the brain undergoes changes that have important implications for behavior. The brain reaches 90% of its adult size by the time a person is six or seven years of age. Thus, the brain does not grow in size much during adolescence. However, the creases in the brain continue to become more complex until the late teens. The biggest changes in the folds of the brain during this time occur in the parts of the cortex that process cognitive and emotional information. Changes to the brain directly influence changes to behavior and mental process. We will discuss some of these issues.

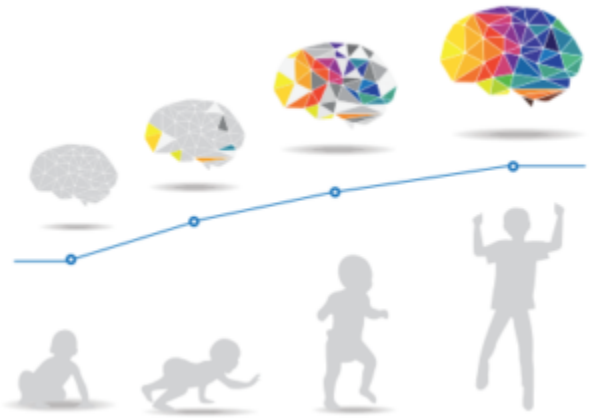


**Figure 5.1.1.** The brain reaches its largest size in the early teen years but continues to mature well into the 20s.


5.1: Brain Basics

5.2: Brain Changes during Adolescence

5.3: Adolescent Sleep

5.4: Teens and Risk-Taking Behavior

5.5: Inside the Teenage Brain

5.6: Behavioral and Psychological Adjustment

5.7: Glossary



This page titled 5: Brain Development during Adolescence is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 5: Brain Development during Adolescence by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 5.1: Brain Basics

The nervous system is composed of two basic cell types: glial cells (also known as glia) and neurons. **Glial cells** are traditionally thought to play a supportive role to neurons, both physically and metabolically. Glial cells provide scaffolding on which the nervous system is built, help neurons line up closely with each other to allow neuronal communication, provide insulation to neurons, transport nutrients and waste products, and mediate immune responses. **Neurons**, on the other hand, serve as interconnected information processors that are essential for all of the tasks of the nervous system. This section briefly describes the structure and function of neurons.

Communication within the central nervous system (CNS), which consists of the brain and spinal cord, begins with nerve cells called **neurons**. Neurons connect to other neurons via networks of nerve fibers called **axons** and **dendrites**. Each neuron typically has a single axon and numerous dendrites that are spread out like branches of a tree (some will say it looks like a hand with fingers). The axon of each neuron reaches toward the dendrites of other neurons at intersections called **synapses**, which are critical communication links within the brain. Axons and dendrites do not touch, instead, electrical impulses in the axons cause the release of chemicals called **neurotransmitters** which carry information from the axon of the sending neuron to the dendrites of the receiving neuron.

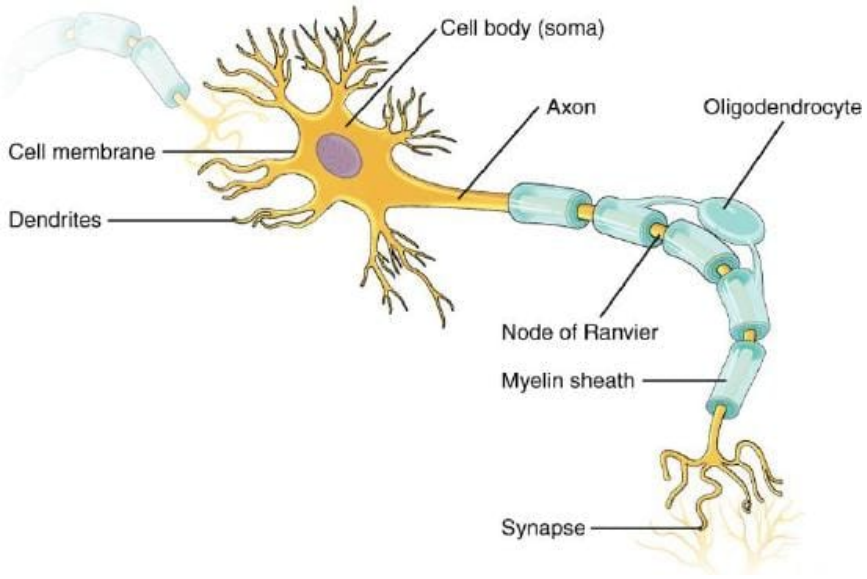



**Figure 5.2.1.** Neuron.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 5.2.1.** The Neuron explains the part of the neuron and the signal transmission of the neurocommunication process.

https://assessments.lumenlearning.co...sessments/4140

# Synaptogenesis and Synaptic Pruning

While most of the brain's 100 to 200 billion neurons are present at birth, they are not fully mature. Each neural pathway forms thousands of new connections during infancy and toddlerhood. **Synaptogenesis**, *or the formation of connections between neurons*, continues from the prenatal period forming thousands of new connections during infancy and toddlerhood. During the next several years, dendrites**,** or connections between neurons, will undergo a period of **transient exuberance** or temporary dramatic growth (*exuberant* because it is so rapid and *transient* because some of it is temporary). There is such a proliferation of these dendrites during these early years that by age 2 a single neuron might have thousands of dendrites.

After this dramatic increase, the neural pathways that are not used will be eliminated through a process called **synaptic pruning**, *where neural connections are reduced, thereby making those that are used much stronger*. It is thought that pruning causes the brain to function more efficiently, allowing for mastery of more complex skills (Hutchinson, 2011). Experience will shape which of these connections are maintained and which of these are lost. Ultimately, about 40 percent of these connections will be lost (Webb, Monk, and Nelson, 2001). Transient exuberance occurs during the first few years of life, and pruning continues through childhood and into adolescence in various areas of the brain. This activity is occurring primarily in the **cortex** or the thin outer covering of the brain involved in voluntary activity and thinking.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 5.2.2.** Synaptic Pruning explains the reasons for pruning.

https://assessments.lumenlearning.co...essments/16548

# Myelination

Another significant change occurring in the central nervous system is the development of **myelin**, a coating of fatty tissues around the axon of the neuron (Carlson, 2014). myelin helps insulate the nerve cell and speed the rate of transmission of impulses from one cell to another. This increase enhances the building of neural pathways and improves coordination and control of movement and thought processes. During infancy, myelination progresses rapidly, with increasing numbers of axons acquiring myelin sheaths. This corresponds with the development of cognitive and motor skills, including language comprehension, speech acquisition, sensory processing, crawling, and walking. Myelination in the motor areas of the brain during early to middle childhood leads to vast improvements in fine and gross motor skills. Myelination continues through adolescence and early adulthood and although largely complete at this time, myelin sheaths can be added in grey matter regions such as the cerebral cortex, throughout life.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 5.2.3.** Myelin explains the formation and purpose of myelin.

## Neuroplasticity

Lastly, **neuroplasticity** refers to the brain's ability to change, both physically and chemically, to enhance its adaptability to environmental change and compensate for injury. Neuroplasticity enables us to learn and remember new things and adjust to new experiences. Both environmental experiences, such as stimulation, and events within a person's body, such as hormones and genes, affect the brain's plasticity. So too does age. Our brains are the most "plastic" when we are young children, as it is during this time that we learn the most about our environment. Adult brains demonstrate neuroplasticity, but they are influenced more slowly and less extensively than those of children (Kolb & Whishaw, 2011).

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 5.2.4.** Long-term Potentiation and Synaptic Plasticity explains how learning occurs through synaptic connections and plasticity.

The control of some specific bodily functions, such as movement, vision, and hearing, is performed in specified areas of the cortex. If these areas are damaged, the individual will likely lose the ability to perform the corresponding function. For instance, if an infant suffers damage to facial recognition areas in the temporal lobe, likely, he or she will never be able to recognize faces (Farah, Rabinowitz, Quinn, & Liu, 2000). On the other hand, the brain is not divided up in an entirely rigid way. The brain's neurons have a remarkable capacity to reorganize and extend themselves to carry out particular functions in response to the needs of the organism, and to repair the damage. As a result, the brain constantly creates new neural communication routes and rewires existing ones.

The Amazing Power of Neuroplasticity

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 5.2.5.** The Story of Jody is a case study about a young girl that had the right hemisphere of her brain removed as a treatment for severe seizures. Due to neuroplasticity, Jody was able to recover from the damage caused by the removal of so much of her cerebrum.

## Brain Structures

At birth, the brain is about 25 percent of its adult weight, and by age two, it is at 75 percent of its adult weight. Most of the neural activity is occurring in the **cortex** or the thin outer covering of the brain involved in voluntary activity and thinking. The cortex is divided into two hemispheres, and each hemisphere is divided into four lobes, each separated by folds known as fissures. If we look at the cortex starting at the front of the brain and moving over the top, we see first the **frontal lobe** (behind the forehead), which is responsible primarily for thinking, planning, memory, and judgment. Following the frontal lobe is the **parietal lobe**, which extends from the middle to the back of the skull and which is responsible primarily for processing information about touch. Next is the **occipital lobe**, at the very back of the skull, which processes visual information. Finally, in front of the occipital lobe, between the ears, is the **temporal lobe**, which is responsible for hearing and language.

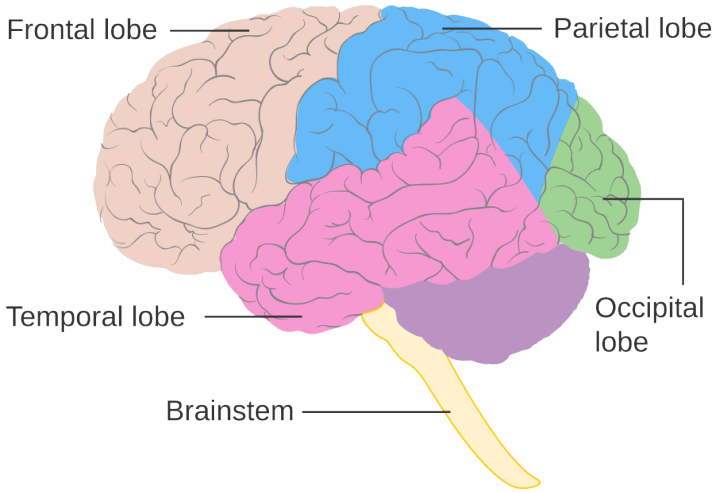



**Figure 5.2.2.** Lobes of the brain.

Although the brain grows rapidly during infancy, specific brain regions do not mature at the same rate. Primary motor areas develop earlier than primary sensory areas, and the prefrontal cortex, which is located behind the forehead, is the least developed. As the prefrontal cortex matures, the child is increasingly able to regulate or control emotions, to plan activities, strategize, and have better judgment. This maturation is not fully accomplished in infancy and toddlerhood but continues throughout childhood, adolescence, and into adulthood.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 5.2.6.** Lobes and Landmarks of the Brain Surface identifies the lobes and some of the major cortexes of the brain.

https://assessments.lumenlearning.co...essments/16591

## Lateralization

**Lateralization** is the process in which different functions become localized primarily on one side of the brain. For example, in most adults, the left hemisphere is more active than the right during language production, while the reverse pattern is observed during tasks involving visuospatial abilities (Springer & Deutsch, 1993). This process develops over time, however, structural asymmetries between the hemispheres have been reported even in fetuses (Chi, Dooling, & Gilles, 1997; Kasprian et al., 2011) and infants (Dubois et al., 2009).

## Growth in the Hemispheres and Corpus Callosum

Between ages 3 and 6, the left hemisphere of the brain grows dramatically. This side of the brain or hemisphere is typically involved in language skills. The right hemisphere continues to grow throughout early childhood and is involved in tasks that require spatial skills, such as recognizing shapes and patterns. The Corpus Callosum, a dense band of fibers that connects the two hemispheres of the brain, contains approximately 200 million nerve fibers that connect the hemispheres (Kolb & Whishaw, 2011).

The corpus callosum is located a couple of inches below the longitudinal fissure, which runs the length of the brain and separates the two cerebral hemispheres (Garrett, 2015). Because the two hemispheres carry out different functions, they communicate with each other and integrate their activities through the corpus callosum. Additionally, because incoming information is directed toward one hemisphere, such as visual information from the left eye being directed to the right hemisphere, the corpus callosum shares this information with the other hemisphere.

The corpus callosum undergoes a growth spurt between ages 3 and 6, and this results in improved coordination between right and left hemisphere tasks. For example, in comparison to other individuals, children younger than 6 demonstrate difficulty coordinating an Etch A Sketch toy because their corpus callosum is not developed enough to integrate the movements of both hands (Kalat, 2016).

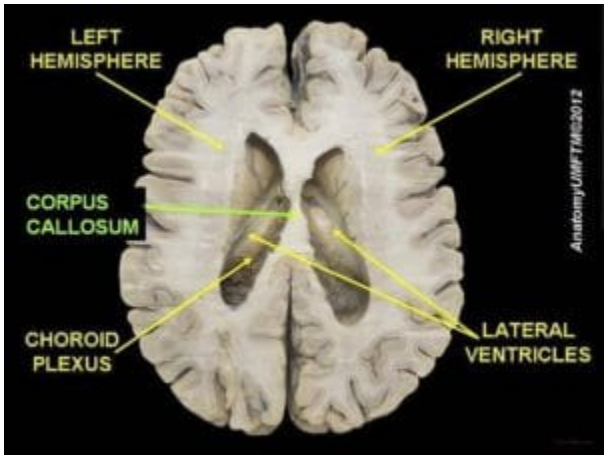



**Figure 5.2.3.** Corpus callosum.

https://assessments.lumenlearning.co...essments/16575

## Candela Citations

CC licensed content, Original

- Brain Basics. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad.../brain-basics/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Brain Development. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ed...n-development/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike
- Psychology 2e. **Authored by**: Rose M. Spielman, William J. Jenkins, Marilyn D. Lovett. **Provided by**: Open Stax. **Retrieved from**: https://openstax.org/books/psycholog...nervous-system. **License**: CC BY: Attribution

CC licensed content, Specific attribution

- Long-term Potentiation and Synaptic Plasticity. **Provided by**: Khan Academy. **Retrieved from**: https://youtu.be/uVQXZudZd5s. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike
- 2-Minutes Neuroscience: The Neuron. **Provided by**: Neuroscientifically Challenged. **Retrieved from**: https://youtu.be/6qS83wD29PY. **License**: CC BY: Attribution
- 2-minute Neuroscience: Myelin . **Provided by**: Neuroscientifically Challenged. **Retrieved from**: https://youtu.be/5V7RZwDpmXE. **License**: CC BY: Attribution
- 2-minute Neuroscience: Lobes and Landmarks of the Brain Surface. **Provided by**: Neuroscientifically Challenged. **Retrieved from**: https://youtu.be/LQ4DlE1Xyd4. **License**: CC BY: Attribution

All rights reserved content

- Brain Plasticity--The Story of Jody. **Retrieved from**: https://youtu.be/VaDlLD97CLM. **License**: *All Rights Reserved*
- Synaptic Pruning. **Provided by**: Alila Medical Media. **Retrieved from**: https://youtu.be/0S0jKbh6R1I. **License**: *All Rights Reserved*

This page titled 5.1: Brain Basics is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 5.1: Brain Basics by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 5.2: Brain Changes during Adolescence

During adolescence, brain cells continue to bloom in the frontal region. Some of the most developmentally significant changes in the brain occur in the **prefrontal cortex**, which is involved in decision making and cognitive control, as well as other higher cognitive functions. During adolescence, **myelination** and **synaptic pruning** in the prefrontal cortex increases, improving the efficiency of information processing, and neural connections between the prefrontal cortex and other regions of the brain are strengthened. However, this growth takes time, and the growth is uneven.

## The Limbic System

The **limbic system** develops years ahead of the prefrontal cortex. Development in the limbic system plays an important role in determining rewards and punishments and processing emotional experience and social information. Pubertal hormones target the **amygdala** directly, and powerful sensations become compelling (Romeo, 2013). Brain scans confirm that cognitive control, revealed by fMRI studies, is not fully developed until adulthood because the prefrontal cortex is limited in connections and engagement (Hartley & Somerville, 2015). Recall that this area is responsible for judgment, impulse control, and planning, and it is still maturing into early adulthood (Casey, Tottenham, Liston, & Durston, 2005).

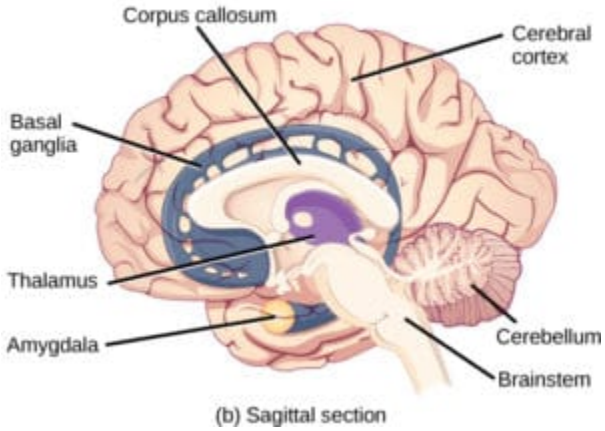



**Figure 5.3.1.** The limbic system.

Additionally, changes in both the levels of the neurotransmitters **dopamine** and **serotonin** in the limbic system make adolescents more emotional and more responsive to rewards and stress. Dopamine is a neurotransmitter in the brain associated with pleasure and attuning to the environment during decision-making. During adolescence, dopamine levels in the limbic system increase, and the input of dopamine to the prefrontal cortex increases. The increased dopamine activity in adolescence may have implications for adolescent risk-taking and vulnerability to boredom. Serotonin is involved in the regulation of mood and behavior. It affects the brain in a different way. Known as the “calming chemical,” serotonin eases tension and stress. Serotonin also puts a brake on the excitement and sometimes recklessness that dopamine can produce. If there is a defect in the serotonin processing in the brain, impulsive or violent behavior can result.

## The Prefrontal Cortex

The prefrontal cortex, the part of the frontal lobes lying just behind the forehead, is often referred to as the “CEO of the brain,” the cognitive control center. This brain region is responsible for cognitive analysis, abstract thought, the moderation of “correct” behavior in social situations, the capacity to exercise good judgment, self-regulation, and future orientation The prefrontal cortex takes in information from all of the senses and orchestrates thoughts and actions to achieve specific goals (Casey, Jones, & Hare, 2008; Walsh, 2004). Around 11 years of age, this region of the brain begins an extended process of pruning and myelination and is not complete until near the age of 25. This is one of the last regions of the brain to reach maturation. This delay may help to explain why some adolescents act the way they do. The so-called “executive functions” of the human prefrontal cortex include:

- Focusing attention

- Organizing thoughts and problem-solving
- Foreseeing and weighing possible consequences of behavior
- Considering the future and making predictions
- Forming strategies and planning
- Ability to balance short-term rewards with long term goals
- Shifting/adjusting behavior when situations change
- Impulse control and delaying gratification
- Modulation of intense emotions
- Inhibiting inappropriate behavior and initiating appropriate behavior
- Simultaneously considering multiple streams of information when faced with complex and challenging information

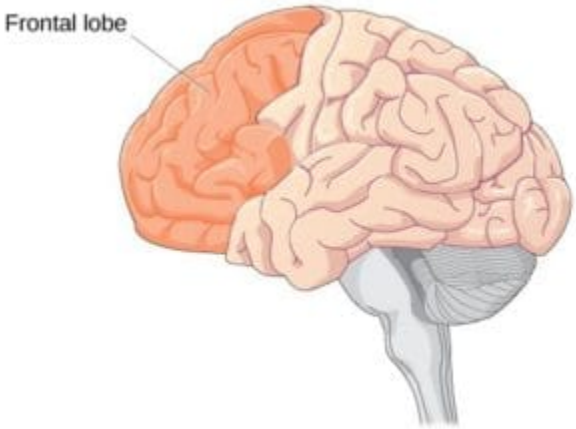



**Figure 5.3.2.** Brain development continues into the early 20s. The development of the frontal lobe, in particular, is important during this stage.

The difference in timing of the development of the limbic system and prefrontal cortex contributes to more risk-taking during adolescence because adolescents are motivated to seek thrills that sometimes come from risky behavior, such as reckless driving, smoking, or drinking, and have not yet developed the cognitive control to resist impulses or focus equally on the potential risks (Steinberg, 2008). One of the world's leading experts on adolescent development, Laurence Steinberg, likens this to engaging a powerful engine before the braking system is in place. The result is that adolescents are more prone to risky behaviors than are children or adults.

## Brain Region Integration

MRI studies of the brain show that developmental processes tend to occur in the brain in a back-to-front pattern, explaining why the prefrontal cortex develops last. These studies have also found that teens have less white matter (myelin) in the frontal lobes of their brains when compared to adults, but this amount increases as the teen ages. With more myelin comes the growth of important brain connections, allowing for a better flow of information between brain regions. MRI research has also revealed that during adolescence, white matter increases in the corpus callosum, the bundle of nerve fibers connecting the right and left hemispheres of the brain. This allows for enhanced communication between the hemispheres and enables a full array of analytic and creative strategies to be brought to bear in responding to the complex dilemmas that may arise in a young person's life (Giedd, 2004).

In sum, the adolescent years are a time of intense brain changes. Interestingly, two of the primary brain functions develop at different rates. Brain research indicates that the part of the brain that perceives rewards from risk, the limbic system, kicks into high gear in early adolescence. The part of the brain that controls impulses and engages in longer-term perspective, the frontal lobes, mature later. This may explain why teens in mid-adolescence take more risks than older teens.

As the frontal lobes become more developed, two things happen. First, self-control develops as teens are better able to assess cause and effect. Second, more areas of the brain become involved in processing emotions, and teens become better at accurately interpreting others' emotions.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 5.3.1**. Brain Changes during Adolescence describes some of the physical changes that occur during adolescence.

The Teen Brain: 6 Things to Know from the National Institute of Mental Health

**Your brain does not keep getting bigger as you get older**

For girls, the brain reaches its largest physical size around 11 years old and for boys, the brain reaches its largest physical size around age 14. Of course, this difference in age does not mean either boys or girls are smarter than one another!

***But that doesn't mean your brain is done maturing***

For both boys and girls, although your brain may be as large as it will ever be, your brain doesn't finish developing and maturing until your mid- to late-20s. The front part of the brain, called the prefrontal cortex, is one of the last brain regions to mature. It is the area responsible for planning, prioritizing, and controlling impulses.

***The teen brain is ready to learn and adapt***

In a digital world that is constantly changing, the adolescent brain is well prepared to adapt to new technology—and is shaped in return by experience.

***Many mental disorders appear during adolescence***

All the big changes the brain is experiencing may explain why adolescence is the time when many mental disorders—such as schizophrenia, anxiety, depression, bipolar disorder, and eating disorders—emerge.

***The teen brain is resilient***

Although adolescence is a vulnerable time for the brain and for teenagers in general, most teens go on to become healthy adults. Some changes in the brain during this important phase of development actually may help protect against long-term mental disorders.

***Teens need more sleep than children and adults***

Although it may seem like teens are lazy, science shows that melatonin levels (or the "sleep hormone" levels) in the blood naturally rise later at night and fall later in the morning than in most children and adults. This may explain why many teens stay up late and struggle with getting up in the morning. Teens should get about 9-10 hours of sleep a night, but most teens don't get enough sleep. A lack of sleep makes paying attention hard, increases impulsivity, and may also increase irritability and depression.

https://assessments.lumenlearning.co...essments/16610

## Candela Citations

CC licensed content, Original

- Brain Changes during Adolescence. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad.../brain-changes. **License**: CC BY-NC-SA: Attribution-

NonCommercial-ShareAlike

CC licensed content, Shared previously

- Brain Development. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ed...in-development. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Specific attribution

- Brain Changes during Adolescence . **Authored by**: Brooke Miller. **Provided by**: Khan Academy . **Retrieved from**: https://youtu.be/5Fa8U6BkhNo. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

This page titled 5.2: Brain Changes during Adolescence is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 5.2: Brain Changes during Adolescence by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 5.3: Adolescent Sleep

Brain development even affects the way teens sleep. Adolescents' normal sleep patterns are different from those of children and adults. Teens are often drowsy upon waking, tired during the day, and wakeful at night. Although it may seem like teens are lazy, science shows that **melatonin** levels (or the "sleep hormone" levels) in the blood naturally rise later at night and fall later in the morning in teens than in most children and adults. This may explain why many teens stay up late and struggle with getting up in the morning.

According to the National Sleep Foundation (NSF) (2016), adolescents need about 8 to 10 hours of sleep each night to function best. The most recent Sleep in America poll in 2006 indicated that adolescents between sixth and twelfth grade were not getting the recommended amount of sleep. On average, adolescents only received 7 ½ hours of sleep per night on school nights with younger adolescents getting more than older ones (8.4 hours for sixth graders and only 6.9 hours for those in twelfth grade). For older adolescents, only about one in ten (9%) get an optimal amount of sleep, and they are more likely to experience negative consequences the following day. These include feeling too tired or sleepy, being cranky or irritable, falling asleep in school, having a depressed mood, and drinking caffeinated beverages (NSF, 2016). Additionally, they are at risk for substance abuse, car crashes, poor academic performance, obesity, and a weakened immune system (Weintraub, 2016).

Why don't adolescents get adequate sleep? In addition to known environmental and social factors, including work, homework, media, technology, and socializing, the adolescent brain is also a factor. As adolescents go through puberty, their circadian rhythms change and push back their sleep time until later in the evening (Weintraub, 2016). This biological change not only keeps adolescents awake at night, but it also makes it difficult for them to get up in the morning. When they are awake too early, their brains do not function optimally. Impairments are noted in attention, behavior, and academic achievement, while increases in tardiness and absenteeism are also demonstrated.

To support adolescents' later sleeping schedule, the Centers for Disease Control and Prevention recommended that school not begin any earlier than 8:30 a.m. Unfortunately, over 80% of American schools begin their day earlier than 8:30 a.m. with an average start time of 8:03 a.m. (Weintraub, 2016). Psychologists and other professionals have been advocating for later school times, and they have produced research demonstrating better student outcomes for later start times. More middle and high schools have changed their start times to reflect the sleep research better. However, the logistics of changing start times and bus schedules are proving too difficult for some schools leaving many adolescents vulnerable to the negative consequences of sleep deprivation.

**Links to Learning**

As research reveals the importance of sleep for teenagers, many people advocate for later high school start times. Read about some of the **research at the National Sleep Foundation on school start times**.

**Video 5.4.1.** Why Schools Should Start Later for Teens discusses how early school start times impact teens and how later start times can benefit students.

## Candela Citations

CC licensed content, Original

- Adolescent Sleep. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Sleep. **Authored by**: Martha Lally and Suzanne Valentine-French. **Provided by**: College of Lake County Foundation. **Retrieved from**: http://dept.clcillinois.edu/psy/Life...evelopment.pdf.. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

All rights reserved content

- Why Schools Should Start Later for Teens. **Authored by**: Wendy Troxel. **Provided by**: TedX Talks. **Retrieved from**: https://www.ted.com/talks/wendy_trox...ce=tedcomshare. **License**: All Rights Reserved

This page titled 5.3: Adolescent Sleep is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 5.3: Adolescent Sleep by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 5.4: Teens and Risk-Taking Behavior

Neuroscience has found that there is early maturation of the limbic system and a prolonged maturation of the prefrontal cortex region of the brain. The maturation of these areas is associated with increased self-control, while the absence of maturation is associated with impulsivity and poor decision-making (Romer, 2012). Adolesces is often associated with greater risk-taking behavior and impulsivity, as demonstrated by increased experimentation with drug use, accidents, and risky sexual behavior (Arnett, 1992).

The propensity for risking-taking behavior is likely influenced by several factors. There are changes happening in parts of the brain that may increase teens' tendencies toward risky behaviors. There is limited maturation in parts of the brain that may control risky decisions and behavior. Moreover, experiences may increase or decrease the proclivity for risky behavior.

## Sensation-Seeking

All areas of the brain are not maturing at the same time and rate. Some parts of the brain develop earlier, while others are not fully mature until adulthood. An area of the brain referred to as the 'rewards system' begins to develop rather early in adolescence. The rewards system is stimulated with increased releases of dopamine when engaged in sensation-seeking behavior. This change encourages adolescence to desire independence, seek novel experiences, and engage in more adult-like activities (Spear, 2007). Many of these exciting, novel, independent activities are associated with some risk (e.g., drugs, driving, sex). Increases in sensation-seeking behavior are observed in 14 to 22-year-olds. The level of sensation-seeking is typically greater in males than females and continues further into adulthood for males. Sensation-seeking behavior tends to peak in females around 16, whereas males peak around 19 (Romer, 2012).

The decision-making process involved in sensation-seeking may be the same heuristic that influences adult decisions. Heuristics are simple decision rules that allow us to make decisions quickly, without much contemplation. In this case, the affect heuristic seems to apply in many risky decisions. The affect heuristic relies on our dominant affective (emotional) reaction to a situation when evaluating the risks and rewards. Simply, we tend to conclude that the more positive effect that is associated with a situation, the less risk we attach. The rational choice would expect us to evaluate risk and reward separately, not in relation to one another. Enjoying an activity does not inherently make it less risky, and safe activity is not innately less enjoyable (Romer, 2012).

Peers are another influence on risk-taking behavior. Adolescent sensation seekers not only associate the positive effects with risky behaviors, but they also seek out peers with similar interests. These peers create a social group that may encourage risk-taking behavior and increases the positive affect associated with the experience. The influence of peers on risky behavior is greater than that of sensation-seeking alone. However, the combination of sensation-seeking and peer influence has a significantly greater influence on risky adolescent behavior than sensation-seeking or peer influence alone (Romber, 2012).

## Delayed Executive Functioning

Another area of the brain that may influence risk-taking tendencies in adolescence is the prefrontal cortex. As previously mentioned, this part of the brain is not fully developed until early adulthood. The developed prefrontal cortex allows us to assess situations, consider consequences, and control impulses adequately. The gap between the increase in the sensation-seeking of the rewards system and the slower-developing prefrontal cortex puts adolescents at particular jeopardy for risk-taking behaviors and potentially unhealthy outcomes.

Brain research data has led to the idea of 'frontalization,' whereby the prefrontal cortex gradually becomes able to oversee and regulate the behavioral responses initiated by the more primitive limbic structures. However, when stress, arousal, or sensations become extreme, the adolescent brain is flooded with impulses that overwhelm the prefrontal cortex, and as a result, adolescents engage in increased risk-taking behaviors and emotional outbursts. With an immature prefrontal cortex, even if teens understand that something is dangerous, they may still engage in risky behavior. Recognizing the asynchrony of development of the regions of the brain helps us to see adolescent risk-taking in a whole new light.

## The Influence of Experience

Risk-taking behavior is not uniform across adolescence or among adolescents. For example, the Seattle Social Development Project (Hill, White, Hawkins, & Catalano, 2000) found that 70% of youth 13 to 18 had not engaged in binge drinking. Three percent reported binge drinking starting at 13 years old and continued through age 18. Another four percent engaged in binge drinking later in adolescence. And 23% didn't binge drink until they were 18 years old. The likelihood f engaging in risk-taking behavior and the timing of these behaviors may be influenced by experience—either early life experiences that increase the propensity toward risk-taking or normative age-graded influences.

For some teens, their impulsivity and risk-taking behavior may have begun years before and persisted into adolescence. There is considerable evidence that adolescent risk-taking, for some, is due to impaired impulse control that occurred in the first years of life due to exposure to severe, chronic stress. This type of stress can have a 'toxic' effect on a range of behaviors and health outcomes. The Adverse Childhood Experiences (ACE) study (CDC, 2019) found that exposure to abuse, neglect, domestic or community violence, familial substance abuse or mental illness, separation from parents, homelessness, discrimination, natural disasters, and war are serious traumas that result in toxic stress. Those facing adverse childhood experiences are at higher risk for adolescent pregnancy, early sexual activity, multiple sexual partners, intimate partner violence, substance abuse, depression, suicide, and poor physical health. In general, the more adverse childhood experiences, the more risky behaviors in adolescence.

The second source for risk, as previously discussed, is the increase in sensation-seeking associated with brain development. Those changes encourage experimentation with adult-like behavior. These risky behaviors are part of normative age-graded influence due to a lack of experience. To overcome the tendency toward these behaviors is to gain experience in taking risks. The role of experience is critical in developing the neural connectivity that allows for the conscious cognitive control of the emotions and passions of adolescence. Teens who take risks in relatively safe situations exercise the circuitry and develop the skills to "put on the brakes" in more dangerous situations (Giedd, 2004).

## Decreasing the Risk

Mitigating the extremes of risk-taking and potential unhealthy outcomes is possible. There are two approaches to helping young people reduce risk and stay safe. First, early intervention, before children reach adolescence, is the best time to teach executive functioning and self-regulation skills that can reduce impulsivity. Second, teens need to gain life experience. When high sensation-seekers engage in risk-taking, they develop greater patience. Patience is a factor that reduces risk-taking behavior. This effect is amplified in conduct-disordered teens. Conduct disorder is a psychological diagnosis applied only to minors, characterized by impulsivity, aggression, deceitfulness, destructive behavior, and resistance to authority or rules. These youth are often sensation-seeking and take risks with the possibility of serious consequences. However, despite their greater risk-taking behavior, their consequences may actually result in them being less impatient than their low sensation-seeking peers (Turner & Piquero, 2002). It seems that teens need to engage in some risk-taking behavior to learn from the consequences of their experiences.

Adolescents are often mischaracterized as irrational loose cannons. However, while adolescents may be learning to think like adults, their brains are not fully developed. A hopped-up rewards system that can drown out warning signals about risk from an underdeveloped prefrontal cortex results in more risk-taking behaviors. Adolescent decisions are not always defined by impulsivity because of lack of brakes, but because of planned and enjoyable pressure to the accelerator. It is helpful to put all of these brain processes in a developmental context. Young people need to somewhat enjoy the thrill of risk-taking in order to complete the incredibly overwhelming task of growing up.

This page titled 5.4: Teens and Risk-Taking Behavior is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 5.4: Teens and Risk-Taking Behavior by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 5.5: Inside the Teenage Brain

https://www.pbs.org/wgbh/frontline/film/inside-the-teenage-brain/

**Video 5.6.1.** Inside the Teenage Brain discusses brain changes during adolescence and how these developments impact thinking and behavior.

**Exercise 5.5.1**

What are the two basic stages of brain development?

*Answer available at the end of this section.*

**Exercise 5.5.2**

When is brain development the most dramatic?

*Answer available at the end of this section.*

**Exercise \({5{.}5{.}\eatSpaces{3\)**

How does this massive pruning impact learning?

*Answer available at the end of this section.*

**Exercise** Extra close brace or missing open brace

How much sleep do teens need?

*Answer available at the end of this section.*

**Exercise 5.5.5**

What happens when teens experience a sleep debt?

*Answer available at the end of this section.*

**Exercise 5.5.6**

Why is sleep important for learning and memory?

*Answer available at the end of this section.*

**Exercise 5.5.7**

Is there anything teens can do to get the sleep that they need and prevent sleep deficits?

*Answer available at the end of this section.*

**Exercise 5.5.8**

Do teens process emotion differently?

*Answer available at the end of this section.*

**Exercise 5.5.9**

True or False: Teens do not want to spend time with their parents and wish for parents to leave them alone.

*Answer available at the end of this section.*

# Candela Citations

CC licensed content, Original

- Inside the Teenage Brain. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...teenage-brain/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

All rights reserved content

- Inside the Teenage Brain. **Provided by**: Frontline, PBS. **Retrieved from**: https://www.pbs.org/wgbh/frontline/f...teenage-brain/. **License**: *All Rights Reserved*

## Answers

**Exercise** 5.5.1

The vast majority of brain development occurs in two basic stages: growth spurts and pruning (Inside the Teenage Brain, Frontline, PBS).

**Exercise** 5.5.2

We've known that "in utero and throughout the first several months of life, the human brain grows at a rapid and dramatic pace, producing millions of brain cells." However, between ages 10 and 13, there is a second wave of rapid development that is quickly followed by a process in which the brain prunes and organizes its neural pathways(Inside the Teenage Brain, Frontline, PBS).

**Exercise \({5{.}5{.}\eatSpaces{3\)**

According to Giedd, "our leading hypothesis ... is the 'use it or lose it' principle,..if a teen is doing music or sports or academics, those are the cells and connections that will be hardwired. If they're lying on the couch or playing video games or [watching] MTV, those are the cells and connections that are going to survive" (Inside the Teenage Brain, Frontline, PBS).

**Exercise** Extra close brace or missing open brace

Mary Carskadon, director of the E.P. Bradley Hospital Sleep Research Laboratory at Brown University, says that on average, teens require more than 9 hours of sleep per night. However, most teens get about seven and a half hours of sleep, creating a sleep debt (Inside the Teenage Brain, Frontline, PBS).

**Exercise** 5.5.5

Sleep debts affect a teen's ability to learn and retain information, particularly, abstract concepts (Inside the Teenage Brain, Frontline, PBS).

**Exercise** 5.5.6

The brain consolidates and practices what is learned during the day after we go to sleep. Learning actually continues to take place while a person is asleep.

The brain consolidates learning during two particular phases of sleep. According to Dr. Robert Stickgold of Harvard University Medical School, "the brain seems to need lots of slow-wave sleep and a good chunk of another kind of sleep, Rapid Eye Movement, or REM. Dr. Stickgold hypothesizes that the reason the brain needs these particular kinds of sleep is that certain brain chemicals plummet during the first part of the night, and information flows out of the hippocampus (the memory region) and into the cortex. He thinks the brain then distributes the new information into appropriate networks and categories. Inside the brain, proteins strengthen the connections between nerve cells consolidating the new skills learned the day before. Then later, during REM, the brain re-enacts the lessons from the previous day and solidifies the newly-made connections through the memory banks" (Inside the Teenage Brain, Frontline, PBS)

**Exercise** 5.5.7

Sleep experts say dimming the lights at night and getting lots of daylight in the morning can help. Having a routine bedtime of 10 p.m., sleeping in a cool environment and turning off music, the Internet, and televisions would help to reset the body clock. And though sleeping in is a good thing, trying to get up after only an extra hour or two is a lot better than "binge-sleeping" on the weekends. If a student is used to getting up at 6:30 a.m., they shouldn't sleep until noon on the weekend. That simply confuses their bodies. And lots of sports helps, too — better earlier in the day than late" (Inside the Teenage Brain, Frontline, PBS)

**Exercise** 5.5.8

Deborah Yurgelun-Todd and a group of researchers have studied how adolescents perceive emotion as compared to adults. Adults and teens were shown pictures of adult faces and asked to identify the emotion expressed. Using fMRI, the researchers traced the part of the brain responded as subjects were asked to identify the expression depicted in the picture.

The adults correctly identified the emotions expressed in the pictures, but the teens misinterpreted the expressions. The teens and adults also used different parts of their brains to process the information. The fMRI showed the amygdala most active in teens. This mid-brain structure guides instinctual or "gut" reactions. In adults, the frontal cortex, which governs reason and planning, was active during this exercise.

As the teens got older, the center of activity shifted more toward the frontal cortex and away from the amygdala (Inside the Teenage Brain, Frontline, PBS).

**Exercise** 5.5.9

Ellen Galinsky, a social scientist and the president of the Families and Work Institute, found that in her interviews with more than a thousand children, teens desire more time and more communication with their parents, even when they seemed to be pushing parents away. "Even though the public perception is about building bigger and better brains, what the research shows is that it's the relationships, it's the connections, it's the people in children's lives who make the biggest difference" (Inside the Teenage Brain, Frontline, PBS)

This page titled 5.5: Inside the Teenage Brain is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 5.5: Inside the Teenage Brain by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 5.6: Behavioral and Psychological Adjustment

With all of these brain changes and novel experiences, we expect to see adolescents undergo significant behavioral and psychological adjustments. Adolescents are facing strong emotions, changing peer relationships, more independence, expectations to be more adult-like, and a desire to take risks, all while lacking a fully mature brain or the life experience to navigate these situations. It is inevitable that some mistakes will occur along the way, as well as a great deal of learning. We will examine some typical adjustment issues encountered by adolescents: driving, aggression, drug use, anxiety, depression, and self-violence.

## Teenage Drivers

In a 2017 National Children's Health poll, parents report that one of the top concerns is teen driving (C.S. Mott Children's Hospital, 2017). Driving gives teens a sense of freedom and independence from their parents and can free up time for parents as they are not shuttling teens to and from school, activities, or work. However, with higher levels of risk-taking behavior and lower levels of experience, parents are concerned with their teen's safety on the road.

The National Highway Traffic Safety Administration (NHTSA) reports that in 2014 young drivers (15 to 20 year-olds) accounted for 5.5% (11.7 million) of the total number of drivers (214 million) in the US (National Center for Statistics and Analysis (NCSA), 2016). However, almost 9% of all drivers involved in fatal crashes that year were young drivers (NCSA, 2016), and according to the National Center for Health Statistics (2014), motor vehicle accidents are the leading cause of death for 15 to 20 year-olds. "In all motorized jurisdictions around the world, young, inexperienced drivers have much higher crash rates than older, more experienced drivers" (NCSA, 2016, p. 1). The rate of fatal crashes is higher for young males than for young females, although, for both genders, the rate was highest for the 15-20 years-old age group. For young males, the rate for fatal crashes was approximately 46 per 100,000 drivers, compared to 20 per 100,000 drivers for young females. The NHTSA (NCSA, 2016) reported that of the young drivers who were killed and who had alcohol in their system, 81% had a blood alcohol count past what was considered the legal limit. Fatal crashes involving alcohol use were higher among young men than young women. The NHTSA also found that teens were less likely to use seat belt restraints if they were driving under the influence of alcohol, and that restraint use decreased as the level of alcohol intoxication increased.

In an AAA study of non-fatal, but moderate to severe motor vehicle accidents in 2014, more than half involved young male drivers 16 to 19 years of age (Carney, McGehee, Harland, Weiss, & Raby, 2015). In 36% of rear-end collisions, teen drivers were following cars too closely to be able to stop in time, and in single-vehicle accidents, driving too fast for weather and road conditions was a factor in 79% of crashes involving teens. Distraction was also a factor in nearly 60% of the accidents involving teen drivers. Fellow passengers, often also teenagers (84% of the time), and cell phones were the top two sources of distraction, respectively. This data suggested that having another teenager in the car increased the risk of an accident by 44% (Carney et al., 2015). According to the NHTSA, 10% of drivers aged 15 to 19 years involved in fatal crashes were reported to be distracted at the time of the crash, the highest figure for any age group (NCSA, 2016). Distraction, coupled with inexperience, has been found to greatly increase the risk of an accident (Klauer et al., 2014).

The NHTSA did find that the number of accidents has been on a decline since 2005. They attribute this to greater driver training, more social awareness to the challenges of driving for teenagers, and to changes in laws restricting the drinking age. The NHTSA estimates that the raising of the legal drinking age to 21 in all 50 states and the District of Columbia has saved 30,323 lives since 1975.

# Aggression and Antisocial Behavior



Several major theories of the development of antisocial behavior treat adolescence as an important period. Patterson's (1982) '*early versus late starter model'* of the development of aggressive and antisocial behavior distinguishes youths whose antisocial behavior begins during childhood (early starters) versus adolescence (late starters). According to the theory, early starters are at greater risk for long-term antisocial behavior that extends into adulthood than are late starters. Late starters who become antisocial during adolescence are theorized to experience poor parental monitoring and supervision, aspects of parenting that become more salient during adolescence. Poor monitoring and lack of supervision contribute to increasing involvement with deviant peers, which, in turn, promotes adolescents' own antisocial behavior. Late starters desist from antisocial behavior when changes in the environment make other options more appealing.

Similarly, Moffitt's (1993) '*life-course-persistent versus adolescent-limited model'* distinguishes between antisocial behavior that begins in childhood versus adolescence. Moffitt regards adolescent-limited antisocial behavior as resulting from a "maturity gap" between adolescents' dependence on and control by adults and their desire to demonstrate their freedom from adult constraint. However, as they continue to develop, and legitimate adult roles and privileges become available to them, there are fewer incentives to engage in antisocial behavior, leading to discontinuation of these antisocial behaviors.

## Psychology and Mass Shootings

Virginia Tech, Columbine, Stoneman Douglas High School, Santa Fe High School, Sandy Hook, Aurora, Las Vegas, Orlando—all sites of horrific and tragic mass shootings. Why are they so common? And what led the perpetrators to commit these acts of violence? Several possible factors may work together to create a fertile environment for mass murder in the United States. Most commonly suggested include:

- Higher accessibility and ownership of guns. The U.S. has the highest per-capita gun ownership in the world with 120.5 firearms per 100 people; the second highest is Yemen with 52.8 firearms per 100 people
- Mental illness and its treatment (or the lack thereof) with psychiatric drugs. This is controversial. Many of the mass shooters in the U.S. suffered from mental illness, but the estimated number of mental illness cases has not increased as significantly as the number of mass shootings. Under 5% of violent behaviors in the U.S. are committed by persons with mental health diagnoses. A 2002 report by the U.S. Secret Service and U.S. Department of Education found evidence that a majority of school shooters displayed evidence of mental health symptoms, often undiagnosed or untreated. Criminologists Fox and DeLateur note that mental illness is only part of the issue, however, and mass shooters tend to externalize their problems, blaming others, and are unlikely to seek psychiatric help, even if available. Other scholars have concluded that mass murderers display a common constellation of chronic mental health symptoms, chronic anger

or antisocial traits, and a tendency to blame others for problems. However, they note that attempting to "profile" school shooters with such a constellation of traits will likely result in many false positives as many individuals with such a profile do not engage in violent behaviors.
- The desire to seek revenge for a long history of being bullied at school. In recent years, citizens calling themselves "targeted individuals" have cited adult bullying campaigns as a reason for their deadly violence.
- The widespread chronic gap between people's expectations for themselves and their actual achievement, and individualistic culture.
- The desire for fame and notoriety. Also, mass shooters learn from one another through "media contagion," that is, "the mass media coverage of them and the proliferation of social media sites that tend to glorify the shooters and downplay the victims."
- The copycat phenomenon.
- Failure of government background checks due to incomplete databases and/or staff shortages.

For additional Information: Mass Violence in America, by The National Council for Behavioral Health

# Behavior and Conduct Problems

Children and adolescents sometimes argue, are aggressive, or act angry or defiant around adults. A behavior disorder may be diagnosed when these disruptive behaviors are uncommon for the child's age at the time, persist over time, or are severe. Because disruptive behavior disorders involve acting out and showing unwanted behavior towards others they are often called **externalizing disorders**.

## Oppositional Defiant Disorder



When children act out persistently so that it causes serious problems at home, in school, or with peers, they may be diagnosed with Oppositional Defiant Disorder (ODD). ODD usually starts before 8 years of age, but no later than by about 12 years of age. Children with ODD are more likely to act oppositional or defiant around people they know well, such as family members, a regular care provider, or a teacher. Children with ODD show these behaviors more often than other children their age.

Examples of ODD behaviors include

- Often being angry or losing one's temper
- Often arguing with adults or refusing to comply with adults' rules or requests
- Often resentful or spiteful
- Deliberately annoying others or becoming annoyed with others
- Often blaming other people for one's own mistakes or misbehavior

## Conduct Disorder

Conduct Disorder (CD) is diagnosed when children show an ongoing pattern of aggression toward others, and serious violations of rules and social norms at home, in school, and with peers. These rule violations may involve breaking the law and result in

arrest. Children with CD are more likely to get injured and may have difficulties getting along with peers.

Examples of CD behaviors include

- Breaking serious rules, such as running away, staying out at night when told not to, or skipping school
- Being aggressive in a way that causes harm, such as bullying, fighting, or being cruel to animals
- Lying, stealing, or damaging other people's property on purpose

**Diagnosing Behavior Disorders**

Learn about the guidelines for diagnosing and treating ODD and CD

# Treatment for Disruptive Behavior Disorders

Starting treatment early is important. Treatment is most effective if it fits the needs of the specific child and family. The first step to treatment is to talk with a healthcare provider. A comprehensive evaluation by a mental health professional may be needed to get the right diagnosis. Some of the signs of behavior problems, such as not following rules in school, could be related to learning problems that may need additional intervention. For younger children, the treatment with the strongest evidence is behavior therapy training for parents, where a therapist helps the parent learn effective ways to strengthen the parent-child relationship and respond to the child's behavior. For school-age children and teens, an often-used effective treatment is a combination of training and therapy that includes the child, the family, and the school.

## Managing Symptoms: Staying Healthy

Being healthy is important for all children and can be especially important for children with behavior or conduct problems. In addition to behavioral therapy and medication, practicing certain healthy lifestyle behaviors may reduce challenging and disruptive behaviors your child might experience. Here are some healthy behaviors that may help:

- Engaging in regular physical activity, including aerobic and vigorous exercise
- Eating a healthful diet centered on fruits, vegetables, whole grains, legumes (for example, beans, peas, and lentils), lean protein sources, and nuts and seeds
- Getting the recommended amount of sleep each night based on age
- Strengthening relationships with family members

## Prevention of Disruptive Behavior Disorders

It is not known exactly why some children develop disruptive behavior disorders. Many factors may play a role, including biological and social factors. It is known that children are at greater risk when they are exposed to other types of violence and criminal behavior, when they experience maltreatment or harsh or inconsistent parenting, or when their parents have mental health conditions like substance use disorders, depression, or attention-deficit/hyperactivity disorder (ADHD). The quality of early childhood care also can impact whether a child develops behavior problems.

Although these factors appear to increase the risk for disruptive behavior disorders, there are ways to decrease the chance that children experience them. Learn about public health approaches to prevent these risks:

- Positive parenting strategies for young children
- Child maltreatment prevention
- Youth violence prevention
- Bullying prevention
- Mental health in adults
- Finding high-quality child care

# Substance Use

Adolescence is a time of rapid change and maturation. It is also a time of experimentation—with new hairstyles, clothes, attitudes, and behaviors. Some of these experiments are harmless. Others, such as using alcohol or other drugs, can have long-lasting harmful consequences. There are several reasons why it is important to identify and treat adolescent substance use.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 5.7.1.** Adolescent Substance Use, Addiction, and Treatment discusses the prevalence of substance use and teens' susceptibility to abuse.

Substance use is common among adolescents. Alcohol, marijuana, and tobacco are the substances most commonly used by youth (Johnston et al., 2014), and alcohol often is the first substance to be used (Johnston et al., 2010). The percentage of young people who have used alcohol increases with age. By eighth grade, 28% of students have tried alcohol, and 12% have been drunk at least once; by twelfth grade, 68% of students have tried alcohol, and more than half have been drunk at least once (Johnston et al., 2014). In 2012, 45% of students in grades 9 through 12 reported ever having used marijuana, and 24% reported having used marijuana in the preceding 30 days. Between 2008 and 2012, the proportion of teens who used marijuana daily increased from 5% to 8% (PDFA, 2013). According to a survey published in 2014, 41% of students in grades 9 through 12 reported having tried cigarettes. Nearly one-quarter said they had used tobacco in some form in the past 30 days (Kann et al., 2014). A substantial percentage of adolescents, including 15% of 12th graders, report misuse (i.e., use without a prescription) of prescription medication, especially stimulants and pain medications (Johnston et al., 2014).

## Why do Adolescents use Drugs?

As we read above, most adolescents will use drugs or alcohol before reaching adulthood; however, the reasons for use can vary greatly. A popular model for understanding the reasons and levels of drug use involves viewing the behavior as a continuum. This continuum includes non-use and experimental drugs, casual, habitual, and compulsive drug use.

A non-user is someone that has never misuse drugs. An experimental user has used drugs a few times out of curiosity. Using substances may make them feel 'grown-up,' or they may do it as a form of rebellion against authority or rules. Using may be exciting for this teen. Typically, experimental users have no significant problems with drug use, and adults are not likely aware of the use.

When substance use becomes more common among peer groups, teens are more likely to engage in social use. Using drugs or alcohol might be a way of fitting in with some social groups or with friends. Teens may feel that they are more outgoing or social when under the influence of substances. Furthermore, some teens may use substances for fun or out of boredom. There may also be circumstantial-situational reasons for substance use, such as increasing awareness or creativity and lowering inhibitions. These casual users might engage in regular drug use, maybe 2 to 4 times per week. They still associate drug use with feeling excited or stimulated, and they make efforts to maintain control of their use. Their substance use may be frequent enough that the behavior is difficult to hide from parents and school officials. Casual users may experience decreased school performance, loss of interest in previously enjoyed activities that do not involve drug use, and other atypical behaviors for the adolescent (e.g., increased lying).

As we see substance use intensify, the concern for the teen's health and safety increases. A habitual user is likely to use drugs daily, often with a particular group of friends that are also using. Drug use may be part of the group's norms and identity. Teens may also use substances to escape or to self-medicate. At this level of use, the teen may not necessarily lose control but experiences significant school and family problems. Drug use may no longer bring the excitement and stimulation previously sought. Instead, the adolescent may become impulsive, erratic, guilt-ridden, and depressed.

A compulsive user has lost control over their drug use. The person is using drugs several times per day, and they spend a significant part of their day in the procurement, maintenance, and use of a regular drug supply. These adolescents engage in behaviors that put their health and safety at risk. Their emotional state is often disorganized. Individuals in the last three categories – casual, habitual, and compulsive – are most likely to qualify for a substance use disorder diagnosis.

## Risk Factors for Substance Abuse

There are certain factors that increase the risk of adolescent substance abuse. Teens that come from dysfunctional families or live in poverty are at higher risk of abuse. As are youth raised in cultures or communities where substance abuse is common. Adolescents that struggle academically or are lacking in social skills may also see higher rates of substance abuse. A highly concerning risk factor is early substance use. The earlier and the more a young person uses substances, the higher risk they are for developing a substance disorder.

Substance use has its own risks and also is associated with other risky behaviors. Adolescent substance use poses both short-term and long-term risks. In the short term, drinking, for example, can result in unintentional injuries and death, suicidal behavior, motor vehicle crashes, intimate partner violence, and academic and social problems (Brown et al., 2008; Cole et al., 2011; Weitzman Nelson, 2004). These outcomes occur because excess alcohol consumption leads to decreased cognitive abilities, inaccurate perception of risk, and impaired bodily control. These effects, in combination with the fact that compared to adults, adolescents tend to be more physically active when under the influence of alcohol, put adolescents at greater risk of harm. For example, at blood alcohol concentrations greater than zero, adolescents are at increased risk of being fatally injured or involved in fatal crashes in single, two, and more vehicles compared with sober male drivers ages 21-34 (Voas et al., 2012). Marijuana use is associated with diminished lifetime achievement (Meier et al., 2012). Tobacco use results in poor health in the short and long term, and it can be a gateway to the use of other drugs (Sims, 2009). The risk of substance use is compounded because it is associated with other risky behaviors, such as unplanned, unprotected sex, which can result in pregnancy (Brown, 2008; Levy et al., 2009; Tapert et al., 2001). Adolescents who misuse prescription opioids are at high risk of transitioning to injection drugs and overdosing (McCabe et al., 2012). Any level of substance use can be harmful to adolescents—no amount is safe.

Adolescence is a particularly vulnerable period for brain development and maturation. Adolescence is a long period of intense neurodevelopmental growth and maturation. As a result, the adolescent brain is particularly vulnerable to the toxic effects of alcohol and other drugs and to the potential for addiction. Persistent marijuana use in adolescence, for example, is associated with neuropsychological impairments across a range of functional domains (Meier et al., 2012). Moreover, stopping use does not fully restore neuropsychological functioning, suggesting particular harm to the adolescent brain.

Use tends to increase over time. National estimates of the prevalence of drinking indicate that older youth drink more and drink more heavily than do younger youth (SAMHSA, 2010). This fact makes it all the more important for pediatricians to start early with screening and brief intervention so as to prevent or delay alcohol use for as long as possible.

Substance use in adolescence is associated with harm in adulthood. The earlier an adolescent begins using substances, the greater are his or her chances of continuing to use and of developing substance use problems later in life. For example, compared to people who do not start drinking until they are young adults, people who begin to drink before age 15 are 5 times as likely to develop alcohol dependence or abuse (Chambers et al., 2003; Grant & Dawson, 1997; Hingson & Zha, 2009). Compared with adolescents who first try marijuana at age 18, those who begin using at 14 or younger are 6 times as likely to meet the criteria for illicit drug dependence or abuse later in life (SAMHSA, 2010). More than 80% of adults who smoke tobacco began before they were 18 (Sims, 2009).

Adolescents who report weekly or more frequent substance use are likely to have a severe substance use disorder. In some cases, by the time an adolescent has reached this point, parents are already aware of the drug use, although they may underestimate the seriousness of the problem. Adolescents with serious substance-use disorders require more-intensive care as soon as possible, including a comprehensive evaluation by a substance use specialist, assessment for co-occurring mental health disorders, and referral to treatment.

## Prevention of Substance Abuse

Prevention of substance abuse during adolescence should be a multipronged and long term approach that involves the education of youth, families, and the community. Prevention education should begin as early as preschool and be specific to the target population (i.e., ethnicity, gender), establishing a culture against substance abuse. Effective programs for teens involve interactive education, such as peer discussions and role-playing, and focus on risk-reduction and fostering good decision-making skills.

### D.A.R.E.–the drug prevention program that never worked

The primary goal of Drug Abuse Resistance Education (DARE) was to teach effective peer resistance and refusal skills so that adolescents can say “no” to drugs and their friends who may want them to use drugs. The secondary goals of the program were to build students’ social skills and enhance their self-esteem, as these are believed to be linked to adolescent drug use.

DARE was developed in 1983 as a joint effort between the Los Angeles County (Calif.) School District and the Los Angeles Police Department. In 1986, the U.S. Congress passed the Drug-Free Schools and Communities Act to promote drug abuse education and prevention programs across the country, and DARE spread rapidly, with many school districts adopting it for their students. By 1994, DARE was the most widely used school-based drug prevention program, showing up in all 50 states in the United States and spreading to six foreign countries.

Several large scale studies assessed the effectiveness of the DARE program. The findings consistently found no effects. There were no statistically significant differences between students participating in the DARE program and those that did not when comparing rates of drug use, attitudes toward drug use, or self-esteem.

## Anxiety, Depression, And Self-Directed Violent Behavior

Developmental models of anxiety and depression treat adolescence as an important period, especially in terms of the emergence of differences and prevalence rates that persist through adulthood (Rudolph, 2009). Although the rates vary across specific anxiety and depression diagnoses, rates for some disorders are markedly higher in adolescence than in childhood or adulthood. For example, prevalence rates for anxiety disorders are about 19% in adults, but 32% in adolescents (NIMH, 2017). Adolescents are also more likely to experience depression (13%) compared to adults (7%) (NIMH, 2019). Rates of self-directed violence are also higher among teens (17%), followed by college students (15%), adults (5%), and children having the lowest rates (1.3%) (APA, 2015).

### Anxiety

Occasional anxiety is an expected part of life. You might feel anxious when faced with a problem, before taking a test, or when making an important decision. But anxiety disorders involve more than temporary worry or fear. For a person with an anxiety disorder, the anxiety does not go away and can get worse over time. The symptoms can interfere with daily activities such as job performance, school work, and relationships.

The wide variety of **anxiety disorders** differ by the objects or situations that induce them but share features of excessive anxiety or worry about a variety of things. Fear and anxiety can cause significant problems in areas of their life, such as social interactions, school, and work. Anxiety also manifests in physiological and psychological responses, such as feeling restless, fatigued, difficulty concentrating, irritability, muscle tension, and sleep problems.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 5.7.2.** Fight, Flight, Freeze–Anxiety Explained for Teens identifies symptoms and responses to the experience of anxiety.

The following data pertains to the compiling of statistics for any anxiety disorder including, panic disorder, generalized anxiety disorder, agoraphobia, specific phobia, social anxiety disorder, post-traumatic stress disorder, obsessive-compulsive disorder, and separation anxiety disorder. An estimated 31.9% of adolescents have an anxiety disorder. Of adolescents with any anxiety disorder, an estimated 8.3% had severe impairment. The prevalence of any anxiety disorder among adolescents was higher for females (38.0%) than for males (26.1%). The prevalence of any anxiety disorder was similar across age groups.

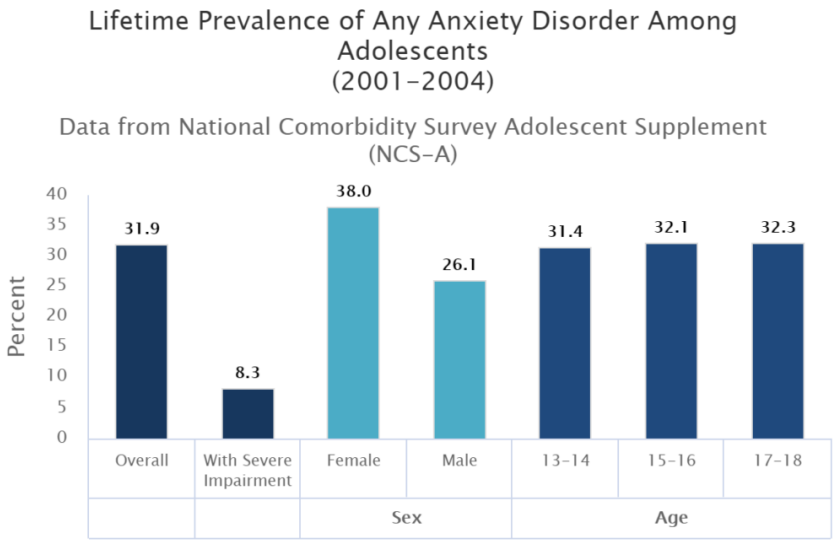



**Figure 5.7.1.** Prevalence of any anxiety disorder among adolescents (2001-2004). Data from the National Comorbidity Survey Adolescent Supplement (NCS-A).

Anxiety disorders are generally treated with psychotherapy, medication, or both. Psychotherapy or "talk therapy" can help people with anxiety disorders. To be effective, psychotherapy must be directed at the person's specific anxieties and tailored to his or her needs. Medication does not cure anxiety disorders but can help relieve symptoms. Medication for anxiety is prescribed by doctors, such as a psychiatrist or primary care provider. The most common classes of medications used to combat anxiety disorders are anti-anxiety drugs (such as benzodiazepines), antidepressants, and beta-blockers. Some people with anxiety disorders might benefit from joining a self-help or support group and sharing their problems and achievements with others. Talking with a trusted friend or member of the clergy can also provide support, but it is not necessarily a sufficient alternative to care from a doctor or other health professional. Stress management techniques and meditation can help people with anxiety disorders calm themselves and may enhance the effects of therapy. Research suggests that aerobic exercise can help some people manage their anxiety; however, exercise should not take the place of standard care, and more research is needed.

### The Prevalence of Mental Illness in youth

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 5.7.3.** In *The Prevalence of Mental Illness in* Youth, McKenna Knapp discusses the prevalence of mental health issues in young people and how the pressures to measure up in high school may contribute.

## Depression

Sadness is something we all experience. It is a normal reaction to a loss or a setback, but it usually passes with a little time. Depression is different. Depression (**major depressive disorder**) is a medical illness that can interfere with a person's ability to handle daily activities, such as sleeping, eating, or managing responsibilities. Depression is common, but that doesn't mean it isn't serious. Well-meaning friends or family members may try to tell someone with depression to "snap out of it," "just be positive," but depression is not a sign of weakness or a character flaw. Many people with depression need treatment to get better.

Depression is characterized by feelings of deep sadness and hopelessness that disrupts all normal, regular activities. However, teens may not identify feelings of sadness and instead report feeling more irritable and angry. Often, when depressed, people feel

worthless and excessively guilty. They withdraw from activities that they normally enjoy and spend more time alone. Changes in appetite and sleeping habits (more or less than normal) are common. People with depression may experience fatigue, having low energy, and also feel restless. Physical aches and pains with no associated reason may occur, like muscle, stomach, or headaches. Cognitive functioning, such as attention, concentrating, memory, and decision-making, may be impaired. And while not necessary for a depression diagnosis, thoughts of death or suicide may be an issue.

Teens with depression may sulk, get into trouble at school, be negative and irritable, and feel misunderstood. It can be difficult to determine whether an adolescent is depressed or just "being a teenager." Consider how long the symptoms have been present, how severe they are, and how different the teen is acting from his or her usual self. Teens with depression may also have other disorders such as anxiety, eating disorders, or substance abuse.

**Interactive Content**

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this Interactive Content online

**Video 5.7.4.** Adolescent Depression provides information on identifying symptoms of depression in teens and how to respond to concerns.

The figure below shows the prevalence of major depressive episodes among U.S. adolescents in 2017. An estimated 3.2 million adolescents aged 12 to 17 in the United States had at least one major depressive episode. This number represented 13.3% of the U.S. population aged 12 to 17. The prevalence of major depressive episodes was higher among adolescent females (20.0%) compared to males (6.8%). The prevalence of major depressive episode was highest among adolescents reporting two or more races (16.9%).

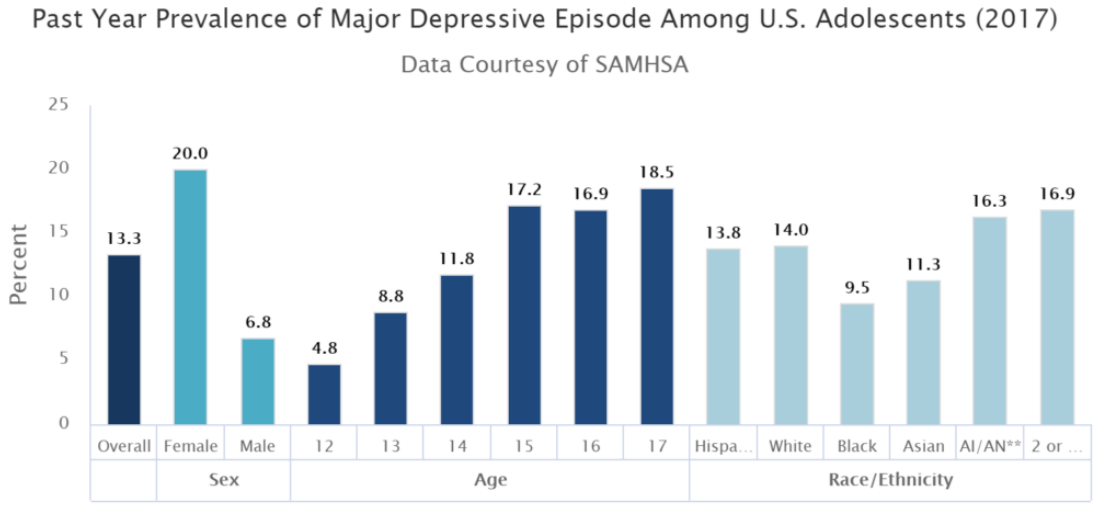



**Figure 5.7.2.** Prevalence of major depressive episode among US adolescents (2017). Data from SAMHSA.

Causes of depression include many factors such as genetics and early childhood experiences that predate adolescence, but puberty may push vulnerable children, especially girls, into despair. During puberty, the rate of major depression more than doubles to an estimated 13%, affecting about one in five girls and one in ten boys. The gender difference occurs for many reasons, biological and cultural (Uddin et al., 2010).

Developmental models focus on interpersonal contexts in both childhood and adolescence that foster depression and anxiety

(e.g., Rudolph, 2009). Family adversity, such as abuse and parental psychopathology during childhood, sets the stage for social and behavioral problems during adolescence. Adolescents with such problems generate stress in their relationships (e.g., by resolving conflict poorly and excessively seeking reassurance) and select into more maladaptive social contexts (e.g., "misery loves company" scenarios in which depressed youths select other depressed youths as friends and then frequently co-ruminate as they discuss their problems, exacerbating negative affect and stress). These processes are intensified for girls compared with boys because girls have more relationship-oriented goals related to intimacy and social approval, leaving them more vulnerable to disruption in these relationships. Anxiety and depression then exacerbate problems in social relationships, which in turn contribute to the stability of anxiety and depression over time.

Depression, even in the most severe cases, can be treated. The earlier that treatment can begin, the more effective it is. Depression is usually treated with medications, psychotherapy, or a combination of the two. An estimated 19.6% received care by a mental health professional alone, and another 17.9% received combined care by a mental health professional and medication treatment. Treatment with medication alone was least common (2.4%). Approximately 60.1% of adolescents with major depressive episode did not receive treatment.

Antidepressants are medicines that treat depression. They may help improve the way the brain uses certain chemicals that control mood or stress. Trying several different antidepressant medicines may be necessary before finding the one that improves symptoms and has manageable side effects. Antidepressants take time – usually 2 to 4 weeks – to work, and often, symptoms such as sleep, appetite, and concentration problems improve before mood lifts, so it is important to give medication a chance before reaching a conclusion about its effectiveness.

Several types of psychotherapy (also called "talk therapy" or, in a less specific form, counseling) can help people with depression. Examples of evidence-based approaches specific to the treatment of depression include cognitive-behavioral therapy (CBT), interpersonal therapy (IPT), and problem-solving therapy. CBT can help an individual with depression change negative thinking and interpret the environment and interactions in a positive, realistic way. IPT is designed to help an individual understand and work through troubled relationships or major issues that may cause depression or make it worse.

Teenagers usually rely on parents, teachers, or other caregivers to recognize their suffering and get them the treatment they need. Many teens don't know where to go for mental health treatment or believe that treatment won't help. Others don't get help because they think depression symptoms may be just part of the typical stress of school or being a teen. Some teens worry about what other people will think if they seek mental health care.

## Self-Directed Violence

Self-directed violence (SDV) encompasses a range of violent behaviors, including acts of fatal and nonfatal suicidal behavior, and non-suicidal self-injury (i.e., behaviors where the intention is not to kill oneself, as in self-mutilation). Recognizing signs of self-directed violence and interventions to help people engaging in this behavior can save a life and help get them treatment.

**Non-suicidal self-injury** (NSSI), also referred to as self-harm, self-mutilation, or cutting, is a "deliberate, self-inflicted injury without suicidal intent or for socially sanction purposes (such as tattoos or piercings). NSSI is most often associated with 'cutting,' but means of self-harm often also include scratching, punching, punching oneself, banging objects with the intention of injury, biting, tearing of the skin, or burning. The location of the injury may also be an indicator of the severity of the psychological disturbance. Injuries to the face, eye, jugular, or genitals may be more concerning. Although not a suicide attempt, NSSI is associated with suicide and can result in an accidental fatality (Whitlock, 2010).

The average age of the first NSSI is between 11 and 15 years old. The prevalence of at least one incident NSSI is estimated to be 12-37% in high school populations and 12 to 20% in late adulthood and early adulthood cohorts, with 6-7% of adolescents reported repetitive NSSI in the last year. Of those reporting repetitive incidents, 40% reported stopping the behavior within a year of starting, and the vast majority (79.8%) stopped within five years (Whitlock, 2010).

While we might presume that NSSI behavior is associated with mental illness, like depression and anxiety, that is not always the case. Forty-four percent of people that engage in common NSSI do not have any co-morbidity. This type of NSSI includes self-injurious behaviors that are (1) compulsive or ritualistic (like trichotillomania), (2) episodic or occasional, with no identification as a person that self-harms, (3) repetitive with a self-harming identity. Common NSSI can be mild, moderate, or severe, depending on the severity of the injuries (Whitlock, 2010).

The reasons for NSSI are psychological, social, and biological and often step from a history of childhood adversity, comorbid psychological disorders, and emotional dysregulation. The psychological reasons are the most common and involve reducing

psychological pain, expressing distress, and distracting oneself from other negative stimuli. Fewer teens report social reasons for NSSI, such as seeking attention or copying peers. Social factors, like peer reinforcement of the behavior, can increase the likelihood of repetitive NSSI. Those reporting “getting a rush” or “feeling normal” from NSSI may have biological reasons for the behavior. These individuals may have chronically low levels of certain neurotransmitters in their brains. The neurochemical response to injury may bring these neurotransmitter levels to a more normal level and help them regulate emotions. This may be the reason that some people are dependent on NSSI (Whitlock, 2010).

The correlation between NSSI and suicide-related behaviors is well known, but the nature of that relationship is rather paradoxical. Moving from NSSI to suicide-related behaviors may appear to be a predictable progression in severity—without intervention, those engaged in NSSI may get worse and eventually become suicidal. However, experts agree that NSSI may actually help alleviate the distress that could lead to suicide-related behavior, at least temporarily. NSSI could be a tool for coping with distress and avoid suicide (Whitlock, 2010).

In 2017, suicide was the second leading cause of death for people aged 10-19. After a stable period from 2000 to 2007, suicide death rates for teens are now increasing. Distressing thoughts about killing oneself become most common at about age 15 (Berger, 2019) and can lead to a variety of suicide-related behaviors.

Suicide-related behaviors include the following:

- **Suicide:** Death caused by self-directed injurious behavior with any intent to die.
- **Suicide attempt:** A non-fatal self-directed potentially injurious behavior with any intent to die as a result of the behavior. A suicide attempt may or may not result in injury.
- **Suicidal ideation:** Thinking about, considering, or planning for suicide.

Suicide-related behavior is complicated and rarely the result of a single source of trauma or stress. Youth who are at increased risk for suicide-related behavior are dealing with a complex interaction of multiple relationships (peer, family, or romantic), mental health, and school stressors. Often, people who engage in suicide-related behavior experience overwhelming feelings of helplessness and hopelessness. Involvement with bullying behavior is one stressor that may significantly contribute to feelings of helplessness and hopelessness that raise the risk of suicide.

Youth are at higher risk for suicide-related behaviors if they experienced violence, including child abuse, bullying, or sexual violence, and cannot cope with problems in healthy ways and solve problems peacefully. Teens with disabilities, learning differences, sexual/gender identity differences, or cultural differences are often most vulnerable to being bullied. Teens who report frequently bullying others are at high, long-term risk for suicide-related behavior. Youth who report both being bullied and bullying others (sometimes referred to as bully-victims) have the highest rates of negative mental health outcomes, including depression, anxiety, and thinking about suicide.

The behaviors listed below may be signs that someone is thinking about suicide.

- Talking about wanting to kill themselves or making a plan to kill themselves
- Talking about feeling empty, hopeless, or having no reason to live
- Talking about great guilt or shame
- Talking about feeling trapped or feeling that there are no solutions
- Feeling unbearable pain (emotional pain or physical pain)
- Talking about being a burden to others
- Using alcohol or drugs more often
- Acting anxious or agitated
- Withdrawing from family and friends
- Changing eating and/or sleeping habits
- Showing rage or talking about seeking revenge
- Taking great risks that could lead to death, such as driving extremely fast
- Talking or thinking about death often
- Displaying extreme mood swings, suddenly changing from very sad to very calm/happy
- Giving away important possessions
- Saying goodbye to friends and family
- Putting affairs in order, making a will

If these warning signs apply to you or someone you know, get help as soon as possible, particularly if the behavior is new or has increased recently. Call the National Suicide Prevention Lifeline (Lifeline) at 1-800-273-TALK (8255), or text the Crisis Text Line

(text HELLO to 741741). Both services are free and available 24 hours a day, seven days a week. The following recommendations are five action steps to help someone in emotional pain:

- ASK: “Are you thinking about killing yourself?” It’s not an easy question, but studies show that asking at-risk individuals if they are suicidal does not increase suicides or suicidal thoughts.
- KEEP THEM SAFE: Reducing a suicidal person’s access to highly lethal items or places is an important part of suicide prevention. While this is not always easy, asking if the at-risk person has a plan and removing or disabling the lethal means can make a difference.
- BE THERE: Listen carefully and learn what the individual is thinking and feeling. Research suggests acknowledging and talking about suicide may reduce rather than increase suicidal thoughts.
- HELP THEM CONNECT: Save the National Suicide Prevention Lifeline’s (1-800-273-TALK (8255)) and the Crisis Text Line’s number (741741) in your phone, so it’s there when you need it. You can also help make a connection with a trusted individual like a family member, friend, spiritual advisor, or mental health professional.
- STAY CONNECTED: Staying in touch after a crisis or after being discharged from care can make a difference. Studies have shown the number of suicide deaths goes down when someone follows up with the at-risk person.




**Figure 5.7.3.** Five action steps for helping someone in emotional pain.

https://assessments.lumenlearning.co...essments/16622

## Candela Citations

CC licensed content, Original

- Behavioral and Psychological Adjustment. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...tment/%20u200e. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Any Anxiety Disorder. **Provided by**: National Institute of Mental Health [NIMH]. **Retrieved from**: https://www.nimh.nih.gov/health/stat...ml#part_155096. **License**: CC0: No Rights Reserved
- Anxiety Disorders. **Provided by**: National Institute of Mental Health [NIMH]. **Retrieved from**: https://www.nimh.nih.gov/health/topi...ml#part_145338. **License**: CC0: No Rights Reserved
- Behavioral and Psychological Adjustment. **Authored by**: Tera Jones. **Provided by**: Lumen Learning. **Retrieved from**: https://courses.lumenlearning.com/wm...al-adjustment/. **License**: CC BY: Attribution
- Depression: What You Need to Know. **Provided by**: National Institute of Mental Health [NIMH]. **Retrieved from**: https://www.nimh.nih.gov/health/publ...dex.shtml#pub3. **License**: CC0: No Rights Reserved

- Major Depression. **Provided by**: National Institute of Mental Health [NIMH]. **Retrieved from**: https://www.nimh.nih.gov/health/stat...ml#part_155031. **License**: CC0: No Rights Reserved
- Self-Directed Violence Surveillance. **Provided by**: Centers for Disease Control and Prevention [CDC]. **Retrieved from**: https://www.cdc.gov/violencepreventi...Violence-a.pdf. **License**: CC0: No Rights Reserved
- Substance Use Screening and Intervention Implementation Guide. **Authored by**: American Academy of Pediatrics [AAP]. **Provided by**: Centers for Disease Control and Prevention [CDC]. **Retrieved from**: https://www.aap.org/en-us/Documents/...ementation.pdf. **License**: CC0: No Rights Reserved
- Suicide Prevention. **Provided by**: National Institute of Mental Health [NIMH]. **Retrieved from**: https://www.nimh.nih.gov/health/topi...on/index.shtml. **License**: CC0: No Rights Reserved
- Suicide Rising Across the US. **Provided by**: Centers for Disease Control [CDC]. **Retrieved from**: https://www.cdc.gov/vitalsigns/pdf/v...-suicide-H.pdf. **License**: CC0: No Rights Reserved
- Teen Depression. **Provided by**: National Institute of Mental Health [NIMH]. **Retrieved from**: https://www.nimh.nih.gov/health/publ...on/index.shtml. **License**: CC0: No Rights Reserved
- Teenage Drivers. **Authored by**: Martha Lally and Suzanne Valentine-French. **Provided by**: College of Lake County Foundation. **Retrieved from**: http://dept.clcillinois.edu/psy/Life...evelopment.pdf. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike
- The Relationship between Bullying and Suicide. **Provided by**: Center for Disease Control [CDC]. **Retrieved from**: https://www.cdc.gov/violencepreventi...on-final-a.pdf. **License**: CC0: No Rights Reserved
- Behavior or Conduct Problems in Children. **Provided by**: Center for Disease Control [CDC]. **Retrieved from**: https://www.cdc.gov/childrensmentalh.../behavior.html. **License**: CC0: No Rights Reserved

CC licensed content, Specific attribution

- Adolescent Substance Use, Addiction, and Treatment: Segment 1. **Authored by**: Dr. Sarah Bagley. **Provided by**: Youth.gov. **Retrieved from**: https://youtu.be/mBp1ah-ZLTM. **License**: CC0: No Rights Reserved

All rights reserved content

- The Prevalence of Mental Illness in Youth. **Authored by**: McKenna Knapp. **Provided by**: TedX Talks. **Retrieved from**: https://youtu.be/UG1_BQ5P9dA. **License**: All Rights Reserved
- Fight, Flight, Freeze--Anxiety Explained for Teens. **Provided by**: Anxiety Canada. **Retrieved from**: https://youtu.be/rpolpKTWrp4. **License**: All Rights Reserved
- Adolescent Depression. **Authored by**: A.D.A.M.. **Provided by**: University of Florida Health. **Retrieved from**: https://ufhealth.org/recognizing-teen-depression. **License**: All Rights Reserved

Public domain content

- Program Profile: Drug Abuse Resistance Education (DARE) (1983-2009). **Provided by**: National Institute of Justice. **Retrieved from**: https://crimesolutions.ojp.gov/ratedprograms/99#em. **License**: Public Domain: No Known Copyright


This page titled 5.6: Behavioral and Psychological Adjustment is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 5.6: Behavioral and Psychological Adjustment by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

**amygdala:** part of the limbic system in the brain, which is involved with emotions and emotional responses and is particularly active during puberty

**dopamine:** a neurotransmitter in the brain that plays a role in pleasure and the reward system; increases in the limbic system and later in the prefrontal cortex during adolescence

**frontal lobes:** the parts of the brain involved in impulse control, planning, and higher-order thinking; still developing in adolescence

**limbic system:** structures in the brain (including the amygdala) that involve processing emotional experience and social information and determining rewards and punishments; develops years before the prefrontal cortex

**melatonin:** sleep hormone whose levels rise later at night and decrease later in the morning for teens, compared to children and adults

**myelination:** insulation of neurons' axons with a fatty substance (myelin sheath) that helps speed up the processing of information; myelination starts to increase in the prefrontal cortex during adolescence

**prefrontal cortex:** part of the frontal lobes, involved with decision making, cognitive control, and other higher-order functions; prefrontal cortex develops further during adolescence

**serotonin:** "calming chemical," a neurotransmitter in the brain involved with the regulation of mood and behavior; serotonin levels increase in the limbic system during adolescence

**synaptic pruning:** connections in the brain that are not used much are lost so that other connections can be strengthened; this pruning happens with prefrontal cortex connections in adolescence

**major depression:** feelings of hopelessness, lethargy, and worthlessness that last two weeks or more

**suicide:** the act of intentionally causing one's own death

**suicidal ideation:** thinking about suicide, usually with some serious emotional and intellectual or cognitive overtones

This page titled 5.7: Glossary is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 5.7: Glossary by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 6: COGNITIVE CHANGES DURING ADOLESCENCE

## Learning Objectives

- Describe the cognitive changes that occur during adolescence
- Explain Piaget's stage theory as it applies to adolescents
- Describe social cognition as it applies to adolescent thinking and behavior
- Explain Vygotsky's theory
- Describe the various aspects of the information processing approach and how it applies to adolescents
- Differentiate the three theories of intelligence

Adolescence is a time of rapid cognitive development. Biological changes in brain structure and connectivity in the brain interact with increased experience, knowledge, and changing social demands to produce rapid cognitive growth. These changes generally begin at puberty or shortly thereafter, and some skills continue to develop as an adolescent ages. Development of executive functions, or cognitive skills that enable the control and coordination of thoughts and behavior, are generally associated with the prefrontal cortex area of the brain. The thoughts, ideas, and concepts developed during this period of life greatly influence one's future life and play a major role in character and personality formation.

There are two primary perspectives on adolescent thinking: constructivist and information-processing. The **constructivist perspective**, based on the work of Piaget, takes a quantitative, stage-theory approach. This view hypothesizes that adolescents' cognitive improvement is relatively sudden and drastic. The **information-processing perspective** derives from the study of artificial intelligence and explains cognitive development in terms of the growth of specific components of the overall process of thinking, such as attention, memory, processing speed, and metacognition.


6.1: Constructivist Theories

6.2: Psychological Constructivism

6.3: Social Constructivism

6.4: Information Processing Theories

6.5: Intelligence

6.6: Glossary



This page titled 6: Cognitive Changes during Adolescence is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 6: Cognitive Changes during Adolescence by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 6.1: Constructivist Theories

**Constructivism** is a perspective on learning focused on how people actively create (or "construct") knowledge out of experiences. Constructivist models of learning differ about how much a learner constructs knowledge independently, compared to how much he or she takes cues from people who may be more of an expert and who help the learner's efforts (Fosnot, 2005; Rockmore, 2005). These are called **psychological constructivism** (changes in thinking resulting from individual experiences) and **social constructivism** (changes in thinking due to assistance from others), even though both versions are, in a sense, explanations about thinking within individuals.

The Piagetian version of psychological constructivist learning is rather "individualistic," in the sense that it does not say much about how other people involved might assist with learning. Parents and teachers are left lingering on the sidelines with few significant responsibilities for helping learners to construct knowledge. Piaget did recognize the importance of helping others in his theory, calling the process of support or assistance social transmission; however, he did not emphasize this aspect of constructivism. Piaget was more interested in what learners could figure out on their own (Salkind, 2004). Partly for this reason, his theory is often considered less about learning and more about development, which is a long-term change in a person resulting from multiple experiences. For the same reason, educators have often found Piaget's ideas especially helpful for thinking about students' readiness to learn.

Unlike Piaget's rather individually oriented version of constructivism, some psychologists have focused on the interactions between a learner and more knowledgeable individuals. One early expression of this viewpoint came from the American psychologist Jerome Bruner (1960, 1966, 1996), who became convinced that students could usually learn more than had been traditionally expected as long as they were given appropriate guidance and resources. He called such support instructional scaffolding— literally meaning a temporary framework, like one used in constructing a building, that allows a much stronger structure to be built within it. The reason for such a bold assertion was Bruner's belief in scaffolding—his belief in the importance of providing guidance in the right way and at the right time. When scaffolding is provided, students seem more competent and "intelligent," and they learn more.

Similar ideas were proposed by Lev Vygotsky (1978), whose writing focused on how a learner's thinking is influenced by relationships with others who are more capable, knowledgeable, or expert than the learner. Vygotsky proposed that when a person is learning a new skill or solving a new problem, he or she can perform better if accompanied and helped by an expert than if performing alone—though still not as well as the expert.

The social version of constructivism, however, highlights the responsibility of the expert for making learning possible. He or she must not only have knowledge and skill but also know how to arrange experiences that make it easy and safe for learners to gain knowledge and skill themselves. In addition to knowing what is to be learned, the expert (i.e., the teacher) also has to break the content into manageable parts, offer the parts in a sensible sequence, provide for suitable and successful practice, bring the parts back together again at the end, and somehow relate the entire experience to knowledge and skills already meaningful to the learner.

## Candela Citations

CC licensed content, Original

- Constructivism. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...ories/%20u200e. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Educational Psychology. **Authored by**: Kelvin Seifert and Rosemary Sutton. **Provided by**: The Saylor Foundation. **Retrieved from**: https://courses.lumenlearning.com/ed...onalpsychology. **License**: CC BY: Attribution

This page titled 6.1: Constructivist Theories is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 6.1: Constructivist Theories by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 6.2: Psychological Constructivism

In chapter 3, we briefly reviewed Piaget and his cognitive development theory. Piaget believed that when we are faced with new information that we experience a cognitive disequilibrium. In response, we are continuously trying to regain cognitive homeostasis through adaptation. Piaget also proposed that through maturation we progress through four stages of cognitive development. As Piaget believed that adolescence was the start of the fourth stage, we will focus on the cognitive developments that occur during this stage.

## Adaptation

When it comes to maintaining cognitive equilibrium, young people have much more of a challenge because they are constantly being confronted with new situations. All of this new information needs to be organized. The framework for organizing information is referred to as a **schema.** We develop schemata through the processes of adaptation. Adaptation can occur through assimilation and accommodation.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 6.3.1** *Semantic Networks and Spreading Activation* explains the creation and use of schemas.

Sometimes when we are faced with new information, we can simply fit it into our current schema; this is called **assimilation.** For example, a student is given a new math problem in class. They use previously learned strategies to try to solve the problem. While the problem is new, the process of solving the problem is something familiar to the student. The new problem fits into their current understanding of the math concept.

Not all new situations fit into our current framework and understanding of the world. In these cases, we may need **accommodation**, *w*hich is expanding the framework of knowledge to accommodate the new situation. If the student solving the math problem could not solve it because they were missing the strategies necessary to find the answer, they would first need to learn these strategies, and then they could solve the problem.

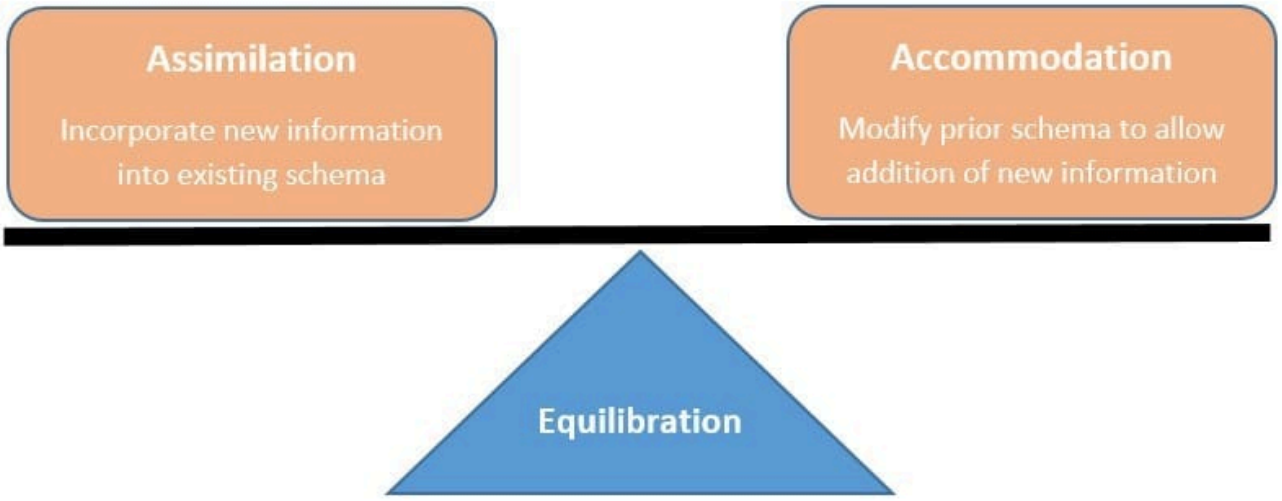



**Figure 6.3.1.** Model of Piaget's adaptation theory.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 6.3.2.** *Schemas, Assimilation, and Accommodation* explains Piaget's theory of constructing schemas through adaptation.

## Piaget's Stages of Cognitive Development

Piaget was a **psychological constructivist**: in his view, learning proceeded by the interplay of assimilation (adjusting new experiences to fit prior concepts) and accommodation (adjusting concepts to fit new experiences). The to-and-fro of these two processes leads not only to short-term learning but also to long-term **developmental change**. The long-term developments are really the main focus of Piaget's cognitive theory.

After observing children closely, Piaget proposed that cognition developed through distinct stages from birth through the end of adolescence. By stages he meant a sequence of thinking patterns with four key features:

1. They always happen in the same order.
2. No stage is ever skipped.
3. Each stage is a significant transformation of the stage before it.
4. Each later stage incorporated the earlier stages into itself.

Piaget proposed four major stages of cognitive development and called them (1) sensorimotor intelligence, (2) preoperational thinking, (3) concrete operational thinking, and (4) formal operational thinking. Each stage is correlated with an age period of childhood, but only approximately.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 6.3.3.** *Piaget's Stages of Cognitive Development* explains the structure of the four stages and major cognitive developments associated with each stage.

## Sensorimotor Stage



According to Piaget, children are in the sensorimotor stage from birth until the age of 2. This first stage is defined as the period when infants "think" by means of their senses and motor actions. As every new parent will attest, infants continually touch, manipulate, look, listen to, and even bite and chew objects. According to Piaget, these actions allow them to learn about the world and are crucial to their early cognitive development.

The infant's actions allow the child to represent (or construct simple concepts of) objects and events. A toy animal may be just a confusing array of sensations at first. However, by looking, feeling, and manipulating it repeatedly, the child gradually organizes her sensations and actions into a stable concept, a *toy animal*. The representation acquires a permanence lacking in the individual experiences of the object, which are constantly changing. Because the representation is stable, the child "knows," or at least believes, that toy animal exists even if the actual *toy animal* is temporarily out of sight. Piaget called this sense of stability **object permanence**, a belief that objects exist whether or not they are actually present. It is a major achievement of sensorimotor development, and marks a qualitative transformation in how older infants (24 months) think about experience compared to younger infants (6 months).

During much of infancy, of course, a child can only barely talk, so sensorimotor development initially happens without the support of language. It might, therefore, seem hard to know what infants are thinking, but Piaget devised several simple, but clever, experiments to get around their lack of language. The results of these experiments suggest that infants do indeed represent objects even without being able to talk (Piaget, 1952). In one, for example, he simply hid an object (like a toy animal) under a blanket. He found that doing so consistently prompts older infants (18–24 months) to search for the object, but fails to prompt younger infants (less than six months) to do so. 'Something' motivates the search by the older infant even without the benefit of language, and the 'something' is presumed to be a permanent concept or representation of the object.

# Preoperational Stage



In the **preoperational stage**, children ages 2 to 7 use their new ability to represent objects in a wide variety of activities, but they do not yet do it in ways that are organized or fully logical. One of the most obvious examples of this kind of cognition is **dramatic play**, the improvised make-believe of preschool children. If you have ever had responsibility for children of this age, you have likely witnessed such play. Ashley holds a plastic banana to her ear and says: "Hello, Mom? Can you be sure to bring me my baby doll? OK!" Then she hangs up the banana and pours tea for Jeremy into an invisible cup. Jeremy giggles at the sight of all of this and exclaims: "Rinnng! Oh Ashley, the phone is ringing again! You better answer it." And on it goes.

In a way, children immersed in make-believe seem "mentally insane," in that they do not think realistically. But they are not truly insane because they have not really taken leave of their senses. At some level, Ashley and Jeremy always know that the banana is still a banana and not *really* a telephone; they are merely *representing* it as a telephone. They are thinking on two levels at once—one imaginative and the other realistic. This dual processing of experience makes dramatic play an early example of **metacognition**, or reflecting on and monitoring of thinking itself. Metacognition is a highly desirable skill for success in school, one that teachers often encourage (Bredekamp & Copple, 1997; Paley, 2005). Partly for this reason, teachers of young children (preschool, kindergarten, and even first or second grade) often make time and space in their classrooms for dramatic play, and sometimes even participate in it themselves to help develop the play further.

# Concrete Operational Stage



As children continue into elementary school, they become able to represent ideas and events more flexibly and logically. Their rules of thinking still seem very basic by adult standards and usually operate unconsciously, but they allow children to solve problems more systematically than before, and therefore to be successful with many academic tasks. In the concrete operational stage, for example, a child may unconsciously follow the rule: "If nothing is added or taken away, then the amount of something stays the same." This simple principle helps children to understand certain arithmetic tasks, such as in adding or subtracting zero from a number, as well as to do certain classroom science experiments, such as ones involving judgments of the amounts of liquids when mixed. Piaget called this period the **concrete operational stage** because children mentally "operate" on concrete objects and events. They are not yet able, however, to operate (or think) systematically about *representations* of objects or events. Manipulating representations is a more abstract skill that develops later, during adolescence.

Concrete operational thinking differs from preoperational thinking in two ways, each of which renders children more skilled as students. One difference is **reversibility**, or the ability to think about the steps of a process in any order. Imagine a simple science experiment, for example, such as one that explores why objects sink or float by having a child place an assortment of objects in a basin of water. Both the preoperational and concrete operational child can recall and describe the steps in this experiment, but only the concrete operational child can recall them *in any order*. This skill is beneficial for any task involving multiple steps—a common feature of tasks in the classroom. In teaching new vocabulary from a story, for another example, a teacher might tell students: "First make a list of words in the story that you do not know, then find and write down their definitions, and finally get a friend to test you on your list." These directions involve repeatedly remembering to move back and forth between a second step and a first—a task that concrete operational students—and most adults—find easy, but that preoperational children often forget to do or find confusing. If the younger children are to do this task reliably, they may need external prompts, such as having the teacher remind them periodically to go back to the story to look for more unknown words

The other new feature of thinking during the concrete operational stage is the child's ability to **decenter** or focus on more than one feature of a problem at a time. There are hints of decentration in preschool children's dramatic play, which requires being aware on two levels at once—knowing that a banana can be both a banana and a "telephone." The decentration of the concrete operational stage is more deliberate and conscious than preschoolers' make-believe. Now the child can attend to two things at once quite purposely. Suppose you give students a sheet with an assortment of subtraction problems on it and ask them to do this: "Find all of the problems that involve two-digit subtraction *and* that involve borrowing from the next column. Circle and solve *only* those problems." Following these instructions is quite possible for a concrete operational student (as long as they have been listening!) because the student can attend to the two subtasks simultaneously—finding the two-digit problems *and* identifying which involve borrowing.

In real classroom tasks, reversibility and decentration often happen together. A well-known example of joint presence is Piaget's experiments with **conservation**, the belief that an amount or quantity stays the same even if it changes apparent size or shape (Piaget, 2001; Matthews, 1998). Imagine two identical balls made of clay. Any child, whether preoperational or concrete operational, will agree that the two indeed have the same amount of clay in them simply because they look the same. However,

if you now squish one ball into a long, thin “hot dog,” the preoperational child is likely to say that the amount of that ball has changed—either because it is longer or because it is thinner, but at any rate, because it now looks different. The concrete operational child will not make this mistake, thanks to new cognitive skills of reversibility and decentration. For this child, the amount is the same because “you could squish it back into a ball again” (reversibility) and because “it may be longer, but it is also thinner” (decentration). Piaget would say the concrete operational child “has conservation of quantity.”

The classroom examples described above also involve reversibility and decentration. As already mentioned, the vocabulary activity described earlier requires reversibility (going back and forth between identifying words and looking up their meanings). However, it can also be construed as an example of decentration. Furthermore, as mentioned, the arithmetic activity requires decentration (looking for problems that meet two criteria *and* also solving them). However, it can also be construed as an example of reversibility (going back and forth between subtasks, as with the vocabulary activity). Either way, the development of concrete operational skills support students in doing many basic academic tasks; in a sense, they make ordinary schoolwork possible.

## Formal Operational Stage



In the fourth (and last) of the Piagetian stages, an adolescent becomes able to reason not only about tangible objects and events, as younger children do, but also about hypothetical or abstract ones. Hence this stage is named the **formal operational** stage—the period when the individual can “operate” on “forms” or representations.

During the formal operational stage, adolescents can understand **abstract principles** that have no physical reference. They can now contemplate such abstract constructs as beauty, love, freedom, and morality. The adolescent is no longer limited by what can be directly seen or heard. Additionally, while younger children solve problems through trial and error, adolescents demonstrate **hypothetical-deductive reasoning**, which is developing hypotheses based on what might logically occur. They can think about all the possibilities in a situation beforehand, and then test them systematically (Crain, 2005). Now they can engage in real scientific thinking. Formal operational thinking also involves accepting hypothetical situations. Adolescents understand the concept of **transitivity**, which means that a relationship between two elements is carried over to other elements logically related to the first two, such as if A

YouTube Video

***This interactive element is not available in this format. Visit the link or scan the QR code to access it online.***

View this YouTube Video online

**Video 6.3.4. *Formal Operational Stage* explains some of the cognitive development consistent with formal operational thought.**

## Abstract and Hypothetical Thinking

One of the major premises of formal operational thought is the capacity to think of possibility, not just reality. Adolescents' thinking is less bound to concrete events than that of children; they can contemplate possibilities outside the realm of what currently exists. One manifestation of the adolescent's increased facility with thinking about possibilities is the improvement of skill in deductive reasoning (also called top-down reasoning), which leads to the development of hypothetical thinking. This development provides the ability to plan ahead, see the future consequences of an action, and provide alternative explanations of events. It also makes adolescents more skilled debaters, as they can reason against a friend's or parent's assumptions. Adolescents also develop a more sophisticated understanding of probability.

This appearance of more systematic, abstract thinking allows adolescents to comprehend the sorts of higher-order abstract logic inherent in puns, proverbs, metaphors, and analogies. Their increased facility permits them to appreciate how language can be used to convey multiple messages, such as satire, metaphor, and sarcasm (children younger than age nine often cannot comprehend sarcasm). This development also permits the application of advanced reasoning and logical processes to social and ideological matters such as interpersonal relationships, politics, philosophy, religion, morality, friendship, faith, fairness, and honesty.

Deductive Reasoning

https://youtu.be/YJyuy4B2aKU

Video 6.3.5. ***Deductive Reasoning*** demonstrates a Piagetian task that presents the child with a hypothetical situation and asks that they deduce what happens given this scenario. The first child is an elementary school-aged child. The second is an adolescent. You can see how these two are able to use hypothetical information differently to make predictions about what will happen next.

## Intuitive and Analytic Thinking

Piaget emphasized the sequence of thought throughout four stages. Others suggest that thinking does not develop in sequence, but instead, that advanced logic in adolescence may be influenced by intuition. Cognitive psychologists often refer to intuitive and analytic thought as the dual-process model, the notion that humans have two distinct networks for processing information (Kuhn, 2013.) Intuitive thought is automatic, unconscious, and fast, and it is more experiential and emotional.

In contrast, analytic thought is deliberate, conscious, and rational (logical). While these systems interact, they are distinct (Kuhn, 2013). Intuitive thought is easier, quicker, and more commonly used in everyday life. As discussed in the adolescent brain development section, the discrepancy between the maturation of the limbic system and the prefrontal cortex may make teens more prone to emotional, intuitive thinking than adults. As adolescents develop, they gain in logic/analytic thinking ability and sometimes regress, with social context, education, and experiences becoming significant influences. Simply put, being "smarter," as measured by an intelligence test, does not advance cognition as much as having more experience, in school and life (Klaczynski & Felmban, 2014).

## Relativistic Thinking

Adolescents are more likely to engage in relativistic thinking—in other words, they are more likely to question others' assertions and less likely to accept information as absolute truth. Through experience outside the family circle, they learn that rules they were taught as absolute are relativistic. They begin to differentiate between rules crafted from common sense (do not touch a hot stove) and those that are based on culturally relative standards (codes of etiquette). This can lead to a period of questioning authority in all domains.

## Formal Operational Thinking In the Classroom

**School is a main contributor in guiding students towards formal operational thought. With students at this level, the teacher can pose hypothetical (or contrary-to-fact) problems: "What if the world had never discovered oil?" or "What if the first European explorers had settled first in California instead of on the East Coast of the United States?" To answer such questions, students must use hypothetical reasoning, meaning that they must manipulate ideas that vary in several ways at once and do so entirely in their minds.**

**The hypothetical reasoning that concerned Piaget primarily involved scientific problems. His studies of formal operational thinking therefore often look like problems that middle or high school teachers pose in science classes. In one problem, for example, a young person is presented with a simple pendulum, to which different amounts of weight can be hung (Inhelder & Piaget, 1958). The experimenter asks: "What determines how fast the pendulum swings: the length of the string holding it, the weight attached to it, or the distance that it is pulled to the side?" The young person is not allowed to solve this problem by trial-and-error with the materials themselves but must reason a way to the solution mentally. To do so systematically, he or she must imagine varying each factor separately, while also imagining the other factors that are held constant. This kind of thinking requires facility at manipulating mental representations of the relevant objects and actions—precisely the skill that defines formal operations.**

**As you might suspect, students with an ability to think hypothetically have an advantage in many kinds of schoolwork: by definition, they require relatively few "props" to solve problems. In this sense, they can in principle be more self-directed than students who rely only on concrete operations—certainly a desirable quality in the opinion of most teachers. Note, though, that formal operational thinking is desirable but not sufficient for school success, and that it is far from being the only way that students achieve educational success. Formal thinking skills do not ensure that a student is motivated or well-behaved, for example, nor does it guarantee other desirable skills. The fourth stage in Piaget's theory is really about a particular kind of formal thinking, the kind needed to solve scientific problems and devise scientific experiments. Since many people do not normally deal with such problems in the normal course of their lives, it should be no surprise that research finds that many people never achieve or use formal thinking fully or consistently, or that they use it only in selected areas with which they are very familiar (Case & Okomato, 1996). For teachers, the limitations of Piaget's ideas suggest a need for additional theories about development—ones that focus more directly on the social and interpersonal issues of childhood and adolescence.**

## Adolescent Egocentrism



**Once adolescents can understand abstract thoughts, they enter a world of hypothetical possibilities and demonstrate egocentrism or a heightened self-focus. The egocentricity comes from attributing unlimited power to their own thoughts (Crain, 2005). Piaget believed it was not until adolescents took on adult roles that they would be able to learn the limits to their own thoughts.**

**David Elkind (1967) expanded on the concept of Piaget's adolescent egocentricity. Elkind theorized that the physiological changes that occur during adolescence result in adolescents being primarily concerned with themselves.**

Additionally, since adolescents fail to differentiate between what others are thinking and their own thoughts, they believe that others are just as fascinated with their behavior and appearance. This belief results in the adolescent anticipating the reactions of others, and consequently constructing an imaginary audience. "The imaginary audience is the adolescent's belief that those around them are as concerned and focused on their appearance as they themselves are" (Schwartz, Maynard, & Uzelac, 2008, p. 441). Elkind thought that the imaginary audience contributed to the self-consciousness that occurs during early adolescence. The desire for privacy and reluctance to share personal information may be a further reaction to feeling under constant observation by others.

Another important consequence of adolescent egocentrism is the personal fable or belief that one is unique, special, and invulnerable to harm. Elkind (1967) explains that because adolescents feel so important to others (imaginary audience), they regard themselves and their feelings as being special and unique. Adolescents believe that only they have experienced strong and diverse emotions, and therefore others could never understand how they feel. This uniqueness in one's emotional experiences reinforces the adolescent's belief of invulnerability, especially to death. Adolescents will engage in risky behaviors, such as drinking and driving or unprotected sex, and feel they will not suffer any negative consequences. Elkind believed that adolescent egocentricity emerges in early adolescence and declines in middle adolescence. However, recent research has also identified egocentricity in late adolescence (Schwartz et al., 2008).

### Consequences of Formal Operational Thought

As adolescents are now able to think abstractly and hypothetically, they exhibit many new ways of reflecting on information (Dolgin, 2011). For example, they demonstrate greater introspection or thinking about one's thoughts and feelings. They begin to imagine how the world could be, which leads them to become idealistic or to insist upon high standards of behavior. Because of their idealism, they may become critical of others, especially adults in their life. Additionally, adolescents can demonstrate hypocrisy, or pretend to be what they are not. Since they can recognize what others expect of them, they will conform to those expectations for their emotions and behavior seemingly hypocritical to themselves. Lastly, adolescents can exhibit pseudostupidity. This is when they approach problems at a level that is too complex and they fail because the tasks are too simple. Their new ability to consider alternatives is not completely under control and they appear "stupid" when they are, in fact, bright, just not experienced.

https://assessments.lumenlearning.co...essments/16613

## Beyond Formal Operational Thought: Postformal Thought

According to Piaget's theory, adolescents acquire formal operational thought and this is the last stage of cognitive development. The hallmark of this type of thinking is the ability to think abstractly or to consider possibilities and ideas about circumstances never directly experienced. Thinking abstractly is only one characteristic of adult thought, however. If you compare a 15-year-old with someone in their late 30s, you would probably find that the latter considers not only what is possible but also what is likely. Why the change? The adult has gained experience and understands why possibilities do not always become realities. They learn to base decisions on what is realistic and practical, not idealistic, and can make adaptive choices. Adults are also not as influenced by what others think. This advanced type of thinking is referred to as postformal thought (Sinnott, 1998).

In addition to moving toward more practical considerations, thinking in early adulthood may also become more flexible and balanced. Abstract ideas that the adolescent believes in firmly may become standards by which the adult evaluates reality. Adolescents tend to think in dichotomies; ideas are true or false; good or bad; there is no middle ground. However, with experience, the adult comes to recognize that there are some right and some wrong in each position, some good or some bad in a policy or approach, some truth and some falsity in a particular idea. This ability to bring together salient aspects of two opposing viewpoints or positions is referred to as dialectical thought and is considered one of the most advanced aspects of postformal thinking (Basseches, 1984). Such thinking is more realistic because very few positions, ideas, situations, or people are completely right or wrong. So, for example, parents who were considered angels or devils by the adolescent eventually become just people with strengths and weaknesses, endearing qualities, and faults to the adult.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 6.3.6. *Perry's Stages of Intellectual Development* explains post-formal stages of cognitive development in adulthood.**

## Does Everyone Reach Formal Operational or Postformal Thought?

**Formal operational thought is influenced by experience and education. Most people attain some degree of formal operational thinking but use formal operations primarily in the areas of their strongest interest (Crain, 2005). Even those that can use formal or postformal thought, they do not regularly demonstrate it. In some small villages and tribal communities, it is barely used at all. A possible explanation is that an individual's thinking has not been sufficiently challenged to demonstrate formal operational thought in all areas.**

**Some adults lead lives in which they are not challenged to think abstractly about their world. Many adults do not receive any formal education and are not taught to think abstractly about situations they have never experienced. Further, they are also not exposed to conceptual tools used to formally analyze hypothetical situations. Those who do think abstractly, in fact, may be able to do so more easily in some subjects than others. For example, psychology majors may be able to think abstractly about psychology, but be unable to use abstract reasoning in physics or chemistry. Abstract reasoning in a particular field requires a knowledge base that we might not have in all areas. Consequently, our ability to think abstractly depends to a large extent on our experiences.**

https://assessments.lumenlearning.co...essments/16614

## Candela Citations

**CC licensed content, Original**

- **Psychological Constructivism . Authored by: Nicole Arduini-Van Hoose. Provided by: Hudson Valley Community College. Retrieved from: https://courses.lumenlearning.com/ad...agets-theories. License: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike**

**CC licensed content, Shared previously**

- **Lifespan Development. Provided by: Lumen Learning. Retrieved from: https://courses.lumenlearning.com/wm...pandevelopment. License: CC BY: Attribution**
- **Educational Psychology. Authored by: Kelvin Seifert and Rosemary Sutton. Provided by: The Saylor Foundation. Retrieved from: https://courses.lumenlearning.com/ed...onalpsychology. License: CC BY: Attribution**

**CC licensed content, Specific attribution**

- **Schemas, Assimilation, and Accommodation. Authored by: Carole Yue. Provided by: Khan Academy. Retrieved from: https://youtu.be/ig-SVifJUKw. License: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike**
- **Semantic Networks and Spreading Activation. Authored by: Carole Yue. Provided by: Khan Academy . Retrieved from: https://youtu.be/ig-SVifJUKw. License: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike**
- **Piaget's Stages of Cognitive Development. Authored by: Carole Yue. Provided by: Khan Academy. Retrieved from: https://youtu.be/Jt3-PIC2nCs. License: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike**

**All rights reserved content**

- **Formal Operational Stage . Provided by: Udacity. Retrieved from: https://youtu.be/hvq7tq2fx1Y. License: *All Rights Reserved***
- **Deductive Reasoning. Retrieved from: https://youtu.be/YJyuy4B2aKU. License: *All Rights Reserved***
- **Perry's Stages of Intellectual Development. Provided by: Student Success Space. Retrieved from: https://youtu.be/MbsqNn8O79o. License: *All Rights Reserved***

This page titled 6.2: Psychological Constructivism is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 6.2: Psychological Constructivism by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 6.3: Social Constructivism



**Figure 6.4.1.** Lev Vygotsky

Lev Vygotsky (1896-1934) was a Russian psychologist whose **sociocultural theory** emphasizes the importance of culture and interaction in the development of cognitive abilities. Vygotsky differed with Piaget in that he believed that a person has not only a set of abilities but also a set of potential abilities that can be realized if given the proper guidance from others. Vygotsky developed theories on teaching that have been adopted by educators today.

Like Piaget, Vygotsky acknowledged intrinsic development, but he argued that it is the language, writings, and concepts arising from the culture that elicit the highest level of cognitive thinking (Crain, 2005). He believed that social interactions with teachers and more learned peers could facilitate a learner's potential for learning. Without this interpersonal instruction, he believed learner's minds would not advance very far as their knowledge would be based only on their own discoveries.

## Zone of Proximal Development and Scaffolding

Vygotsky's best-known concept is the **Zone of Proximal Development (ZPD). The** ZPD has been defined as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem-solving under adult guidance, or in collaboration with more capable peers" (Vygotsky, 1978, p. 86). Vygotsky stated that learners should be taught in the ZPD. A good teacher or more-knowledgable-other (MKO) identifies a learner's ZPD and helps them stretch beyond it. Then the MKO gradually withdraws support until the learner can perform the task unaided. Other psychologists have applied the metaphor of scaffolds (the temporary platforms on which construction workers stand) to Vygotsky's theory. Scaffolding is the temporary support that a MKO gives a learner to do a task.

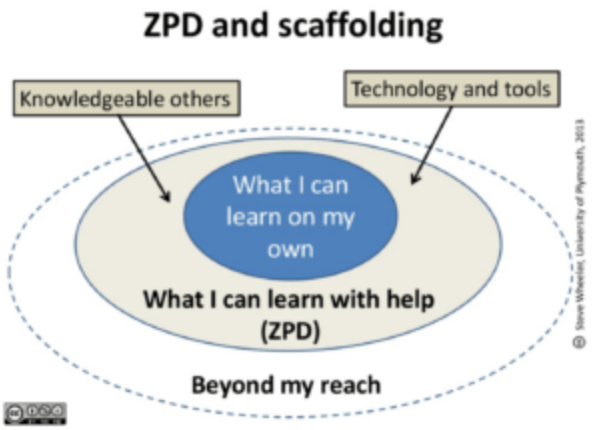



**Figure 6.4.2.** Model of Vygotsky's zone of proximal development.

## Thought and Speech

Do you ever talk to yourself? Why? Chances are, this occurs when you are struggling with a problem, trying to remember something, or feel very emotional about a situation. Children talk to themselves too. Piaget interpreted this as **egocentric speech** or a practice engaged in because of a child's inability to see things from another's point of view. Vygotsky, however, believed that children talk to themselves in order to solve problems or clarify thoughts. As children learn to think in words, they do so aloud, referred to as **private speech**, speech meant only for one's self. Eventually, thinking out loud becomes thought accompanied by internal speech, and talking to oneself becomes a practice only engaged in when we are trying to learn something or remember something. This inner speech is not as elaborate as the speech we use when communicating with others (Vygotsky, 1962).

### Vygotsky's Influence on Education

Vygotsky's theories have been extremely influential for education. Although Vygotsky himself never mentioned the term scaffolding, it is often credited to him as a continuation of his ideas pertaining to the way adults or other children can use guidance in order for a child to work within their ZPD. (The term scaffolding was first developed by Jerome Bruner, David Wood, and Gail Ross while applying Vygotsky's concept of ZPD to various educational contexts.)

Educators often apply these concepts by assigning tasks that students cannot do on their own, but which they can do with assistance; they should provide just enough assistance so that students learn to complete the tasks independently and then provide an environment that enables students to do harder tasks than would otherwise be possible. Teachers can also allow students with more knowledge to assist students who need more guidance. Especially in the context of collaborative learning, group members who have higher levels of understanding can help the less advanced members learn within their zone of proximal development.

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 3.4.1.** *Vygotsky's Developmental Theory* introduces the applications of the theory in the classroom.

## Contrasting Paget and Vygotsky

Piaget was highly critical of teacher-directed instruction believing that teachers who take control of the child's learning place the

child into a passive role (Crain, 2005). Further, teachers may present abstract ideas without the child's true understanding, and instead, they just repeat back what they heard. Piaget believed children must be given opportunities to discover concepts on their own. As previously stated, Vygotsky did not believe children could reach a higher cognitive level without instruction from more learned individuals. Who is correct? Both theories certainly contribute to our understanding of how children learn.

## Candela Citations

CC licensed content, Original

- Social Constructivism. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...onstructivism/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Zone of Proximal Development & Scaffolding. **Provided by**: Lumen Learning. **Retrieved from**: https://courses.lumenlearning.com/fo...r/chapter/zpd/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

All rights reserved content

- Vygotsky's Developmental Theory. **Provided by**: Davidson Films. **Retrieved from**: https://youtu.be/InzmZtHuZPY. **License**: All Rights Reserved

This page titled 6.3: Social Constructivism is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 6.3: Social Constructivism by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 6.4: Information Processing Theories

**Information Processing** is *how individuals perceive, analyze, manipulate, use, and remember information*. Unlike Piaget's theory, this approach proposes that cognitive development is ongoing and gradual, not organized into distinct stages. The areas of basic cognitive changes generally occur in five areas:

- *Attention*. Improvements are seen in **selective attention**(the process by which one focuses on one stimulus while tuning out another), as well as **divided attention** (the ability to pay attention to two or more stimuli at the same time).
- *Memory*. Improvements are seen in working memory and long-term memory.
- *Processing Speed*. With maturation, children think more quickly. Processing speed improves sharply between age five and middle adolescence, levels off around age 15, and does not appear to change between late adolescence and adulthood.
- *Organization of Thinking*. As children mature, they are more planful, they approach problems with strategy, and are flexible in using different strategies in different situations.
- *Metacognition*. Older children can think about thinking itself. This often involves monitoring one's own cognitive activity during the thinking process. **Metacognition**provides the ability to plan ahead, see the future consequences of an action, and provide alternative explanations of events.

## Attention

Changes in attention have been described by many as the key to changes in human memory (Nelson & Fivush, 2004; Posner & Rothbart, 2007). However, attention is not a unified function; it is comprised of sub-processes. Our ability to focus on a single task or stimulus while ignoring distracting information, called **selective attention**. There is a sharp improvement in selective attention from age six into adolescence (Vakil, Blachstein, Sheinman, & Greenstein, 2009). **Sustained attention** is the ability to stay on task for long periods. The ability to switch our focus between tasks or external stimuli is called **divided attention** or **multitasking, which** also improves into adolescence (Carlson, Zelazo, & Faja, 2013).

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 3.8.1.** Attention explains the ways in which we may attend or fail to attend to stimuli.

## Selective Attention

The ability with selective attention tasks improves through childhood and into adolescence. While children's selective attention may be inconsistent during middle childhood, adolescents demonstrate the ability to select and prioritize stimuli for attention reliably. The development of this ability is influenced by the child's temperament (Rothbart & Rueda, 2005), the complexity of the stimulus or task (Porporino, Shore, Iarocci & Burack, 2004), and may be dependent on whether the stimuli are visual or auditory (Guy, Rogers & Cornish, 2013). Guy et al. (2013) found that children's ability to attend to visual information selectively outpaced that of auditory stimuli. This change may explain why young children are not able to hear the voice of the teacher over the cacophony of sounds in the typical preschool classroom (Jones, Moore & Amitay, 2015). Jones and his colleagues found that 4 to 7 year-olds could not filter out background noise, especially when its frequencies were close in sound to the target sound. In comparison, teens often performed similarly to adults.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 3.8.2.** Theories of Selective Attention explains how and why we attend to some stimuli and not others.

## Sustained Attention

Most measures of sustained attention typically ask individuals to spend several minutes focusing on one task, while waiting for an infrequent event, while there are multiple distractors for several minutes. Young children can retain their visual and auditory attention for approximately 5 minutes if they are 5-years-old, 6 minutes if they are 6-years old, 7 minutes if they are 7-years-old, and so on. If a task is interesting or novel, the child may sustain attention substantially longer. Sustained attention improves to around age 10, then plateaus with only small improvements to adulthood. Common estimates of the attention span of healthy teenagers and adults range from 10 to 20 minutes. There is some debate as to whether attention is consistently sustained or whether people repeatedly choose to re-focus on the same thing (Raichle, 1999) This ability to renew attention permits people to 'pay attention' to things that last for more than a few minutes.

For time-on-task measurements, the type of activity used in the test affects the results, as people are generally capable of a longer attention span when they are doing something that they find enjoyable or intrinsically motivating (Raichle,1999). Attention is also increased if the person can perform the task fluently, compared to a person who has difficulty performing the task, or to the same person when he or she is just learning the task. Fatigue, hunger, noise, and emotional stress reduce the time focused on the task. After losing attention from a topic, a person may restore it by resting, doing a different kind of activity, changing mental focus, or deliberately choosing to re-focus on the first topic.

## Divided Attention

Divided attention can be thought of in a couple of ways. We may look at how well people can multitask, performing two or more tasks simultaneously, or how people can alternate attention between two or more tasks. For example, walking and talking to a friend at the same time is multitasking, where trying to text while driving requires us to alternate attention between two tasks quickly.

Young children (age 3-4) have considerable difficulties in dividing their attention between two tasks and often perform at levels equivalent to our closest relative, the chimpanzee. However, by age five, they have surpassed the chimp (Hermann, Misch, Hernandez-Lloreda & Tomasello, 2015; Hermann & Tomasello, 2015). Despite these improvements, 5-year-olds continue to perform below the level of school-age children, adolescents, and adults. These skills continue to develop into adolescence.

Regardless of age, we have a limited capacity for attention, and the division of attention is confined to that limitation. Our ability to effectively multitask or alternate attention is dependent on the automaticity or complexity of the task, but are also influenced by conditions like anxiety, arousal, task difficulty, and skills (Sternberg & Sternberg, 2012). Research shows that when dividing attention, people are more apt to make mistakes or perform their tasks more slowly (Matlin, 2013). Attention must be divided among all of the component tasks to perform them.

Classical research on divided attention involved people performing simultaneous tasks, like reading stories while listening and writing something else, or listening to two separate messages through different ears. Subjects were often tested on their ability to learn new information while engaged in multiple tasks. More current research examines the performance of doing two tasks simultaneously (Matlin, 2013), such as driving while performing another task. This research reveals that the human attentional system has limits for what it can process. For examples, driving performance is worse while engaged in other tasks; drivers make more mistakes, brake harder and later, get into more accidents, veer into other lanes, and/or are less aware of their surroundings when engaged in the previously discussed tasks (Collet et al., 2009; Salvucci & Taatgen, 2008; Strayer & Drews, 2007).

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 3.8.3.** The Spotlight Model of Attention and Our Ability to Multitask explains how we divide our attention to attend to different tasks or information.

## Memory

Memory is an information processing system; therefore, we often compare it to a computer. **Memory** is the set of processes used to encode, store, and retrieve information over different periods of time.




**Figure 3.8.1.** Encoding involves the input of information into the memory system. Storage is the retention of encoded information. Retrieval, or getting the information out of memory and back into awareness, is the third function.

## Encoding

We get information into our brains through a process called **encoding**, which is the input of information into the memory system. Once we receive sensory information from the environment, our brains label or code it. We organize the information with other similar information and connect new concepts to existing concepts. Encoding information occurs through automatic processing and effortful processing.

If someone asks you what you ate for lunch today, more than likely, you could recall this information quite easily. This is known as **automatic processing**, or the encoding of details like time, space, frequency, and the meaning of words. Automatic processing is usually done without any conscious awareness. Recalling the last time you studied for a test is another example of automatic processing. However, what about the actual test material that you studied? It probably required a lot of work and attention on your part in order to encode that information. This is known as **effortful processing**.

There are three types of encoding. The encoding of words and their meaning is known as **semantic encoding**. It was first demonstrated by William Bousfield (1935) in an experiment in which he asked people to memorize words. The 60 words were divided into 4 categories of meaning, although the participants did not know this because the words were randomly presented. When they were asked to remember the words, they tended to recall them in categories, showing that they paid attention to the meanings of the words as they learned them.

**Visual encoding** is the encoding of images, and **acoustic encoding** is the encoding of sounds, words in particular. To see how visual encoding works, read over this list of words: *car, level, dog, truth, book, value*. If you were asked later to recall the words from this list, which ones do you think you'd most likely remember? You would probably have an easier time recalling the words *car, dog,* and *book*, and a more difficult time recalling the words *level, truth,* and *value*. Why is this? Because you can recall images (mental pictures) more easily than words alone. When you read the words *car, dog,* and *book,* you created images of these things in your mind. These are concrete, high-imagery words. On the other hand, abstract words like *level, truth,* and *value* are low-imagery words. High-imagery words are encoded both visually and semantically (Paivio, 1986), thus building a more reliable memory.

Now let us turn our attention to acoustic encoding. You are driving in your car, and a song comes on the radio that you have not heard in at least ten years, but you sing along, recalling every word. In the United States, children often learn the alphabet through song, and they learn the number of days in each month through rhyme: "Thirty days hath September, / April, June, and November; / All the rest have thirty-one, / Save February, with twenty-eight days clear, / And twenty-nine each leap year." These lessons are easy to remember because of acoustic encoding. We encode the sounds the words make. This is one of the reasons why much of what we teach young children is done through song, rhyme, and rhythm.

Which of the three types of encoding do you think would give you the best memory of verbal information? Some years ago, psychologists Fergus Craik and Endel Tulving (1975) conducted a series of experiments to find out. Participants were given words along with questions about them. The questions required the participants to process the words at one of the three levels. The visual processing questions included such things as asking the participants about the font of the letters. The acoustic processing questions asked the participants about the sound or rhyming of the words, and the semantic processing questions asked the participants about the meaning of the words. After participants were presented with the words and questions, they were given an unexpected recall or recognition task.

Words that had been encoded semantically were better remembered than those encoded visually or acoustically. Semantic encoding involves a deeper level of processing than shallower visual or acoustic encoding. Craik and Tulving concluded that we process verbal information best through semantic encoding, especially if we apply what is called the self-reference effect. The **self-reference effect** is the tendency for an individual to have a better memory for information that relates to oneself in comparison to material that has less personal relevance (Rogers, Kuiper & Kirker, 1977). Could semantic encoding be beneficial to you as you attempt to memorize the concepts in this chapter?

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 3.8.4.** Encoding Strategies discusses various encoding techniques that help us store information in memory.

## Storage

Once the information has been encoded, we have to retain it somehow. Our brains take the encoded information and place it in storage. **Storage** is the creation of a permanent record of information.

In order for a memory to go into storage (i.e., long-term memory), it has to pass through three distinct stages: Sensory Memory, Short-Term Memory, and finally, Long-Term Memory. These stages were first proposed by Richard Atkinson and Richard Shiffrin (1968). Their model of human memory, called Atkinson-Shiffrin (A-S) or three-box model, is based on the belief that we process memories in the same way that a computer processes information.

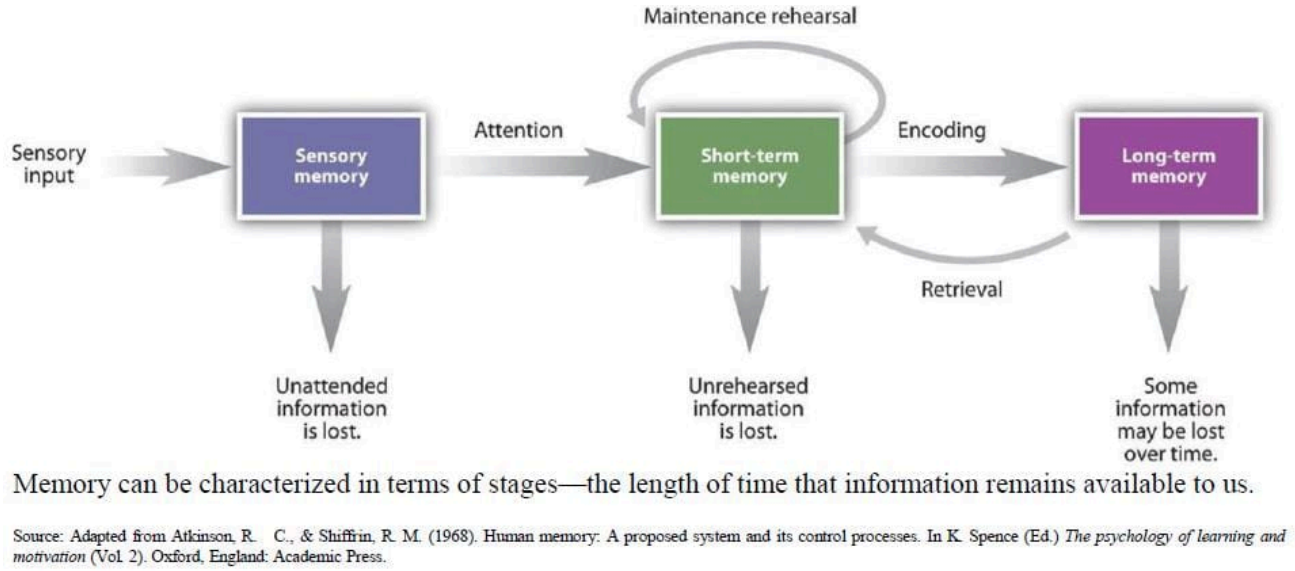



**Figure 3.8.2.** According to the Atkinson-Shiffrin model of memory, information passes through three distinct stages in order for it to be stored in long-term memory.

The three-box is just one model of memory. Others, such as Baddeley and Hitch (1974), have proposed a model where short-term memory itself has different forms. In this model, storing memories in short-term memory is like opening different files on a computer and adding information. The type of short-term memory (or computer file) depends on the type of information received. There are memories in visual-spatial form, as well as memories of spoken or written material, and they are stored in three short-term systems: a visuospatial sketchpad, an episodic buffer, and a phonological loop. According to Baddeley and Hitch, a central executive part of memory supervises or controls the flow of information to and from the three short-term systems.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 3.8.5.** Information Processing Model: Sensory, Working, and Long Term Memory explains the three-box model of memory.

## Sensory Memory

In the Atkinson-Shiffrin model, stimuli from the environment are processed first in **sensory memory**: storage of brief sensory events, such as sights, sounds, and tastes. It is very brief storage, *essentially long enough for the brain to register and start processing the information*. Sensory memory can hold visual information for about half of a second and auditory information for a few seconds. Unlike other cognitive processes, it seems that sensory memory does not change from infancy (Siegler, 1998). However, without the ability to encode the information, it fades from sensory memory quickly (Papalia et al., 2008). As children and adolescence become more capable of encoding, they can take more advantage of the information available to them in the sensory memory.

We are constantly bombarded with sensory information. We cannot absorb all of it, or even most of it. Moreover, most of it has no impact on our lives. For example, what was your professor wearing the last class period? As long as the professor was dressed appropriately, it does not matter what she was wearing. Sensory information about sights, sounds, smells, and even textures, which we do not view as valuable information, we discard. If we view something as valuable, the information will move into our short-term memory system.

One study of sensory memory researched the significance of valuable information on short-term memory storage. J. R. Stroop discovered a memory phenomenon in the 1930s: you will name a color more easily if it appears printed in that color, which is called the Stroop effect. In other words, the word "red" will be named more quickly, regardless of the color the word appears in, than any word that is colored red. Try an experiment: name the colors of the words you are given in Figure 3.8.3. Do not read the words, but say the color the word is printed in. For example, upon seeing the word "yellow" in green print, you should say "green," not "yellow." This experiment is fun, but it is not as easy as it seems.

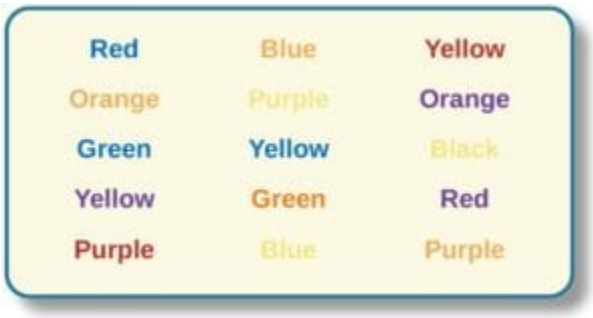



**Figure 3.8.3.** The Stroop effect describes why it is difficult for us to name a color when the word and the color of the word are different.

## Short-Term (Working) Memory

**Short-term memory (STM)**, also called **working memory**, is a temporary storage system that processes incoming sensory memory. Short-term memory is the bridge between information taken in through sensory memory and the more permanent storage of information in long-term memory. Information that is not moved along from short-term memory to long-term memory will be forgotten. Short-term memory is also called working memory because this is the system where the "work" of memory happens. If you are retrieving information from your long-term memory, you are moving it into your working memory, where you can think about that information.

Think of working memory as the information you have displayed on your computer screen—a document, a spreadsheet, or a web page. Then, the information in this memory system goes to long-term memory (you save it to your hard drive), or it is discarded (you delete a document or close a web browser). This step of **rehearsal**, the conscious repetition of information to be remembered, to move STM into long-term memory is called **memory consolidation**.

You may find yourself asking, "How much information can our memory handle at once?" To explore the capacity and duration of your short-term memory, have a partner read the strings of random numbers (Figure 3.8.4) out loud to you, beginning each string by saying, "Ready?" and ending each by saying, "Recall," at which point you should try to write down the string of numbers from memory.

9754 68259 913825 5316842 86951372 719384273
6419 67148 648327 5963827 51739826 163875942

**Figure 3.8.4.** Work through this series of numbers using the recall exercise explained above to determine the longest string of digits that you can store.

Note the longest string at which you got the series correct. For most people, this will be close to 7. Recall is somewhat better for random numbers than for random letters (Jacobs, 1887), and also often slightly better for information we hear (acoustic encoding) rather than see (visual encoding) (Anderson, 1969).

Short-term or working memory often requires conscious effort and adequate use of attention to function effectively. As you read earlier, children struggle with many aspects of attention, and this greatly diminishes their ability to juggle several pieces of information in memory consciously. The capacity of working memory is the amount of information someone can hold in consciousness is smaller in young children than in older children and adults. The typical 5-year-old can hold only a four-digit number active. The typical adult and teenager can hold a seven-digit number active in their short-term memory. The capacity of working memory expands during middle and late childhood, and research has suggested that both an increase in processing speed and the ability to inhibit irrelevant information from entering memory are contributing to the greater efficiency of working

memory during this age (de Ribaupierre, 2002). Changes in myelination and synaptic pruning in the cortex are likely behind the increase in processing speed and ability to filter out irrelevant stimuli (Kail, McBride-chang, Ferrer, Cho, & Shu, 2013).

Short-term memory can only hold information for a short period of time, without rehearsal. For a typical adolescent or adult, storage lasts about 20-30 seconds. Older children and adults use mental strategies to aid their memory performance. For instance, simple rote rehearsal may be used to commit information to memory. Young children often do not rehearse unless reminded to do so, and when they do rehearse, they often fail to use clustering rehearsal. In **clustering rehearsal,** the person rehearses previous material while adding in additional information. If a list of words is read out loud to you, you are likely to rehearse each word as you hear it along with any previous words you were given. Young children will repeat each word they hear, but often fail to repeat the prior words in the list. In Schneider, Kron-Sperl, and Hunnerkopf's (2009) longitudinal study of 102 kindergarten children, the majority of children used no strategy to remember information, a finding that was consistent with previous research. As a result, their memory performance was reduced when compared to their abilities as they aged and started to use more effective memory strategies.

#### Executive Functions

Changes in attention and the working memory system also involve changes in executive function. **Executive function (ef)** refers to self-regulatory processes, such as the ability to inhibit behavior or cognitive flexibility, that enable adaptive responses to new situations or to reach a specific goal. Executive function skills gradually emerge during early childhood and continue to develop throughout childhood and adolescence. Like many cognitive changes, brain maturation, especially the prefrontal cortex, along with experience, influence the development of executive function skills. A child, whose parents are more warm and responsive, use scaffolding when the child is trying to solve a problem, and who provide cognitively stimulating environments for the child show higher executive function skills (Fay-Stammbach, Hawes & Meredith, 2014). For instance, scaffolding was positively correlated with greater cognitive flexibility at age two and inhibitory control at age four (Bibok, Carpendale & Müller, 2009).

#### STM and Learning

Individuals differ in their memory abilities, and these differences predict academic performance (Prebler, Krajewski, & Hasselhorn, 2013). Children with learning disabilities in math and reading often have difficulties with working memory (Alloway, 2009). They may struggle with following the directions of an assignment. When a task calls for multiple steps, children with poor working memory may miss steps because they may lose track of where they are in the task. Adults working with such children may need to communicate: using more familiar vocabulary, using shorter sentences, repeating task instructions more frequently, and breaking more complex tasks into smaller, more manageable steps. Some studies have also shown that more intensive training of working memory strategies, such as chunking, aid in improving the capacity of working memory in children with poor working memory (Alloway, Bibile, & Lau, 2013).

## Long-term Memory

**Long-term memory (LTM)** is the continuous storage of information. Unlike short-term memory, the storage capacity of LTM has no real limits. It encompasses all the things you can remember what happened more than just a few minutes ago to all of the things that you can remember what happened days, weeks, and years ago. In keeping with the computer analogy, the information in your LTM would be like the information you have saved on the hard drive. It is not there on your desktop (your short-term memory), but you can pull up this information when you want it, at least most of the time. Not all long-term memories are strong memories. Some memories can only be recalled through prompts. For example, you might easily recall a fact— "What is the capital of the United States?"—or a procedure—"How do you ride a bike?"—but you might struggle to recall the name of the restaurant you had dinner when you were on vacation in France last summer. A prompt, such as that the restaurant was named after its owner, who spoke to you about your shared interest in soccer, may help you recall the name of the restaurant.

Long-term memory is divided into two types: explicit and implicit (Figure 3.8.5). Understanding the different types is important because a person's age or particular types of brain trauma or disorders can leave certain types of LTM intact while having disastrous consequences for other types. **Explicit memories,** also called **declarative memories,** are those we consciously try to remember and recall. For example, if you are studying for your chemistry exam, the material you are learning will be part of your explicit memory. (Note: Sometimes, but not always, the terms explicit memory and declarative memory are used interchangeably.)

**Implicit memories,** also called **non-declarative memories,** are memories that are not part of our consciousness. They are memories formed from behaviors. Implicit memory is also called non-declarative memory.

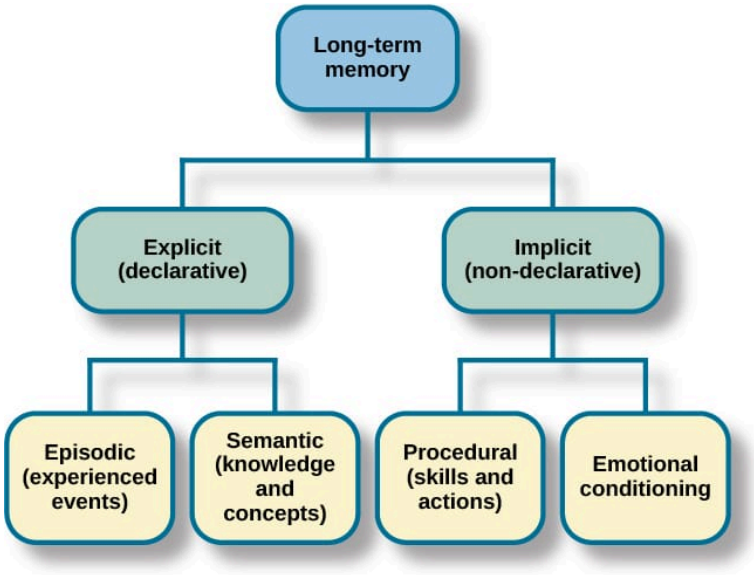



**Figure 3.8.5.** There are two components of long-term memory: explicit and implicit. Explicit memory includes episodic and semantic memory. Implicit memory includes procedural memory and things learned through conditioning.

**Procedural memory** is a type of implicit memory: it stores information about how to do things. It is the memory for skilled actions, such as how to brush your teeth, how to drive a car, how to swim the crawl (freestyle) stroke. If you are learning how to swim freestyle, you practice the stroke: how to move your arms, how to turn your head to alternate breathing from side to side, and how to kick your legs. You would practice this many times until you become good at it. Once you learn how to swim freestyle and your body knows how to move through the water, you will never forget how to swim freestyle, even if you do not swim for a couple of decades. Similarly, if you present an accomplished guitarist with a guitar, even if he has not played in a long time, he will still be able to play quite well.

Explicit or declarative memory has to do with the storage of facts and events we personally experienced. Explicit (declarative) memory has two parts: semantic memory and episodic memory. Semantic means having to do with language and knowledge about language. An example would be the question, "what does *argumentative* mean?" Stored in our **semantic memory** is knowledge about words, concepts, and language-based knowledge and facts. For example, answers to the following questions are stored in your semantic memory:

- Who was the first President of the United States?
- What is democracy?
- What is the longest river in the world?

**Episodic memory** is information about events we have personally experienced. The concept of episodic memory was first proposed about 40 years ago (Tulving, 1972). Since then, Tulving and others have looked at the scientific evidence and reformulated the theory. Currently, scientists believe that episodic memory is memory about happenings in particular places at particular times, the what, where, and when of an event (Tulving, 2002). It involves recollection of visual imagery as well as the feeling of familiarity (Hassabis & Maguire, 2007).

A component of episodic memory is **autobiographical memory,** or our personal narrative. Adolescents and adults rarely remember events from the first few years of life. We refer to this normal experience as infantile amnesia. In other words, we lack autobiographical memories from our experiences as an infant, toddler, and very young preschooler. Several factors contribute to the emergence of autobiographical memory, including brain maturation, improvements in language, opportunities to talk about experiences with parents and others, the development of theory of mind, and a representation of "self" (Nelson & Fivush, 2004). Two-year-olds do remember fragments of personal experiences, but these are rarely coherent accounts of past events (Nelson & Ross, 1980). Between 2 and 2 ½ years of age, children can provide more information about past experiences. However, these recollections require considerable prodding by adults (Nelson & Fivush, 2004). Over the next few years, children will form more detailed autobiographical memories and engage in more reflection of the past.

## Retrieval

So you have worked hard to encode (via effortful processing) and store some important information for your upcoming final exam. How do you get that information back out of storage when you need it? The act of getting information out of memory storage and back into conscious awareness is known as **retrieval**. This process would be similar to finding and opening a paper you had previously saved on your computer's hard drive. Now it is back on your desktop, and you can work with it again. Our ability to retrieve information from long-term memory is vital to our everyday functioning. You must be able to retrieve information from memory in order to do everything from knowing how to brush your hair and teeth, to driving to work, to knowing how to perform your job once you get there.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 3.8.6.** Retrieval Cues discusses how cues prompt memory retrieval.

There are three ways to retrieve information from long-term memory storage systems: recall, recognition, and relearning. **Recall** is what we most often think about when we talk about memory retrieval: it means you can access information without cues. For example, you would use recall for an essay test. **Recognition** happens when you identify information that you have previously learned after re-encountering it. It involves a process of comparison. When you take a multiple-choice test, you are relying on recognition to help you choose the correct answer. Here is another example. Let us say you graduated from high school ten years ago, and you have returned to your hometown for your 10-year reunion. You may not be able to recall all of your classmates, but you recognize many of them based on their yearbook photos.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 3.8.7.** Free Recall, Cued Recall, and Recognition discusses the various ways in which information can be retrieved from long term memory.

The third form of retrieval is **relearning**, and it is just as it sounds. It involves learning information that you previously learned. Whitney took Spanish in high school, but after high school, she did not have the opportunity to speak Spanish. Whitney is now 31, and her company has offered her an opportunity to work in their Mexico City office. In order to prepare herself, she enrolls in a Spanish course at the local community center. She is surprised at how quickly she can pick up the language after not speaking it for 13 years; this is an example of relearning.

# Organization of Thinking

During middle childhood and adolescence, young people can learn and remember more due to improvements in the way they attend to and store information. As people learn more about the world, they develop more categories for concepts and learn more efficient strategies for storing and retrieving information. One significant reason is that they continue to have more experiences on which to tie new information. In other words, their **knowledge base**, *knowledge in particular areas that makes learning new information easier*, expands (Berger, 2014).

## Cognitive Control

As noted earlier, executive functions, such as attention, increases in working memory, and cognitive flexibility, have been steadily improving since early childhood. Studies have found that executive function is very competent in adolescence. However, **self-regulation**, or *the ability to control impulses,* may still fail. A failure in self-regulation is especially true when there is high stress or high demand on mental functions (Luciano & Collins, 2012). While high stress or demand may tax even an adult's self-regulatory abilities, neurological changes in the adolescent brain may make teens particularly prone to more risky decision-making under these conditions.

## Inductive and Deductive Reasoning

**Inductive reasoning** emerges in childhood and is a type of reasoning that is sometimes characterized as "bottom-up-processing" in which specific observations, or specific comments from those in authority, may be used to draw general conclusions. However, in inductive reasoning, the veracity of the information that created the general conclusion does not guarantee the accuracy of that conclusion. For instance, a child who has only observed thunder on summer days may conclude that it only thunders in the summer. In contrast, **deductive reasoning**, sometimes called "top-down-processing," emerges in adolescence. This type of reasoning starts with some overarching principle and, based on this, propose specific conclusions. Deductive reasoning guarantees an accurate conclusion if the premises on which it is based are accurate.

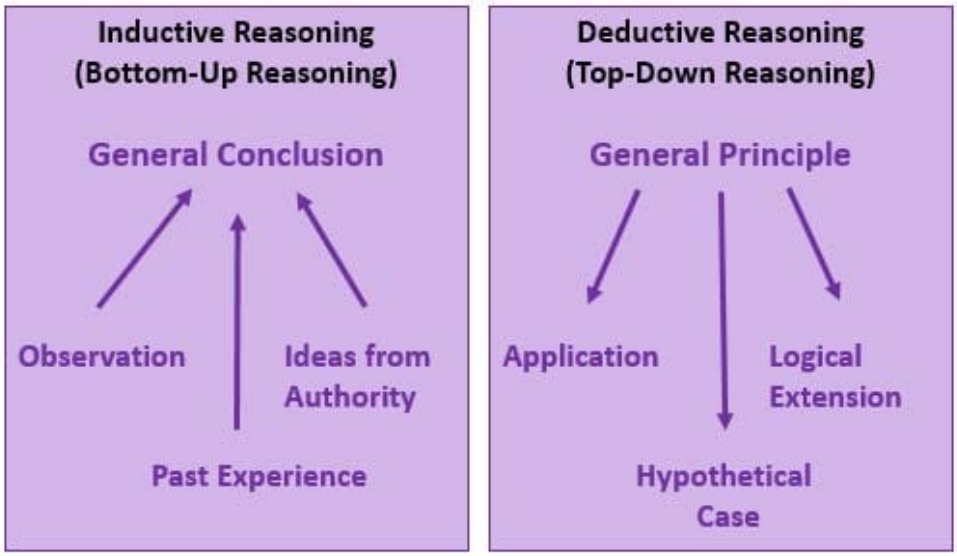



**Figure 3.8.6. Models of inductive and deductive reasoning.**

## Intuitive versus Analytic Thinking

Cognitive psychologists often refer to intuitive and analytic thought as the Dual-Process Model, the notion that humans have two distinct networks for processing information (Albert & Steinberg, 2011). **Intuitive thought** is automatic, unconscious, and fast (Kahneman, 2011), and it is more experiential and emotional. In contrast, **Analytic thought** is deliberate, conscious, and rational. While these systems interact, they are distinct (Kuhn, 2013). Intuitive thought is easier and more commonly used in everyday life. It is also more commonly used by children and teens than by adults (Klaczynski, 2001). The quickness of adolescent thought, along with the maturation of the limbic system, may make teens more prone to emotional, intuitive thinking than adults.

## Critical Thinking

According to Bruning et al. (2004), there is a debate in U.S. education as to whether schools should teach students what to think or how to think. **Critical thinking**, or a detailed examination of beliefs, courses of action, and evidence, involves teaching children how to think. The purpose of critical thinking is to evaluate information in ways that help us make informed decisions. Critical thinking involves better understanding a problem through gathering, evaluating, and selecting information,

and also by considering many possible solutions. Ennis (1987) identified several skills useful in critical thinking. These include: Analyzing arguments, clarifying information, judging the credibility of a source, making value judgments, and deciding on an action. Metacognition is essential to critical thinking because it allows us to reflect on the information as we make decisions.

# Metacognition

As children mature through middle and late childhood and into adolescence, they have a better understanding of how well they are performing a task and the level of difficulty of a task. As they become more realistic about their abilities, they can adapt studying strategies to meet those needs. Young children spend as much time on an unimportant aspect of a problem as they do on the main point, while older children start to learn to prioritize and gauge what is significant and what is not. As a result, they develop metacognition. **Metacognition** refers to the knowledge we have about our thinking and our ability to use this awareness to regulate our cognitive processes (Bruning, Schraw, Norby, & Ronning, 2004).

Bjorklund (2005) describes a developmental progression in the acquisition and use of memory strategies. Such strategies are often lacking in younger children but increase in frequency as children progress through elementary school. Examples of memory strategies include rehearsing information you wish to recall, visualizing and organizing information, creating rhymes, such as "i" before "e" except after "c," or inventing acronyms, such as "ROYGBIV" to remember the colors of the rainbow. Schneider, Kron-Sperl, and hünnerkopf (2009) reported a steady increase in the use of memory strategies from ages six to ten in their longitudinal study (see table 3.8.1). Moreover, by age ten, many children were using two or more memory strategies to help them recall information. Schneider and colleagues found that there were considerable individual differences at each age in the use of strategies and that children who utilized more strategies had better memory performance than their same-aged peers.

*Table 3.8.1. Percentage of children who did not use any memory strategies by age.*

| Age | Percentage |
|---|---|
| 6 | 55 |
| 7 | 44 |
| 8 | 25 |
| 9 | 17 |
| 10 | 13 |

A person may experience three deficiencies in their use of memory strategies. A **mediation deficiency** occurs when a person does not grasp the strategy being taught, and thus, does not benefit from its use. If you do not understand why using an acronym might be helpful, or how to create an acronym, the strategy is not likely to help you. In a **production deficiency,** the person does not spontaneously use a memory strategy and has to be prompted to do so. In this case, the person knows the strategy and is more than capable of using it, but they fail to "produce" the strategy on their own. For example, a child might know how to make a list but may fail to do this to help them remember what to bring on a family vacation. A **utilization deficiency** refers to a person using an appropriate strategy, but it fails to aid their performance. Utilization deficiency is common in the early stages of learning a new memory strategy (Schneider & Pressley, 1997; miller, 2000). Until the use of the strategy becomes automatic, it may slow down the learning process, as space is taken up in memory by the strategy itself. Initially, children may get frustrated because their memory performance may seem worse when they try to use the new strategy. Once children become more adept at using the strategy, their memory performance will improve. Sodian and Schneider (1999) found that new memory strategies acquired before age 8 often show utilization deficiencies, with there being a gradual improvement in the child's use of the strategy. In contrast, strategies acquired after this age often followed an "all-or-nothing" principle in which improvement was not gradual, but abrupt.

## Candela Citations

CC licensed content, Original

- Information Processing Theories. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...g-theories/%20. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Psychology. **Authored by**: Rose M. Spielman, William J. Jenkins, Marilyn D. Lovett. **Provided by**: OpenStax. **Retrieved from**: https://openstax.org/details/books/psychology. **License**: CC BY: Attribution
- Attention. **Provided by**: Wikipedia. **Retrieved from**: https://en.wikipedia.org/wiki/Attention. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike
- Lifespan Development. **Authored by**: Martha Lally and Suzanne Valentine-French. **Retrieved from**: http://dept.clcillinois.edu/psy/Life...evelopment.pdf. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike
- Divided Attention, Selective Attention, Inattentional Blindness, & Change Blindness. **Authored by**: Carole Yue. **Provided by**: Khan Academy. **Retrieved from**: https://youtu.be/s4JBqLoY3tY. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike
- Theories of Selective Attention. **Authored by**: Carole Yue. **Provided by**: Khan Academy. **Retrieved from**: https://youtu.be/qpsaHE_uZic. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike
- The Spotlight Model of Attention and Our Ability to Multitask. **Provided by**: Khan Academy. **Retrieved from**: https://youtu.be/THJgaznSBu8. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike
- Information Processing Model: Sensory, Working, and Long Term Memory. **Authored by**: Carole Yue. **Provided by**: Khan Academy. **Retrieved from**: https://youtu.be/pMMRE4Q2FGk. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Specific attribution

- Free Recall, Cued Recall, and Recognition. **Authored by**: Carole Yue. **Provided by**: Khan Academy. **Retrieved from**: https://youtu.be/Uhyk2bRTguI. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike


This page titled 6.4: Information Processing Theories is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 6.4: Information Processing Theories by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 6.5: Intelligence

For nearly a century, educators and psychologists have debated the nature of intelligence, and more specifically whether intelligence is just one broad ability or can take more than one form. Many classical definitions of the concept have tended to define **intelligence** as a single broad ability that allows a person to solve or complete many sorts of tasks, or at least many academic tasks like reading, knowledge of vocabulary, and the solving of logical problems (Garlick, 2002). Other psychologists believe that instead of a single factor, intelligence is a collection of distinct abilities. Still, other psychologists believe that intelligence should be defined in more practical terms. We'll review three perspectives on intelligence, Spearman's g, Sternberg's Triarchic Theory of Intelligence, and Gardner's Frame of Mind. Understanding theories of intelligence will help us understand variations in students' intellectual abilities.

British psychologist Charles Spearman believed intelligence consisted of one general factor, called *g*, which could be measured and compared among individuals. Spearman focused on the commonalities among various intellectual abilities and deemphasized what made each unique. There is research evidence of such a global ability, and the idea of general intelligence often fits with society's everyday beliefs about intelligence. Partly for these reasons, an entire mini-industry has grown up around publishing tests of intelligence, academic ability, and academic achievement. Since these tests affect the work of teachers, I return to discussing them later in this book.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 6.6.1.** Intelligence explains the different definitions of intelligence and the nature/nurture debate in the context of intelligence.

## Measuring Intelligence: Standardization and the Intelligence Quotient

The goal of most intelligence tests is to measure "*g*," the general intelligence factor. Good intelligence tests are **reliable,** meaning that they are consistent over time, and also demonstrate **validity,** meaning that they actually measure intelligence rather than something else. Because intelligence is such an important individual difference dimension, psychologists have invested substantial effort in creating and improving measures of intelligence, and these tests are now considered the most accurate of all psychological tests. In fact, the ability to accurately assess intelligence is one of the most important contributions of psychology to everyday public life.

Intelligence changes with age. A 3-year-old who could accurately multiply 183 by 39 would certainly be intelligent, but a 25-year-old who could not do so would be seen as unintelligent. Thus understanding intelligence requires that we know the norms or standards in a given population of people at a given age. The **standardization** of a test involves giving it to a large number of people at different ages and computing the average score on the test at each age level.

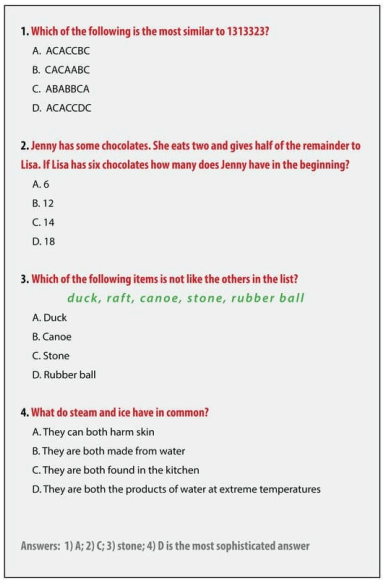
It is important that intelligence tests be standardized on a regular basis, because the overall level of intelligence in a population may change over time. The **Flynn effect** refers to the observation that scores on intelligence tests worldwide have increased substantially over the past decades (Flynn, 1999). Although the increase varies somewhat from country to country, the average increase is about 3 IQ points every ten years. There are many explanations for the Flynn effect, including better nutrition, increased access to information, and more familiarity with multiple-choice tests (Neisser, 1998). But whether people are actually getting smarter is debatable (Neisser, 1997).

Once the standardization has been accomplished, we have a picture of the average abilities of people at different ages and can calculate a person's **mental age**, which is the age at which a person is performing intellectually. If we compare the mental age

of a person to the person's chronological age, the result is the **intelligence quotient (IQ),** a measure of intelligence that is adjusted for age. A simple way to calculate IQ is by using the following formula:

$$IQ = \text{mental age} \div \text{chronological age} \times 100.$$

Thus a 10-year-old child who does as well as the average 10-year-old child has an IQ of 100 (10 ÷ 10 × 100), whereas an 8-year-old child who does as well as the average 10-year-old child would have an IQ of 125 (10 ÷ 8 × 100). Most modern intelligence tests are based on the relative position of a person's score among people of the same age, rather than on the basis of this formula, but the idea of an intelligence "ratio" or "quotient" provides a good description of the score's meaning.



1. Which of the following is the most similar to 1313323?
   A. ACACCBC
   B. CACAABC
   C. ABABBCA
   D. ACACCDC

2. Jenny has some chocolates. She eats two and gives half of the remainder to Lisa. If Lisa has six chocolates how many does Jenny have in the beginning?
   A. 6
   B. 12
   C. 14
   D. 18

3. Which of the following items is not like the others in the list?
   *duck, raft, canoe, stone, rubber ball*
   A. Duck
   B. Canoe
   C. Stone
   D. Rubber ball

4. What do steam and ice have in common?
   A. They can both harm skin
   B. They are both made from water
   C. They are both found in the kitchen
   D. They are both the products of water at extreme temperatures

Answers: 1) A; 2) C; 3) stone; 4) D is the most sophisticated answer

**Figure 6.6.1.** Examples of the types of items you might see on an intelligence test.

https://assessments.lumenlearning.co...essments/16599

## Wechsler Scales

The **Wechsler Adult Intelligence Scale (WAIS)** is the most widely used intelligence test for adults (Watkins, Campbell, Nieberding, & Hallmark, 1995). The current version of the WAIS, the WAIS-IV, was standardized on 2,200 people ranging from 16 to 90 years of age. It consists of 15 different tasks, each designed to assess intelligence, including working memory, arithmetic ability, spatial ability, and general knowledge about the world. The WAIS-IV yields scores on four domains: verbal, perceptual, working memory, and processing speed. The reliability of the test is high (more than 0.95), and it shows substantial construct validity. The WAIS-IV is correlated highly with other IQ tests such as the Stanford-Binet, as well as with criteria of academic and life success, including college grades, measures of work performance, and occupational level. It also shows significant correlations with measures of everyday functioning among people with intellectual disabilities.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 6.1.2.** Brain vs. Bias provides an overview of the WAIS & WISC tests, standardization and validity, and IQ performance.

The Wechsler scale has also been adapted for preschool children in the form of the *Wechsler primary and preschool scale of*

*intelligence-fourth edition (WPPSI-IV)* and for older children and adolescents in the form of the *Wechsler intelligence scale for children-fifth edition (WISC-V)*.

## Bias in Intelligence Testing

Intelligence tests and psychological definitions of intelligence have been heavily criticized since the 1970s for being biased in favor of Anglo-American, middle-class respondents and for being inadequate tools for measuring non-academic types of intelligence or talent. Intelligence changes with experience, and intelligence quotients or scores do not reflect that ability to change. What is considered smart varies culturally as well, and most intelligence tests do not take this variation into account. For example, in the West, being smart is associated with being quick. A person who answers a question the fastest is seen as the smartest, but in some cultures, being smart is associated with considering an idea thoroughly before giving an answer. A well-thought out, contemplative answer is the best answer.

## watch it

**Video 6.1.3.** Watch this video to learn more about the history behind intelligence testing.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Theories of Intelligence**

Psychologists have long debated how to best conceptualize and measure intelligence (Sternberg, 2003). These questions include how many types of intelligence there are, the role of nature versus nurture in intelligence, how intelligence is represented in the brain, and the meaning of group differences in intelligence.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 6.6.4.** Theories of Intelligence reviews a few of the different theoretical views of intelligence.

## General Intelligence Factor ("*g*")

From 1904-1905 the French psychologist Alfred Binet (1857–1914) and his colleague Théodore Simon (1872–1961) began working on behalf of the French government to develop a measure that would identify children who would not be successful with the regular school curriculum. The goal was to help teachers better educate these students (Aiken, 1994). Binet and Simon developed what most psychologists today regard as the first intelligence test, which consisted of a wide variety of questions that included the ability to name objects, define words, draw pictures, complete sentences, compare items, and construct sentences.

Binet and Simon (Binet, Simon, & Town, 1915; Siegler, 1992) believed that the questions they asked the children all assessed the basic abilities to understand, reason, and make judgments. It turned out that the correlations among these different types of

measures were, in fact, all positive; that is, students who got one item correct were more likely to also get other items correct, even though the questions themselves were very different.

On the basis of these results, the psychologist Charles Spearman (1863–1945) hypothesized that there must be a single underlying construct that all of these items measure. He called the construct that the different abilities and skills measured on intelligence tests have in common the **general intelligence factor (*g*).** Virtually all psychologists now believe that there is a generalized intelligence factor, "g," that relates to abstract thinking and that includes the abilities to acquire knowledge, to reason abstractly, to adapt to novel situations, and to benefit from instruction and experience (Gottfredson, 1997; Sternberg, 2003). People with higher general intelligence learn faster.

Soon after Binet and Simon introduced their test, the American psychologist Lewis Terman at Stanford University (1877–1956) developed an American version of Binet's test that became known as the *Stanford- Binet intelligence test*. The Stanford-Binet is a measure of general intelligence made up of a wide variety of tasks, including vocabulary, memory for pictures, naming of familiar objects, repeating sentences, and following commands.

## Sternberg's Triarchic theory

Although there is general agreement among psychologists that "g" exists, there is also evidence for **specific intelligence** "s," *a measure of specific skills in narrow domains*. One empirical result in support of the idea of "s" comes from intelligence tests themselves. Although the different types of questions do correlate with each other, some items correlate more highly with each other than do other items; they form clusters or clumps of intelligences.

One advocate of the idea of multiple intelligences is the psychologist Robert Sternberg. Sternberg has proposed a **Triarchic (three-part) Theory of Intelligence** that proposes that *people may display more or less analytical intelligence, creative intelligence, and practical intelligence*. Sternberg (1985, 2003) argued that traditional intelligence tests assess **analytical intelligence**, *academic problem solving and performing calculations,* but that they do not typically assess **creative intelligence**, *the ability to adapt to new situations and create new ideas*, and/or **practical intelligence**, *the ability to demonstrate common sense and street- smarts.*

As Sternberg proposed, research has found that creativity is not highly correlated with analytical intelligence (Furnham & Bakhtiar, 2008), and exceptionally creative scientists, artists, mathematicians, and engineers do not score higher on intelligence than do their less creative peers (Simonton, 2000). Furthermore, the brain areas that are associated with **convergent thinking**, *thinking that is directed toward finding the correct answer to a given problem*, are different from those associated with **divergent thinking**, *the ability to generate many different ideas or solutions to a single problem* (Tarasova, Volf, & Razoumnikova, 2010). On the other hand, being creative often takes some of the basic abilities measured by "g," including the abilities to learn from experience, to remember information, and to think abstractly (bink & marsh, 2000). Ericsson (1998), Weisberg (2006), Hennessey and Amabile (2010), and Simonton (1992) studied creative people and identified at least five components that are likely to be important for creativity as listed in the table below.

*Table 6.6.1. Important components for creativity*

| Component | Description |
|---|---|
| Expertise | Creative people have studied and learned about a topic |
| Imaginative Thinking | Creative people view problems in new and different ways |
| Risk-Taking | Creative people take on new, but potentially risky approaches |
| Intrinsic Interest | Creative people take on projects for interest, not money |
| Working in Creative Environments | The most creative people are supported, aided, and challenged by other people working on similar projects |

The last aspect of the triarchic model, practical intelligence, refers primarily to intelligence that cannot be gained from books or formal learning. Practical intelligence represents a type of "street smarts" or "common sense" that is learned from life experiences. Although a number of tests have been devised to measure practical intelligence (Sternberg, Wagner, & Okazaki, 1993; Wagner & Sternberg, 1985), research has not found much evidence that practical intelligence is distinct from "g" or that it is predictive of success at any particular tasks (Gottfredson, 2003). Practical intelligence may include, at least in part, certain abilities that help people perform well at specific jobs, and these abilities may not always be highly correlated with general intelligence (Sternberg et al., 1993).

## Gardner's Frame of Mind

**Theory of multiple intelligences:** another champion of the idea of specific types of intelligences rather than one overall intelligence is the psychologist Howard Gardner (1983, 1999). Gardner argued that it would be evolutionarily functional for different people to have different talents and skills, and proposed that there are eight intelligences that can be differentiated from each other. A potential ninth intelligence, existential intelligence, still needs empirical support. Gardner investigated intelligences by focusing on children who were talented in one or more areas and adults who suffered from strokes that compromised some capacities, but not others. Gardner also noted that some evidence for multiple intelligences comes from the abilities of **autistic savants**, *people who score low on intelligence tests overall but who nevertheless may have exceptional skills in a given domain*, such as math, music, art, or in being able to recite statistics in a given sport (Treffert & Wallace, 2004). In addition to brain damage and the existence of savants, Gardner identified these 8 intelligences based on other criteria, including a set developmental history and psychometric findings. See table 5.4 for a list of Gardner's eight specific intelligences.

*Table 6.6.2. Howard Gardner's eight specific intelligences*

| Intelligence | Description |
|---|---|
| Linguistic | The ability to speak and write well |
| Logical-mathematical | The ability to use logic and mathematical skills to solve problems |
| Spatial | The ability to think and reason about objects in three dimensions |
| Musical | The ability to perform and enjoy music |
| Kinesthetic (body) | The ability to move the body in sports, dance, or other physical activities |
| Interpersonal | The ability to understand and interact effectively with others |
| Intrapersonal | The ability to have insight into the self |
| Naturalistic | The ability to recognize, identify, and understand animals, plants, and other living things |

Source: Adapted from Gardner, H. (1999). Intelligence Framed: Multiple Intelligences for the 21st Century. New York, NY: Basic Books.

The idea of multiple intelligences has been influential in the field of education, and teachers have used these ideas to try to teach differently to different students. For instance, to teach math problems to students who have particularly good kinesthetic intelligence, a teacher might encourage the students to move their bodies or hands according to the numbers. On the other hand, some have argued that these "intelligences" sometimes seem more like "abilities" or "talents" rather than real intelligence. There is no clear conclusion about how many intelligences there are. Our sense of humor, artistic skills, dramatic skills, and so forth also separate intelligences? Furthermore, and again demonstrating the underlying power of a single intelligence, the many different intelligences are, in fact, correlated and thus represent, in part, "g" (Brody, 2003).

https://lumenlearning.h5p.com/content/1290777754718118168/embed

# Extremes of Intelligence: Intellectual Disability and Giftedness

The results of studies assessing the measurement of intelligence show that IQ is distributed in the population in the form of a **Normal Distribution (or bell curve),** which *is the pattern of scores usually observed in a variable that clusters around its average*. In a normal distribution, the bulk of the scores fall toward the middle, with many fewer scores falling at the extremes. The normal distribution of intelligence shows that on IQ tests, as well as on most other measures, the majority of people cluster around the average (in this case, where IQ = 100), and fewer are either very smart or very dull (see Figure 5.10). Because the standard deviation of an IQ test is about 15, this means that about 2% of people score above an IQ of 130, often considered the threshold for giftedness, and about the same percentage score below an IQ of 70, often being considered the threshold for intellectual disability.

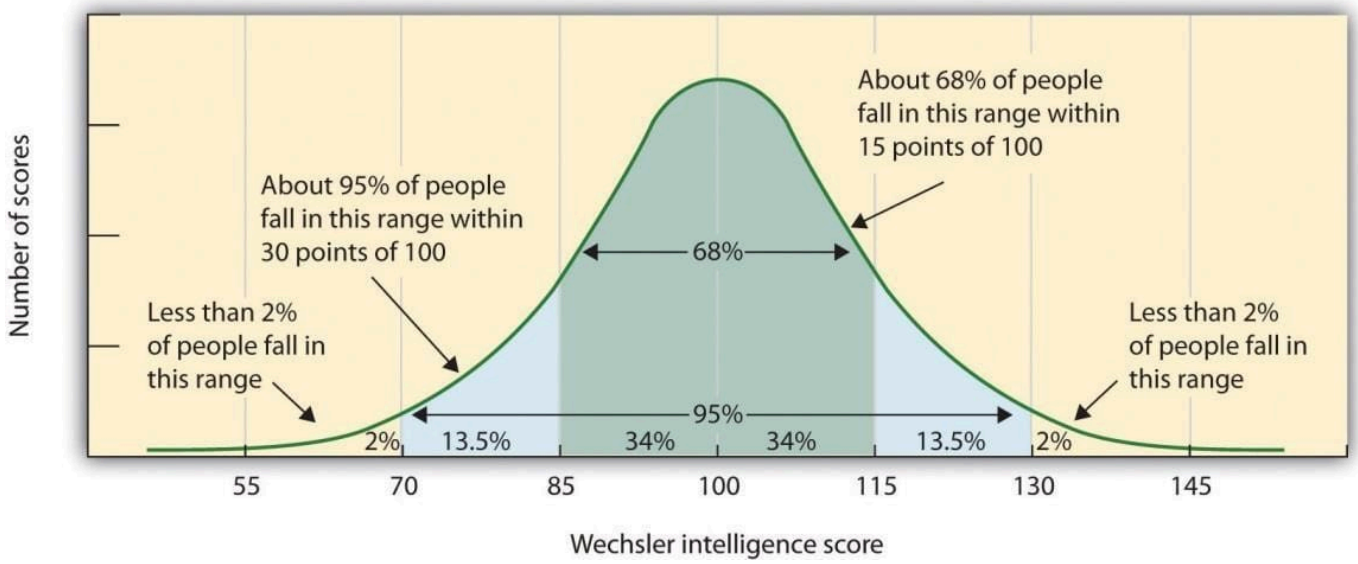



**Figure 6.6.2.** Distribution of IQ Scores in the General PopulationThe normal distribution of IQ scores in the general population shows that most people have about average intelligence, while very few have extremely high or extremely low intelligence.

People with very low IQ define one end of the distribution of intelligence scores. **Intellectual disability** (or **intellectual developmental disorder**) is assessed based on cognitive capacity (IQ) and adaptive functioning. The severity of the disability is based on adaptive functioning, or how well the person handles everyday life tasks. About 1% of the United States population, most of them males, fulfill the criteria for intellectual developmental disorder, but some children who are given this diagnosis lose the classification as they get older and better learn to function in society. A particular vulnerability of people with low IQ is that they may be taken advantage of by others, and this is an important aspect of the definition of intellectual developmental disorder (Greenspan, Loughlin, & Black, 2001).

**Giftedness** *refers to those who have an IQ of 130 or higher* (Lally & Valentine-French, 2015). Having an extremely high IQ is clearly less of a problem than having an extremely low IQ, but there may also be challenges to being particularly smart. It is often assumed that schoolchildren who are labeled as "gifted" may have adjustment problems that make it more difficult for them to create social relationships. To study gifted children, Lewis Terman and his colleagues (Terman & Oden, 1959) selected about 1,500 high school students who scored in the top 1% on the Stanford-Binet and similar IQ tests (i.e., who had IQs of about 135 or higher), and tracked them for more than seven decades (the children became known as the "termites" and are still being studied today). This study found that these students were not unhealthy or poorly adjusted, but rather were above average in physical health and were taller and heavier than individuals in the general population. The students also had above-average social relationships and were less likely to divorce than the average person (Seagoe, 1975).

Terman's study also found that many of these students went on to achieve high levels of education and entered prestigious professions, including medicine, law, and science. Of the sample, 7% earned doctoral degrees, 4% earned medical degrees, and 6% earned law degrees. These numbers are all considerably higher than what would have been expected from a more general population. Another study of young adolescents who had even higher IQs found that these students ended up attending graduate school at a rate more than 50 times higher than that in the general population (Lubinski & Benbow, 2006).

As you might expect based on our discussion of intelligence, kids who are gifted have higher scores on general intelligence "g," but there are also different types of giftedness. Some children are particularly good at math or science, some at automobile repair or carpentry, some at music or art, some at sports or leadership, and so on. There is a lively debate among scholars about whether it is appropriate or beneficial to label some children as "gifted and talented" in school and to provide them with accelerated special classes and other programs that are not available to everyone. Although doing so may help the gifted kids (Colangelo & Assouline, 2009), it also may isolate them from their peers and make such provisions unavailable to those who are not classified as "gifted."

## Candela Citations

CC licensed content, Original

- Intelligence. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad.../intelligence/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Specific attribution

- Intelligence. **Authored by**: Carole Yue. **Provided by**: Khan Academy. **Retrieved from**: https://youtu.be/F9n3hLnwwc0. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike
- Theories of Intelligence. **Authored by**: Brooke Miller. **Provided by**: Khan Academy . **Retrieved from**: https://youtu.be/oaJ01Ex7DLw. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

This page titled 6.5: Intelligence is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 6.5: Intelligence by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

**adolescent egocentrism:** a characteristic of adolescent thinking that leads young people (ages 10-13) to focus on themselves to the exclusion of others (according to David Elkind)

**analytic thought:** thought that results from analysis, such as a systematic ranking of pros and cons, risks and consequences, possibilities, and facts. Analytic thought depends on logic and rationality

**behavioral decision-making theory:** proposes that adolescents and adults both weigh the potential rewards and consequences of an action. However, research has shown that adolescents seem to give more weight to rewards, particularly social rewards than do adults

**constructivist perspective:** based on the work of Piaget, a quantitative, stage-theory approach. This view hypothesizes that adolescents' cognitive improvement is relatively sudden and drastic, as adolescents learn by acting on their environment and they actively construct knowledge

**deductive reasoning:** reasoning from a general statement, premise, or principle, though logical steps to figure out (deduce) specifics. Also called top-down processing

**divided attention:** the ability to pay attention to two or more stimuli at the same time; this ability improves during adolescence

**dual process model/dual processing:** the notion that two networks exist within the human brain, one for emotional processing of stimuli and one for analytic reasoning

**formal operational thought:** the fourth and final stage of Piaget's theory of cognitive development, characterized by more systematic logical thinking and by the ability to understand and systematically manipulate abstract concepts

**hypothetical thought:** reasoning that includes propositions and possibilities that may not reflect reality

**imaginary audience:** the other people who, in an adolescent's egocentric belief, are watching and taking note of his or her appearance, ideas, and behavior. This belief makes many adolescents very self-conscious

**information-processing perspective:** derives from the study of artificial intelligence and explains cognitive development in terms of the growth of specific components of the overall process of thinking

**intuitive thought:** thoughts that arise from an emotion or a hunch, beyond rational explanation, and is influenced by past experiences and cultural assumptions

**invincibility fable:** an adolescent's egocentric conviction that he or she cannot be overcome or even harmed by anything that might defeat a normal mortal, such as unprotected sex, drug abuse, or high-speed driving

**metacognition:** refers to "thinking about thinking" and it is relevant in social cognition and results in increased introspection, self-consciousness, and intellectualization during adolescence

**mnemonic devices:** mental strategies to help learn and remember information more efficiently; improves during adolescence

**personal fable:** an aspect of adolescent egocentrism characterized by an adolescent's belief that his or her thoughts, feelings, and experiences are unique, more wonderful, or more awful than anyone else's

**relativistic thinking:** thinking that understands the relative, or situational, nature of circumstances

**selective attention:** the process by which one focuses on one stimulus while tuning out another; this ability improves during adolescence

---

This page titled 6.6: Glossary is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 6.6: Glossary by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 7: LEARNING, ACHIEVEMENT, AND WORK IN ADOLESCENCE

## Learning Objectives

- Identify the functions of education
- Explain the symptoms and impact of learning disabilities, autism spectrum disorder, and attention deficit hyperactivity disorder
- Identify factors that impact academic achievement
- Explain the functions of different levels of schooling
- Identify trends in teens working
- Explain career development according to Holland

Remember the ecological systems model that we explored early in the course? This model helps us understand an individual by examining the contexts in which the person lives and the direct and indirect influences on that person's development. School and work become an essential component of a teen's life. Parents, educators, and society contribute to teen's experiences in school and work, as indicated by the ecological systems model through their interaction.


7.1: Education

7.2: Understanding Learning Difficulties

7.3: Academic Achievement

7.4: Work and Career

7.5: Glossary



This page titled 7: Learning, Achievement, and Work in Adolescence is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 7: Learning, Achievement, and Work in Adolescence by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 7.1: Education

Often, we use the terms “schooling” and “education” interchangeably, but they have different meanings. Education is not solely concerned with the basic academic concepts that a student learns in the classroom. Education is a social institution through which a society’s children are taught basic academic knowledge, learning skills, and cultural norms. Societies also educate their children outside of the school system in matters of everyday practical living. These two types of learning are referred to as formal education and informal education.

**Formal education** describes the learning of academic facts and concepts through a formal curriculum. Arising from the tutelage of ancient Greek thinkers, centuries of scholars have examined topics through formalized methods of learning. Education in earlier times was only available to the higher classes; they had the means for access to scholarly materials, plus the luxury of leisure time that could be used for learning. The Industrial Revolution and its accompanying social changes made education more accessible to the general population. Many families in the emerging middle class found new opportunities for schooling.

The modern U.S. educational system is the result of this progression. Today, basic education is considered a right and responsibility for all citizens. Expectations of this system focus on formal education, with curricula and testing designed to ensure that students learn the facts and concepts that society believes are basic knowledge.

In contrast, **informal education** describes learning about cultural values, norms, and expected behaviors by participating in society. This type of learning occurs both through the formal education system and at home. Our earliest learning experiences generally happen via parents, relatives, and others in our community. Through informal education, we learn how to dress for different occasions, how to perform regular life routines like shopping for and preparing food, and how to keep our bodies clean.

## The Functions of Schools

Schools teach us far more than reading, writing, and arithmetic. They also socialize us to cultural norms and expectations of our society. These cultural expectations and norms are reinforced by our teachers, our textbooks, and our classmates. (For students outside the dominant culture, this aspect of the education system can pose significant challenges.) You might remember learning your multiplication tables in second grade and also learning the social rules of taking turns on the swings at recess. You might recall learning about the U.S. Constitution in an American Government course as well as learning when and how to speak up in class.

Schools are one of the more important social institutions in a society and contribute to two kinds of functions: manifest (or primary) functions, which are the intended and visible functions of education; and latent (or secondary) functions, which are the hidden and unintended functions.

### Manifest Functions of Education

There are several major manifest functions associated with education. The first is socialization. Beginning in preschool and kindergarten, students are taught to practice various societal roles. The French sociologist Émile Durkheim (1858–1917), who established the academic discipline of sociology, characterized schools as “socialization agencies that teach children how to get along with others and prepare them for adult economic roles” (Durkheim 1898). Indeed, it seems that schools have taken on this responsibility in full.

This socialization also involves learning the rules and norms of society as a whole. In the early days of compulsory education, students learned the dominant culture. Today, since the culture of the United States is increasingly diverse, students may learn a variety of cultural norms, not only that of the dominant culture.

School systems in the United States also transmit the core values of the nation through manifest functions like social control. One of the roles of schools is to teach students conformity to law and respect for authority. Obviously, such respect, given to teachers and administrators, will help a student navigate the school environment. This function also prepares students to enter the workplace and the world at large, where they will continue to be subject to people who have authority over them. The fulfillment of this function rests primarily with classroom teachers and instructors who are with students all day.

Education also provides one of the major methods used by people for upward social mobility. This function is referred to as **social**

**placement**. College and graduate schools are viewed as vehicles for moving students closer to the careers that will give them the financial freedom and security they seek. As a result, college students are often more motivated to study areas that they believe will be advantageous on the social ladder. A student might value business courses over a class in Victorian poetry because she sees business class as a stronger vehicle for financial success.

## Latent Functions of Education

Education also fulfills latent functions. As you well know, much goes on in a school that has little to do with formal education. For example, you might notice an attractive fellow student when he gives a particularly interesting answer in class—catching up with him and making a date speaks to the latent function of courtship fulfilled by exposure to a peer group in the educational setting.

The educational setting introduces students to social networks that might last for years and can help people find jobs after their schooling is complete. Of course, with social media such as Facebook and LinkedIn, these networks are easier than ever to maintain. Another latent function is the ability to work with others in small groups, a skill that is transferable to a workplace, and that might not be learned in a homeschool setting.

The educational system, especially as experienced on university campuses, has traditionally provided a place for students to learn about various social issues. There is ample opportunity for social and political advocacy, as well as the ability to develop tolerance to the many views represented on campus. In 2011, the Occupy Wall Street movement swept across college campuses all over the United States, leading to demonstrations in which diverse groups of students were unified with the purpose of changing the political climate of the country.

Another role of schools, according to functionalist theory, is that of **sorting** or classifying students based on academic merit or potential. The most capable students are identified early in schools through testing and classroom achievements. Such students are placed in accelerated programs in anticipation of successful college attendance.

School, particularly in recent years, is taking over some of the functions that were traditionally undertaken by family. Society relies on schools to teach about human sexuality as well as basic skills such as budgeting and job applications—topics that at one time, were addressed by the family.

*Table 7.2.1. Manifest and Latent Functions of Education*

| Manifest Functions: Openly stated functions with intended goals | Latent Functions: Hidden, unstated functions with sometimes unintended consequences |
|---|---|
| Socialization | Courtship |
| Transmission of culture | Social networks |
| Social control | Working in groups |
| Social placement | Creation of generation gap |
| Cultural innovation | Political and social integration |

# Student Diversity

Diversity means different things to different people, and it can be understood differently in different environments. In the context of education, diversity generally refers to the differences among people in the school environment by race, culture, ethnicity, religion, socioeconomic status, sexual orientation, abilities, opinions, political views, and in other ways. We also think about how groups interact with one another, given their differences (even if they're just perceived differences.) How do diverse populations experience and explore their relationships?

Students have, of course, always been diverse. Whether in the past or in the present day, students learn at unique paces, show unique personalities, and learn in their own ways. In recent decades, though, the forms and extent of diversity have increased. Now more than ever, teachers are likely to serve students from diverse language backgrounds, to serve more individuals with special educational needs, and to teach students either younger and older than in the past.

## Cultural and Language Diversity

Take the case of language diversity. In the United States, about 40 million people, or 14% of the population are Hispanic. About 20% of these speak primarily Spanish, and approximately another 50% speak only limited English (United States Census Bureau, 2005). The educators responsible for the children in this group need to accommodate instruction to these students somehow. Part of the solution, of course, is to arrange specialized second-language teachers and classes. But adjustment must also happen in "regular" classrooms of various grade levels and subjects. Classroom teachers must learn to communicate with students whose English language background is limited, at the same time that the students themselves are learning to use English more fluently (Pitt, 2005). Since relatively few teachers are Hispanic or speak fluent Spanish, the adjustments can sometimes be a challenge. Teachers must plan lessons and tasks that students actually understand. At the same time, teachers must also keep track of the major learning goals of the curriculum.

- Cultures and ethnic groups differ not only in languages but also in how languages are used. Since some of the patterns differ from those typical of modern classrooms, they can create misunderstandings between teachers and students (Cazden, 2001; Rogers et al., 2005). Consider these examples:
- In some cultures, it is considered polite or even intelligent not to speak unless you have something truly important to say. Chitchat, or talk that simply affirms a personal tie between people, is considered immature or intrusive (Minami, 2002). In a classroom, this habit can make it easier for a child to learn not to interrupt others, but it can also make the child seem unfriendly.
- Eye contact varies by culture. In many African American and Latin American communities, it is considered appropriate and respectful for a child not to look directly at an adult who is speaking to them (Torres-Guzman, 1998). In classrooms, however, teachers often expect a lot of eye contact (as in "I want all eyes on me!") and may be tempted to construe a lack of eye contact as a sign of indifference or disrespect.
- Social distance varies by culture. In some cultures, it is common to stand relatively close when having a conversation; in others, it is more customary to stand relatively far apart (Beaulieu, 2004). Problems may happen when a teacher and student prefer different social distances. A student who expects a closer distance than does the teacher may seem overly familiar or intrusive, whereas one who expects a longer distance may seem overly formal or hesitant.
- Wait time varies by culture. Wait time is the gap between the end of one person's comment or question and the next person's reply or answer. In some cultures, wait time is relatively long, as long as three or four seconds (Tharp & Gallimore, 1989). In others, it is a negative gap, meaning that it is acceptable, even expected, for a person to interrupt before the end of the previous comment. In classrooms, the wait time is customarily about one second; after that, the teacher is likely to move on to another question or to another student. A student who habitually expects a wait time longer than one second may seem hesitant, and not be given many chances to speak. A student who expects a negative wait time, on the other hand, may seem overeager or even rude.
- In most non-Anglo cultures, questions are intended to gain information, and it is assumed that a person asking the question truly does not have the information requested (Rogoff, 2003). In most classrooms, however, teachers regularly ask test questions, which are questions to which the teacher already knows the answer, and that simply assess whether a student knows the answer as well (Macbeth, 2003). The question: "How much is 2 + 2?" for example, is a test question. If the student is not aware of this purpose, he or she may become confused, or think that the teacher is surprisingly ignorant. Worse yet, the student may feel that the teacher is trying deliberately to shame the student by revealing the student's ignorance or incompetence to others.
- Preference for activities that are cooperative rather than competitive. Many activities in school are competitive, even when teachers try to de-emphasize the competition. Once past the first year or second year of school, students often become attentive to who receives the highest marks on an assignment, for example, or who is the best athlete at various sports or whose contributions to class discussions gets the most verbal recognition from the teacher (Johnson & Johnson, 1998). A teacher deliberately organizes important activities or assignments competitively, as in "Let's see who finishes the math sheet first." Classroom life can then become explicitly competitive, and the competitive atmosphere can interfere with cultivating supportive relationships among students or between students and the teacher (Cohen, 2004). For students who give priority to these relationships, competition can seem confusing at best and threatening at worst. A student may wonder, "What sort of sharing or helping with answers is allowed?" The answer to this question may be different depending on the cultural background of the student and teacher. What the student views as cooperative sharing may be seen by the teacher as laziness, freeloading, or even cheating.

## Diversity of Special Educational Needs

Another factor making classrooms increasingly diverse has been the inclusion of students with disabilities into classrooms with non-disabled peers. In the United States, the trend began in the 1970s, but accelerated with the passage of the Individuals

with Disabilities Education Act in 1975, and again when the Act was amended in 2004 (United States Government Printing Office, 2005). The law guarantees free, appropriate education for children with disabilities of any kind—whether the impairment is physical, cognitive, emotional, or behavioral. The laws also recognize that such students need special supports in order to learn or function effectively in a classroom with non-disabled peers, so they provide for special services (for example, teaching assistants) and procedures for making individualized educational plans for students with disabilities.

## Children with Disabilities: Legislation

Since the 1970s, political and social attitudes have moved increasingly toward including people with disabilities into a wide variety of "regular" activities. In the United States, the shift is illustrated clearly in the Federal legislation that was enacted during this time. Three major laws were passed that guaranteed the rights of persons with disabilities, and of children and students with disabilities in particular. The third law has had the biggest impact on education.

**Rehabilitation Act of 1973, Section 504:** This law, the first of its kind, required that individuals with disabilities be accommodated in any program or activity that receives Federal funding (PL 93-112, 1973). Although this law was not intended specifically for education, in practice, it has protected students' rights in some extra-curricular activities (for older students) and in some child care or after-school care programs (for younger students). If those programs receive Federal funding of any kind, the programs are not allowed to exclude children or youths with disabilities, and they have to find reasonable ways to accommodate the individuals' disabilities.

**Americans with Disabilities Act of 1990 (or ADA):** This legislation also prohibited discrimination on the basis of disability, just as Section 504 of the Rehabilitation Act had done (PL 101-336, 1990). Although the ADA also applies to all people (not just to students), its provisions are more specific and "stronger" than those of Section 504. In particular, ADA extends to all employment and jobs, not just those receiving Federal funding. It also specifically requires accommodations to be made in public facilities such as with buses, restrooms, and telephones. ADA legislation is therefore responsible for some of the "minor" renovations in schools that you may have noticed in recent years, like wheelchair-accessible doors, ramps, and restrooms, and public telephones with volume controls.

**Individuals with Disabilities Education Act (or IDEA):** As its name implied, this legislation was more focused on education than either Section 504 or ADA. It was first passed in 1975 and has been amended several times since, including most recently in 2004 (PL 108-446, 2004). To be eligible under IDEA, a student must be adversely affected in oral expression, listening comprehension, written expression, basic reading skills, reading fluency skills, reading comprehension, mathematics calculation, or mathematics problem-solving. In its current form, the law guarantees the following rights related to education for anyone with a disability from birth to age 21. The first two influence schooling in general, but the last three affect the work of classroom teachers rather directly:

- *Free, appropriate education*: An individual or an individual's family should not have to pay for education simply because the individual has a disability, and the educational program should be truly educational; i.e., not merely care-taking or babysitting the person.
- *Due process*: In case of disagreements between an individual with a disability and the schools or other professionals, there must be procedures for resolving the disagreements that are fair and accessible to all parties, including the person himself or herself or the person's representative.
- *Fair evaluation of performance in spite of disability*: Tests or other evaluations should not assume test-taking skills that a person with a disability cannot reasonably be expected to have, such as holding a pencil, hearing or seeing questions, working quickly, or understanding and speaking orally. Evaluation procedures should be modified to allow for these differences. This provision of the law applies both to evaluations made by teachers and to school-wide or "high-stakes" testing programs.
- *Education in the "least restrictive environment"*: Education for someone with a disability should provide as many educational opportunities and options for the person as possible, both in the short term and in the long term. In practice, this requirement has meant including students in regular classrooms and school activities as much as possible, though often not totally.
- *An individualized educational program*: Given that every disability is unique, instructional planning for a person with a disability should be unique or individualized as well. In practice, this provision has led to classroom teachers planning individualized programs jointly with other professionals (like reading specialists, psychologists, or medical personnel) as part of a team.

## Students with Disabilities

Students are eligible for the rights afforded under the IDEA if their academic achievement is being impacted due to a learning disability, autism spectrum disorder, visual or hearing impairment, orthopedic impairment, traumatic brain injury, speech or language impairment, intellectual disability, emotional disturbance, or other health impairment.

### Learning Disabilities

A **Learning Disability** (or LD) is a specific impairment of academic learning that interferes with a specific aspect of schoolwork, and that reduces a student's academic performance significantly. An LD shows itself as a major discrepancy between a student's ability and some feature of achievement: The student may be delayed in reading, writing, listening, speaking, or doing mathematics, but not in all of these at once. A learning problem is not considered a learning disability if it stems from physical, sensory, or motor handicaps, or from generalized intellectual impairment. It is also not an LD if the learning problem really reflects the challenges of learning English as a second language. Genuine LDs are the learning problems left over after these other possibilities are accounted for or excluded. Typically, a student with an LD has not been helped by teachers' ordinary efforts to assist the student when he or she falls behind academically, though what counts as an "ordinary effort," of course, differs among teachers, schools, and students. Most importantly, though, an LD relates to a fairly specific area of academic learning. A student may be able to read and compute well enough, for example, but not be able to write. LDs are by far the most common form of special educational need, accounting for half of all students with special needs in the United States and anywhere from 5 to 20% of all students, depending on how the numbers are estimated (United States Department of Education, 2005; Ysseldyke & Bielinski, 2002). Students with LDs are so common, in fact, that most teachers regularly encounter at least one per class in any given school year, regardless of the grade level they teach.

These difficulties are identified in school because this is when children's academic abilities are being tested, compared, and measured. Consequently, once academic testing is no longer essential in that person's life (as when they are working rather than going to school), these disabilities may no longer be noticed or relevant, depending on the person's job and the extent of the disability.

https://youtu.be/RKCNqHEzLwQ

**Video 7.2.1.** Learning Disability explains the different types of disabilities and their symptoms.

**Dyslexia** is one of the most commonly diagnosed disabilities and involves having difficulty in the area of reading. This diagnosis is used for a number of reading difficulties. Common characteristics are difficulty with phonological processing, which includes the manipulation of sounds, spelling, and rapid visual/verbal processing. Additionally, the child may reverse letters, have difficulty reading from left to right, or may have problems associating letters with sounds. It appears to be rooted in neurological problems involving the parts of the brain active in recognizing letters, verbally responding, or being able to manipulate sounds. Recent studies have identified a number of genes that are linked to developing dyslexia (National Institute of Neurological Disorders and Stroke, 2016). Treatment typically involves altering teaching methods to accommodate the person's particular problematic area.

**Dysgraphia,** a writing disability, is often associated with dyslexia (Carlson, 2013). There are different types of dysgraphia, including phonological dysgraphia, when the person cannot sound out words and write them phonetically. Orthographic dysgraphia is demonstrated by those individuals who can spell regularly spelled words, but not irregularly spelled ones. Some individuals with dysgraphia experience difficulties in motor control and experience trouble forming letters when using a pen or pencil.

**Dyscalculia** refers to problems in math. Cowan and Powell (2014) identified several terms used when describing difficulties in mathematics, including dyscalculia, mathematical learning disability, and mathematics disorder. All three terms refer to students with average intelligence who exhibit poor academic performance in mathematics. When evaluating a group of third graders, Cowan and Powell (2014) found that children with dyscalculia demonstrated problems with working memory, reasoning, processing speed, and oral language, all of which are referred to as domain-general factors. Additionally, problems with multi-digit skills, including number system knowledge, were also exhibited.

https://assessments.lumenlearning.co...essments/16597

### Autism Spectrum Disorder

**Autism spectrum disorder** (ASD) is probably the most misunderstood and puzzling of neurodevelopmental disorders. Children with this disorder show signs of significant disturbances in three main areas: (a) deficits in social interaction, (b) deficits in

communication, and (c) repetitive patterns of behavior or interests. These disturbances appear early in life and cause serious impairments in functioning (APA, 2013). The child with autism spectrum disorder might exhibit deficits in social interaction by not initiating conversations with other children or turning their head away when spoken to. These children do not make eye contact with others and seem to prefer playing alone rather than with others. In a certain sense, it is almost as though these individuals live in a personal and isolated social world others are simply not privy to or able to penetrate. Communication deficits can range from a complete lack of speech to one-word responses (e.g., saying “Yes” or “No” when replying to questions or statements that require additional elaboration), echoed speech (e.g., parroting what another person says, either immediately or several hours or even days later), to difficulty maintaining a conversation because of an inability to reciprocate others’ comments. These deficits can also include problems in using and understanding nonverbal cues (e.g., facial expressions, gestures, and postures) that facilitate normal communication.

Repetitive patterns of behavior or interests can be exhibited in a number of ways. The child might engage in stereotyped, repetitive movements (rocking, head-banging, or repeatedly dropping an object and then picking it up), or she might show great distress at small changes in routine or the environment. For example, the child might throw a temper tantrum if an object is not in its proper place or if a regularly- scheduled activity is rescheduled. In some cases, the person with autism spectrum disorder might show highly restricted and fixated interests that appear to be abnormal in their intensity. For instance, the child might learn and memorize every detail about something, even though doing so serves no apparent purpose. Importantly, autism spectrum disorder is not the same thing as intellectual disability, although these two conditions can occur together. The DSM-5 specifies that the symptoms of autism spectrum disorder are not caused or explained by intellectual disability.
The qualifier “spectrum” in autism spectrum disorder is used to indicate that individuals with the disorder can show a range, or spectrum, of symptoms that vary in their magnitude and severity: Some severe, others less severe. The previous edition of the DSM included a diagnosis of Asperger’s disorder, generally recognized as a less severe form of autistic disorder; individuals diagnosed with Asperger’s disorder were described as having average or high intelligence and strong vocabulary, but exhibiting impairments in social interaction and social communication, such as talking only about their special interests (Wing, Gould, & Gillberg, 2011). However, because research has failed to demonstrate that Asperger’s disorder differs qualitatively from autistic disorder, the DSM-5 does not include it. Some individuals with autism spectrum disorder, particularly those with better language and intellectual skills, can live and work independently as adults. However, most do not because the symptoms remain sufficient to cause serious impairment in many realms of life (APA, 2013).

Currently, estimates indicate that nearly 1 in 88 children in the United States have autism spectrum disorder; the disorder is 5 times more common in boys (1 out of 54) than girls (1 out of 252) (CDC, 2012). Rates of autistic spectrum disorder have increased dramatically since the 1980s. For example, California saw an increase of 273% in reported cases from 1987 through 1998 (Byrd, 2002); between 2000 and 2008, the rate of autism diagnoses in the United States increased 78% (CDC, 2012). Although it is difficult to interpret this increase, it is possible that the rise in prevalence is the result of the broadening of the diagnosis, increased efforts to identify cases in the community, and greater awareness and acceptance of the diagnosis. In addition, mental health professionals are now more knowledgeable about autism spectrum disorder and are better equipped to make the diagnosis, even in subtle cases (Novella, 2008).

The exact causes of autism spectrum disorder remain unknown despite massive research efforts over the last two decades (Meek, Lemery-Chalfant, Jahromi, & Valiente, 2013). Autism appears to be strongly influenced by genetics, as identical twins show concordance rates of 60%– 90%, whereas concordance rates for fraternal twins and siblings are 5%–10% (Autism Genome Project Consortium, 2007). Many different genes and gene mutations have been implicated in autism (Meek et al., 2013). Among the genes involved are those important in the formation of synaptic circuits that facilitate communication between different areas of the brain (Gauthier et al., 2011). A number of environmental factors are also thought to be associated with increased risk for autism spectrum disorder, at least in part, because they contribute to new mutations. These factors include exposure to pollutants, such as plant emissions and mercury, urban versus rural residence, and vitamin D deficiency (Kinney, Barch, Chayka, Napoleon, & Munir, 2009).

There is no scientific evidence that a link exists between autism and vaccinations (Hughes, 2007). Indeed, a recent study compared the vaccination histories of 256 children with autism spectrum disorder with that of 752 control children across three time periods during their first two years of life (birth to 3 months, birth to 7 months, and birth to 2 years) (DeStefano, Price, & Weintraub, 2013). At the time of the study, the children were between 6 and 13 years old, and their prior vaccination records were obtained. Because vaccines contain immunogens (substances that fight infections), the investigators examined medical records to see how many immunogens children received to determine if those children who received more immunogens were at greater risk for developing autism spectrum disorder. The results of this study clearly demonstrated that the number of immunogens from vaccines received during the first two years of life was not at all related to the development of autism spectrum disorder.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 7.2.2.** Autism Spectrum Disorder discusses the range of symptoms associated with ASD.

**Other Health Impairment**

**Attention Deficit Hyperactivity Disorder** (ADHD) is not a learning disability but can be considered as an 'other health impairment' if it is impacting academic performance. Individuals with ADHD show a constant pattern of inattention and/or hyperactive and impulsive behavior that interferes with normal functioning (American Psychological Association (APA), 2013). Some of the signs of inattention include great difficulty with, and avoidance of, tasks that require sustained attention (such as conversations or reading), failure to follow instructions (often resulting in failure to complete schoolwork and other duties), disorganization (difficulty keeping things in order, poor time management, sloppy and messy work), lack of attention to detail, becoming easily distracted, and forgetfulness. Hyperactivity is characterized by excessive movement, and includes fidgeting or squirming, leaving one's seat in situations when remaining seated is expected, having trouble sitting still (e.g., in a restaurant), running about and climbing on things, blurting out responses before another person's question or statement has been completed, difficulty waiting one's turn for something, and interrupting and intruding on others. Frequently, the hyperactive child comes across as noisy and boisterous. The child's behavior is hasty, impulsive, and seems to occur without much forethought; these characteristics may explain why adolescents and young adults diagnosed with ADHD receive more traffic tickets and have more automobile accidents than do others their age (Thompson, Molina, Pelham, & Gnagy, 2007).

ADHD occurs in about 5% of children (APA, 2013). On average, boys are 3 times more likely to have ADHD than are girls; however, such findings might reflect the greater propensity of boys to engage in aggressive and antisocial behavior and thus incur a greater likelihood of being referred to psychological clinics (Barkley, 2006). Children with ADHD face severe academic and social challenges. Compared to their non-ADHD counterparts, children with ADHD have lower grades and standardized test scores and higher rates of expulsion, grade retention, and dropping out (Loe & Feldman, 2007). They also are less well-liked and more often rejected by their peers (Hoza et al., 2005).

**Video 7.2.3.** Attention Deficit Hyperactivity Disorder explains the symptoms associated with the three types of ADHD.

**Is the prevalence rate of ADHD increasing?** Many people believe that the rates of ADHD have increased in recent years, and there is evidence to support this contention. In a recent study, investigators found that the parent-reported prevalence of ADHD among children (4–17 years old) in the United States increased by 22% during a 4-year period, from 7.8% in 2003 to 9.5% in 2007 (CDC, 2010). ADHD may be over-diagnosed by doctors who are too quick to medicate children as behavior treatment. There is also greater awareness of ADHD now than in the past. Nearly everyone has heard of ADHD, and most parents and teachers are aware of its key symptoms. Thus, parents may be quick to take their children to a doctor if they believe their child possesses these symptoms, or teachers may be more likely now than in the past to notice the symptoms and refer the child for evaluation.

ADHD can persist into adolescence and adulthood (Barkley, Fischer, Smallish, & Fletcher, 2002). A recent study found that 29.3% of adults who had been diagnosed with ADHD decades earlier still showed symptoms (Barbaresi et al., 2013). Somewhat troubling, this study also reported that nearly 81% of those whose ADHD persisted into adulthood had experienced at least one other comorbid disorder, compared to 47% of those whose ADHD did not persist. Additional concerns when an adult has ADHD include worse educational attainment, lower socioeconomic status, less likely to be employed, more likely to be divorced, and more likely to have non-alcohol-related substance abuse problems (Klein et al., 2012).

Family and twin studies indicate that genetics play a significant role in the development of ADHD. Burt (2009), in a review of 26 studies, reported that the median rate of concordance for identical twins was .66, whereas the median concordance rate for fraternal twins was .20. The specific genes involved in ADHD are thought to include at least two that are important in the regulation of the neurotransmitter dopamine (Gizer, Ficks, & Waldman, 2009), suggesting that dopamine may be important in ADHD. Indeed, medications used in the treatment of ADHD, such as methylphenidate (Ritalin) and amphetamine with dextroamphetamine (Adderall), have stimulant qualities and elevate dopamine activity. People with ADHD show less dopamine

activity in key regions of the brain, especially those associated with motivation and reward (Volkow et al., 2009), which provides support to the theory that dopamine deficits may be a vital factor in the development this disorder (Swanson et al., 2007).

Brain imaging studies have shown that children with ADHD exhibit abnormalities in their frontal lobes, an area in which dopamine is in abundance. Compared to children without ADHD, those with ADHD appear to have smaller frontal lobe volume, and they show less frontal lobe activation when performing mental tasks. Recall that one of the functions of the frontal lobes is to inhibit our behavior. Thus, abnormalities in this region may go a long way toward explaining the hyperactive, uncontrolled behavior of ADHD.

Many parents attribute their child's hyperactivity to sugar. A statistical review of 16 studies, however, concluded that sugar consumption has no effect at all on the behavioral and cognitive performance of children (Wolraich, Wilson, & White, 1995). Additionally, although food additives have been shown to increase hyperactivity in non-ADHD children, the effect is rather small (McCann et al., 2007). Numerous studies, however, have shown a significant relationship between exposure to nicotine in cigarette smoke during the prenatal period and ADHD (Linnet et al., 2003). Maternal smoking during pregnancy is associated with the development of more severe symptoms of the disorder (Thakur et al., 2013).

Recommended treatment for ADHD includes behavioral interventions, cognitive behavioral therapy, parent and teacher education, recreational programs, and lifestyle changes, such as getting more sleep (Clay, 2013). For some children, medication is prescribed. Parents are often concerned that stimulant medication may result in their child acquiring a substance use disorder. However, research using longitudinal studies has demonstrated that children diagnosed with ADHD who received pharmacological treatment had a lower risk for substance abuse problems than those children who did not receive medication (Wilens, Fararone, Biederman, & Gunawardene, 2003). The risk of substance abuse problems appears to be even greater for those with ADHD who are un-medicated and also exhibit antisocial tendencies (Marshal & Molina, 2006).

https://assessments.lumenlearning.co...essments/16598

## Candela Citations

CC licensed content, Original

- Education. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...ter/education/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Educational Psychology. **Authored by**: Kelvin Seifert and Rosemary Sutton. **Provided by**: The Saylor Foundation. **Retrieved from**: https://resources.saylor.org/wwwreso...hology.pdf.%20. **License**: CC BY: Attribution
- Lifespan Development. **Authored by**: Martha Lally and Suzanne Valentine-French. **Provided by**: College of Lake County Foundation . **Retrieved from**: http://dept.clcillinois.edu/psy/Life...evelopment.pdf. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

All rights reserved content

- Learning Disability. **Provided by**: Osmosis. **Retrieved from**: https://youtu.be/RKCNqHEzLwQ. **License**: All Rights Reserved
- Autism Spectrum Disorder. **Provided by**: Osmosis. **Retrieved from**: https://youtu.be/x2hWVgZ8J4A. **License**: All Rights Reserved
- Attention Deficit Hyperactivity Diorder. **Provided by**: Osmosis. **Retrieved from**: https://youtu.be/vQRh_VMA7Vc. **License**: All Rights Reserved

This page titled 7.1: Education is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 7.1: Education by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 7.2: Understanding Learning Difficulties

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 8.3.1.** *How Difficult Can This Be? The F.A.T. City Workshop* depicts a series of simulations to help non-learning disabled people understand what it is like to have learning difficulties. Rick Lavoie also provides suggestions for how to help students facing these challenges.

## Questions

Below are several questions to help guide your learning while you watch the video.

**Introduction**

What does F.A.T stand for in this video?

**Anxiety**

What is a typical reaction humans have when experiencing anxiety? What do we insist kids do when they respond in this way?

**Processing**

When the teacher asks a question how are mainstream and learning disabled (LD) children different in processing that questions?

**Risk-Taking**

How do we unintentionally decrease the likelihood of LD students from taking risks?

**Visual Perception**

Can we motivate LD children to “try harder” when something is too difficult? Why or why not?

**Reading Comprehension**

Reading comprehension has more to do with _____, not vocabulary!

**Effects of Perception on Behavior**

Why do LD students often say “I didn’t do anything wrong” or “I don’t know what I did” when they get into trouble?

**Visual-Motor Coordination**

How does difficulty with visual-motor integration effect some LD students?

**Oral Expression**

What is dysnomia? Why are LD students more likely to experience high rates of this?

**Reading & Decoding**

Children that are able to decode words to read may not be comprehending what is read. What explanation does the video offer for why this happens?

**Auditory-Visual Capability**

Why do books on tape benefit some LD students?

**Fairness**

According to the video, what is fairness?

**Commentary**

What were some of the effects that the participants reported feeling during this simulation? Is this a fair representation as to what LD students may experience?

## Candela Citations

CC licensed content, Original

- Understanding Learning Difficulties. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...-difficulties/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

All rights reserved content

- How Difficult Can This Be? The F.A.T. City Workshop. **Authored by**: Richard Lavoie. **Retrieved from**: https://youtu.be/Q3UNdbxk3xs. **License**: All Rights Reserved

This page titled 7.2: Understanding Learning Difficulties is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 7.2: Understanding Learning Difficulties by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 7.3: Academic Achievement

Academic achievement during adolescence is predicted by interpersonal (e.g., parental engagement in adolescents' education), intrapersonal (e.g., intrinsic motivation), and institutional (e.g., school quality) factors. Academic achievement is important in its own right as a marker of positive adjustment during adolescence but also because academic achievement sets the stage for future educational and occupational opportunities. The most serious consequence of school failure, particularly dropping out of school, is the high risk of unemployment or underemployment in adulthood that follows. High achievement can set the stage for college or future vocational training and opportunities.

## Parental Engagement with School

As adolescents become more independent in managing their academic roles, they still may need parental support to be successful in school. Parents vary in their level of involvement with their children's schools. Teachers often complain that they have difficulty getting parents to participate in their child's education and devise a variety of techniques to keep parents in touch with daily and overall progress. For example, parents may be required to sign a behavior chart each evening to be returned to school or may be given information about the school's events through websites and newsletters. There are other factors that need to be considered when looking at parental involvement. To explore these, first, ask yourself if all parents who enter the school with concerns about their child be received in the same way?

Horvat (2004) found that teachers seek a particular type of involvement from particular types of parents. While teachers thought they were open and neutral in their responses to parental involvement, in reality, teachers were most receptive to support, praise, and agreement coming from parents who were most similar in race and social class with the teachers. Parents who criticized the school or its policies were less likely to be given a voice. Parents who have higher levels of income, occupational status, and other qualities favored in society have **family capital.** This is a form of power that can be used to improve a child's education. Parents who do not have these qualities may find it more difficult to be effectively involved. The authors suggest that teachers closely examine their biases against parents. Schools may also need to examine their ability to dialogue with parents about school policies in more open ways. Any efforts to improve effective parental involvement should address these concerns.

## Motivation to Achieve

Motivation varies and is demonstrated by the kind of goals that students set for themselves, and by how the goals support students' academic achievement. As you might suspect, some goals encourage academic achievement more than others, but even motives that do not concern academics explicitly tend to affect learning indirectly.

What kinds of achievement goals do students hold? Some students' goal may be to learn the material as well as possible because they find it interesting and because they believe it will be useful later—this is a mastery goal because they want primarily to learn or master the material. Other students are concerned less about learning the content than about getting high grades in the course—this is a performance goal because the focus is primarily on looking successful by performing well in the eyes of peers and teachers. There may also be students that are primarily concerned about avoiding a poor or failing mark—this is a performance-avoidance goal because they are not really as concerned about learning or about competitive success but is simply intending to avoid failure.

As you might imagine, mastery, performance, and performance-avoidance goals often are not experienced in pure form, but in combinations. If you play the clarinet in the school band, you might want to improve your technique simply because you enjoy playing as well as possible—essentially a mastery orientation. But you might also want to look talented in the eyes of classmates—a performance orientation. Another part of what you may wish, at least privately, is to avoid looking like a complete failure at playing the clarinet. One of these motives may predominate over the others, but they all may be present.

Mastery goals tend to be associated with the enjoyment of learning the material at hand, and in this sense, represent an outcome that teachers often seek for students. By definition, therefore, they are a form of **intrinsic motivation**. As such, mastery goals have been found to be better than performance goals at sustaining students' interest in a subject. In one review of research about learning goals, for example, students with primarily mastery orientations toward a course they were taking not only tended to express greater interest in the course, but also continued to express interest well beyond the official end of the course, and to enroll in further courses in the same subject (Harackiewicz, et al., 2002; Wolters, 2004).

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 7.3.1.** Instincts, Arousal, Needs, and Drives: Drive-Reduction and Cognitive Theories explain some intrinsic motivations.

Performance goals, on the other hand, imply **extrinsic motivation** and tend to show the mixed effects of this orientation. A positive effect is that students with a performance orientation do tend to get higher grades than those who express primarily a mastery orientation. The advantage in grades occurs both in the short term (with individual assignments) and in the long term (with overall grade point average when graduating). But there is evidence that performance-oriented students do not actually learn the material as deeply or permanently as students who are more mastery-oriented (Midgley, Kaplan, & Middleton, 2001). A possible reason is that measures of performance—such as test scores—often reward relatively shallow memorization of information and therefore guide performance-oriented students away from processing the information thoughtfully or deeply. Another possible reason is that a performance orientation, by focusing on gaining recognition as the best among peers, encourages competition among peers. Giving and receiving help from classmates is thus not in the self-interest of a performance-oriented student, and the resulting isolation limits the student's learning.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 7.3.2.** Incentive Theory explains extrinsic motivation.

As we mentioned, failure-avoidant goals by nature undermine academic achievement. Often they are a negative byproduct of the competitiveness of performance goals (Urdan, 2004). If a teacher (and sometimes also fellow students) put too much emphasis on being the best in the class, and if interest in learning the material as such therefore suffers, then some students may decide that success is beyond their reach or may not be desirable in any case. The alternative—simply avoiding failure—may seem wiser as well as more feasible. Once a student adopts this attitude, he or she may underachieve more or less deliberately, doing only the minimum work necessary to avoid looking foolish or to avoid serious conflict with the teacher. Avoiding failure in this way is an example of **self-handicapping**—deliberate actions and choices that reduce the chances of success. Students may self-handicap in a number of ways; in addition to not working hard, they may procrastinate about completing assignments, for example, or set goals that are unrealistically high.

## The Wold of School

Remember Urie Brofenbrenner's **ecological systems model** we learned about when we first examined theories of development? This model helps us understand an individual by examining the contexts in which the person lives and the direct and indirect influences on that person's life. School becomes a very important component of children's lives during middle childhood and one way to understand children is to look at the world of school. We have discussed educational policies that impact the curriculum in schools above. Now let's focus on the school experience from the standpoint of the student, the teacher and parent relationship, and the cultural messages or hidden curriculum taught in schools in the United States.

Parents vary in their level of involvement with their children's schools. Teachers often complain that they have difficulty getting parents to participate in their child's education and devise a variety of techniques to keep parents in touch with daily and overall

progress. For example, parents may be required to sign a behavior chart each evening to be returned to school or may be given information about the school's events through websites and newsletters. There are other factors that need to be considered when looking at parental involvement. To explore these, first, ask yourself if all parents who enter the school with concerns about their child are received in the same way? If not, what would make a teacher or principal more likely to consider the parent's concerns? What would make this less likely?

Lareau and Horvat (2004) found that teachers seek a particular type of involvement from particular types of parents. While teachers thought they were open and neutral in their responses to parental involvement, in reality, teachers were most receptive to support, praise, and agreement coming from parents who were most similar in race and social class with the teachers. Parents who criticized the school or its policies were less likely to be given a voice. Parents who have higher levels of income, occupational status, and other qualities favored in society have family capital. This is a form of power that can be used to improve a child's education. Parents who do not have these qualities may find it more difficult to be effectively involved. Lareau and Horvat (2004) offer three cases of African-American parents who were each concerned about discrimination in the schools. Despite evidence that such discrimination existed, their children's white, middle-class teachers were reluctant to address the situation directly. Note the variation in approaches and outcomes for these three families:

- The Williams family: This working-class, African-American couple, a minister and a hairstylist, voiced direct complaints about discrimination in the schools. Their claims were thought to undermine the authority of the school and as a result, their daughter was kept in a lower reading class. However, her grade was boosted to "avoid a scene" and the parents were not told of this grade change.
- The Irving family: This middle-class, African-American couple was concerned that the school was discriminating against black students. They fought against it without using direct confrontation by staying actively involved in their daughter's schooling and making frequent visits to the school to make sure that discrimination could not occur. They also talked with other African-American teachers and parents about their concerns.
- Ms. Caldron: This poor, single-parent was concerned about discrimination in the school. She was a recovering drug addict receiving welfare. She did not discuss her concerns with other parents because she did not know the other parents and did not monitor her child's progress or get involved with the school. She felt that her concerns would not receive attention. She requested spelling lists from the teacher on several occasions but did not receive them. The teacher complained that Ms. Caldron did not sign forms that were sent home for her signature.

Working within the system without direct confrontation seemed to yield better results for the Irvings, although the issue of discrimination in the school was not completely addressed. Ms. Caldron was the least involved and felt powerless in the school setting. Her lack of family capital and lack of knowledge and confidence keep her from addressing her concerns with the teachers. What do you think would happen if she directly addressed the teachers and complained about discrimination? Chances are, she would be dismissed as undermining the authority of the school, just as the Masons, and might be thought to lack credibility because of her poverty and drug addiction. The authors of this study suggest that teachers closely examine their biases against parents. Schools may also need to examine their ability to dialogue with parents about school policies in more open ways. What happens when parents have concerns over school policy or view student problems as arising from flaws in the educational system? How are parents who are critical of the school treated? And are their children treated fairly even when the school is being criticized? Certainly, any efforts to improve effective parental involvement should address these concerns.

## Student Perspectives

Imagine being a 3rd-grader for one day in public school. What would the daily routine involve? To what extent would the institution dictate the activities of the day and how much of the day would you spend on those activities? Would you always be on task? What would you say if someone asked you how your day went? or "What happened in school today?" Chances are, you would be more inclined to talk about whom you sat at lunch with or who brought a puppy to class than to describe how fractions are added.

Ethnographer and Professor of Education Peter McLaren (1999) describes the student's typical day as filled with constrictive and unnecessary ritual that has a damaging effect on the desire to learn. Students move between various states as they negotiate the demands of the school system and their own personal interests. The majority of the day (298 minutes) takes place in the **student state**. This state is one in which the student focuses on a task or tries to stay focused on a task, is passive, compliant, and often frustrated. Long pauses before getting out the next book or finding materials sometimes indicate that frustration. The **street corner state** is one in which the child is playful, energetic, excited, and expresses personal opinions, feelings, and beliefs. About 66 minutes a day take place in this state. Children try to maximize this by going slowly to assemblies or when getting a hall pass-always eager to say 'hello' to a friend or to wave if one of their classmates is in another room. This is the state in which friends talk and play. In fact, teachers sometimes reward students with opportunities to move freely or to talk or to be themselves. But when students initiate the street corner state on their own, they risk losing recess time, getting extra homework, or being

ridiculed in front of their peers. The **home state** occurs when parents or siblings visit the school. Children in this state may enjoy special privileges such as going home early or being exempt from certain school rules in the mother's presence, or it can be difficult if the parent is there to discuss trouble at school with a staff member. The **sanctity state** is a time in which the child is contemplative, quiet, or prayerful. Typically the sanctity state is a very brief part of the day.

Since students seem to have so much enthusiasm and energy in street corner states, what would happen if the student and street corner states could be combined? Would it be possible? Many educators feel concerned about the level of stress children experience in school. Some stress can be attributed to problems in friendship. And some can be a result of the emphasis on testing and grades, as reflected in a Newsweek article entitled "The New First Grade: Are Kids Getting Pushed Too Fast Too Soon?" (Tyre, 2006). This article reports concerns of a principal who worries that students begin to burn out as early as 3rd grade. In the book, The Homework Myth: Why Our Kids Get Too Much of a Bad Thing, Kohn (2006) argues that neither research nor experience support claims that homework reinforces learning and builds responsibility. Why do schools assign homework so frequently? A look at cultural influences on education may provide some answers.

https://assessments.lumenlearning.co...essments/16601

## Cultural Influences

Another way to examine the world of school is to look at the cultural values, concepts, behaviors and roles that are part of the school experience but are not part of the formal curriculum. These are part of the **hidden curriculum** but are nevertheless very powerful messages. The hidden curriculum includes ideas of patriotism, gender roles, the ranking of occupations and classes, competition, and other values. Teachers, counselors, and other students specify and make known what is considered appropriate for girls and boys. The gender curriculum continues into high school, college, and professional school. Students learn a ranking system of occupations and social classes as well. Students in gifted programs or those moving toward college preparation classes may be viewed as superior to those who are receiving tutoring.

Gracy (2004) suggests that cultural training occurs early. Kindergarten is an "academic boot camp" in which students are prepared for their future student role-that of complying with an adult imposed structure and routine designed to produce docile, obedient, children who do not question meaningless tasks that will become so much of their future lives as students. A typical day is filled with structure, ritual, and routine that allows for little creativity or direct, hands-on contact. "Kindergarten, therefore, can be seen as preparing children not only for participation in the bureaucratic organization of large modern school systems, but also for the large-scale occupational bureaucracies of modern society." (Gracy, 2004, p. 148)

Emphasizing math and reading in preschool and kindergarten classes is becoming more common in some school districts. It is not without controversy, however. Some suggest that emphasis is warranted in order to help students learn math and reading skills that will be needed throughout school and in the world of work. This will also help school districts improve their accountability through test performance. Others argue that learning is becoming too structured to be enjoyable or effective and that students are being taught only to focus on performance and test-taking. Students learn student incivility or lack of sincere concern for politeness and consideration of others is taught in kindergarten through 12th grades through the "what is on the test" mentality modeled by teachers. Students are taught to accept routinized, meaningless information in order to perform well on tests. And they are experiencing the stress felt by teachers and school districts focused on test scores and taught that their worth comes from their test scores. Genuine interest, an appreciation of the process of learning, and valuing others are important components of success in the workplace that are not part of the hidden curriculum in today's schools.

## What Happened to No child Left Behind?

Children's academic performance is often measured with the use of standardized tests. **Achievement tests** are used to measure what a child has already learned. Achievement tests are often used as measures of teaching effectiveness within a school setting and as a method to make schools that receive tax dollars (such as public schools, charter schools, and private schools that receive vouchers) accountable to the government for their performance. In 2001, President Bush signed into effect Public Law 107-110, better known as the **No Child Left Behind Act** mandating that schools administer achievement tests to students and publish those results so that parents have an idea of their children's performance. Additionally, the government would have information on the gaps in educational achievement between children from various social class, racial, and ethnic groups. Schools that showed significant gaps in these levels of performance were mandated to work toward narrowing these gaps. Educators criticized the policy for focusing too much on testing as the only indication of student performance. Target goals were considered unrealistic and set by the federal government rather than individual states. Because these requirements became increasingly unworkable for schools, changes to the law were requested. On December 12, 2015 President Obama signed into law the **Every Student**

**Succeeds Act** (ESSA). This law is state driven and focuses on expanding educational opportunities and improving student outcomes, including in the areas of high school graduation, drop-out rates, and college attendance.

## Middle School

Adolescents spend more waking time in school than in any other context (Eccles & Roeser, 2011). **Secondary education** is traditionally grades 7-12 and denotes the school years after elementary school (known as primary education) and before college or university (known as tertiary education). Adolescents who complete primary education (learning to read and write) and continue on through secondary and tertiary education tend to also have better health, wealth, and family life (Rieff, 1998). Because the average age of puberty has declined over the years, **middle schools** were created for grades 5 or 6 through 8 as a way to distinguish between early adolescence and late adolescence, especially because these adolescents different biologically, cognitively, and emotionally and definitely have different needs.

Transition to middle school is stressful, and the transition is often complex. When students transition from elementary to middle school, many students are undergoing physical, intellectual, social, emotional, and moral changes (Parker, 2013). Research suggests that early adolescence is an especially sensitive developmental period (McGill et al., 2012). Some students mature faster than others. Students who are developmentally behind typically experience more stress than their counterparts (U.S. Department of Education, 2008). Consequently, they may earn lower grades and display decreased academic motivation, which may increase the rate of dropping out of school (U.S. Department of Education, 2008). For many middle school students, academic achievement slows down, and behavioral problems can increase.

While young adolescents seem to desire independence, they also need protection, security, and structure (Brighton, 2007). Baly, Cornell, & Lovegrove (2014) found that bullying increases in middle school, particularly in the first year. Additionally, unlike elementary school, concerns arise regarding procedural changes. Just when egocentrism is at its height, students are worried about being thrown into an environment of independence and responsibility. They are expected to get to and from classes on their own, manage time wisely, organize and keep up with materials for multiple classes, be responsible for all classwork and homework from multiple teachers, and at the same time develop and maintain a social life (Meece & Eccles, 2010). Students are trying to build new friendships and maintain the ones they already have. As noted throughout this module, peer acceptance is particularly important.

Another aspect to consider is technology. Typically, adolescents get their first cell phone at about age 11, and, simultaneously, they are also expected to research items on the Internet. Social media use and texting increase dramatically, and the research finds both harm and benefits to this use (Coyne et al., 2018).

## High School

As adolescents enter high school, their continued cognitive development allows them to think abstractly, analytically, hypothetically, and logically, which is all formal operational thought. High school emphasizes formal thinking in an attempt to prepare graduates for college where analysis is required. Overall, high school graduation rates in the United States have increased steadily over the past decade, reaching 83.2% in 2016 after four years in high school (Gewertz, 2017). Additionally, many students in the United States do attend college. Unfortunately, though, about half of those who go to college leave without a degree (Kena et al., 2016). Those that do earn a degree, however, do make more money and have an easier time finding employment. The key here is understanding adolescent development and supporting teens in making decisions about college or alternatives to college after high school.

### High School Dropouts

The **status dropout rate** refers to the percentage of 16 to 24 year-olds who are not enrolled in school and do not have high school credentials (either a diploma or an equivalency credential such as a General Educational Development [GED] certificate). The dropout rate is based on sample surveys of the civilian, noninstitutionalized population, which excludes persons in prisons, persons in the military, and other persons not living in households. The dropout rate among high school students has declined from a rate of 12% in 1990 to 7% in 2013 (U.S. Department of Education, 2015). The rate is lower for Whites than for Blacks, and the rates for both Whites and Blacks are lower than the rate for Hispanics. However, the gap between Whites, Blacks, and Hispanics have narrowed (see Figure 7.2).

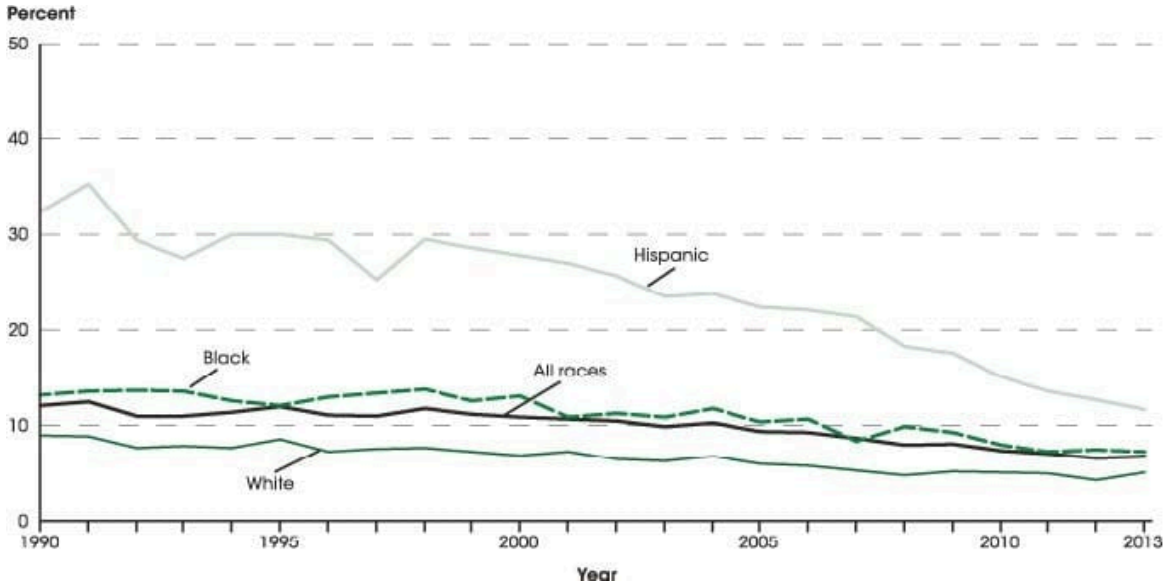



**Figure: 7.3.1.** Status dropout rates of 16- through 24-year-olds, by race/ethnicity: 1990 through 2013

The dropout rate for males in 1990 was 12%, where it stayed until 2000. Thereafter the rate dropped to 7% in 2013. The dropout rate for females in 1990 was 12%, where it dropped to 10% in 2000, and in 2013 was 6%. From 1997 until 2012, the rate for males was appreciably higher than for females, while in 2013, the gender difference was minimal (U.S. Department of Education, 2015).

## Higher Education

College is an important aspect of the lives of many young adults in the United States, with 36% of 18 to 24-year-olds (NCHEMS, 2016b). The rate of college attainment has grown more slowly in the United States than in a number of other nations in recent years (OCED, 2014). This may be due to the fact that the cost of attaining a degree is higher in the U.S. than in many other nations.

As the level of State funding of higher education declines, students are finding that the cost of college is outpacing the rate of inflation, Pell grant increases, and other student scholarships. One in six students are funding their education through personal loans (TICAS, 2015). With the rising costs of higher education, various news headlines have asked if a college education is worth the cost. One way to address this question is in terms of the earning potential associated with various levels of educational achievement. In 2016, the average earnings for Americans 25 and older with only a high school education was $35,615, compared with $65,482 for those with a bachelor's degree, compared with $92,525 for those with more advanced degrees. Average earnings vary by gender, race, and geographical location in the United States (U.S. Census Bureau, 2017).

Nonetheless, the benefits both to the individual and society outweigh the initial costs. As can be seen in Figure 7.3, those in America with the most advanced degrees earn the highest income and have the lowest unemployment.

**Figure 7.16**

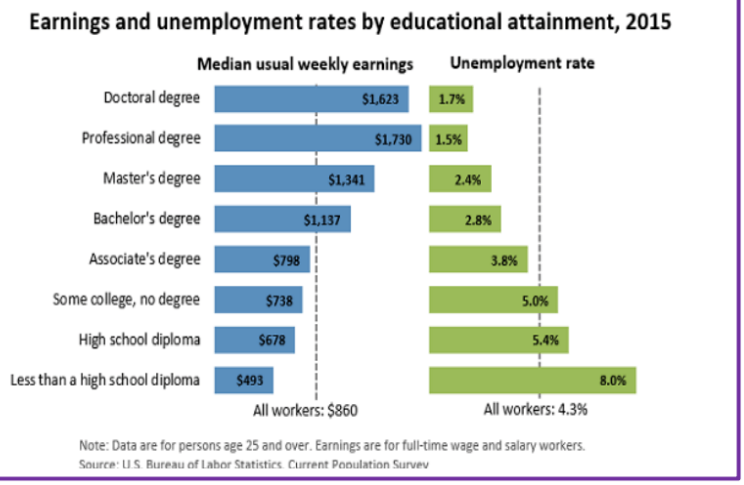



**Figure 7.3.2.** Earning and unemployment rate by education attainment, 2015.

Worldwide, over 80% of college-educated adults are employed, compared with just over 70% of those with a high school or equivalent diploma, and only 60% of those with no high school diploma (OECD, 2015). Those with a college degree will earn more over the course of their lifetime. Moreover, the benefits of a college education go beyond employment and finances. The OECD found that around the world, adults with higher educational attainment were more likely to volunteer, felt they had more control over their lives, and thus were more interested in the world around them. Studies of U.S. college students find that they gain a more distinct identity and become more socially competent, less dogmatic, and ethnocentric compared to those not in college (Pascarella, 2006).

## Who is Going to College?

Each generation tends to earn (and perhaps need) increased levels of formal education. As we can see in Figure 7.4, approximately one-third of the American adult population has a bachelor's degree or higher, as compared with less than 5% in 1940. Educational attainment rates vary by gender and race. All races combined, women are slightly more likely to have graduated from college than men; that gap widens with graduate and professional degrees. However, wide racial disparities still exist. For example, 23% of African-Americans have a college degree, and only 16.4% of Hispanic Americans have a college degree, compared to 37% of non-Hispanic white Americans. The college graduation rates of African-Americans and Hispanic Americans have been growing in recent years. However, the rate has doubled since 1991 for African-Americans, and it has increased by 60% in the last two decades for Hispanic-Americans.

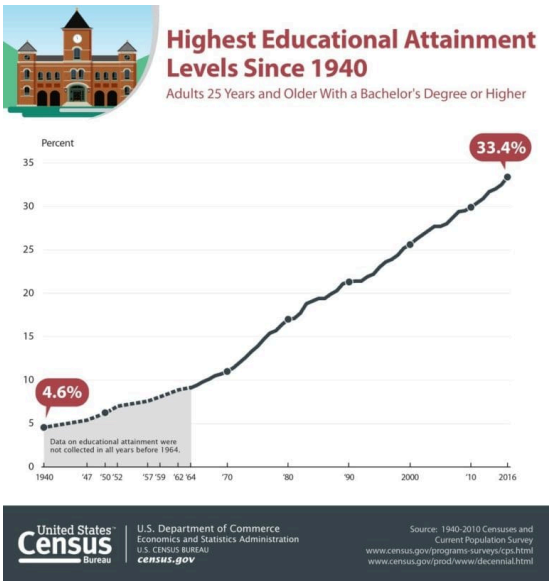



**Figure 7.3.3.** Higher education attainment for adults over age 25.

What about those young or emerging adults graduating high school today—is the majority of that group going to college? According to the U.S. Bureau of Labor Statistics (2017), 66.7% of youth ages 16-24 who graduated high school between January and October 2017 were enrolled in colleges or universities in October 2017. There were gender differences (71.7% of females vs. 61.1% of males) and racial differences (83% of Asians, 67.1% of non-Hispanic whites, 61% Hispanics, and 59.4% Blacks). Not all of these students will persist and earn college degrees, however (U.S. Census Bureau, 2017).

## Higher Education and Career Preparation

Of concern in recent years is the relationship between higher education and the workplace. In 2005, American educator and then Harvard University President, Derek Bok, called for a closer alignment between the goals of educators and the demands of the economy. Companies outsource much of their work, not only to save costs but to find workers with the skills they need. What is required to do well in today's economy? Colleges and universities, he argued, need to promote global awareness, critical thinking skills, the ability to communicate, moral reasoning, and responsibility in their students. Regional accrediting agencies and state organizations provide similar guidelines for educators. Workers need skills in listening, reading, writing, speaking, global awareness, critical thinking, civility, and computer literacy—all skills that enhance success in the workplace.

More than a decade later, the question remains: does formal education prepare young adults for the workplace? It depends on whom you ask. In an article referring to information from the National Association of Colleges and Employers' 2018 Job Outlook Survey, Bauer-Wolf (2018) explains that employers perceive gaps in students' competencies, but many graduating college seniors are overly confident. The biggest difference was in perceived professionalism and work ethic (only 43% of employers thought that students are competent in this area compared to 90% of the students) (Bauer-Wolf, 2018). Similar differences were also found in terms of oral communication, written communication, and critical thinking skills. Only in terms of digital technology skills were more employers confident about students' competencies than were the students (66% compared to 60%).

It appears that students need to learn what some call "soft skills," as well as the particular knowledge and skills within their college major. As education researcher Loni Bordoloi Pazich (2018) noted, most American college students today are enrolling in business or other pre-professional programs and to be effective and successful workers and leaders, they would benefit from the communication, teamwork, and critical thinking skills, as well as the content knowledge, gained from liberal arts education (Bordoloi Pazich, 2018). In fact, two-thirds of children starting primary school now will be employed in jobs in the future that currently do not exist. Therefore, students cannot learn every single skill or fact that they may need to know, but they can learn how to learn, think, research, and communicate well so that they are prepared to continually learn new things and adapt effectively in their careers and lives since the economy, technology, and global markets will continue to evolve (Henseler, 2017).

# Candela Citations

CC licensed content, Original

- Academic Achievement. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...c-achievement/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Educational Psychology. **Authored by**: Kelvin Seifert and Rosemary Sutton. **Provided by**: Saylor Foundation. **Retrieved from**: https://resources.saylor.org/wwwreso...Psychology.pdf. **License**: CC BY: Attribution
- Lifespan Development. **Authored by**: Martha Lally and Suzanne Valentine-French. **Provided by**: College of Lake County Foundation . **Retrieved from**: http://dept.clcillinois.edu/psy/Life...evelopment.pdf. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Specific attribution

- Instincts, Arousal, Needs, Drives: Drive-Reduction and Cognitive Theories. **Authored by**: Shreena Desai. **Provided by**: Khan Academy. **Retrieved from**: https://youtu.be/LHnHXS51J4E. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

This page titled 7.3: Academic Achievement is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 7.3: Academic Achievement by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 7.4: Work and Career

## Working Teens

Many adolescents work either summer jobs or during the school year. Holding a job may offer teenagers extra funds, the opportunity to learn new skills, ideas about future careers, and perhaps the true value of money. However, there are numerous concerns about teenagers working, especially during the school year. A long-standing concern is that that it "engenders precocious maturity of more adult-like roles and problem behaviors" (Staff, VanEseltine, Woolnough, Silver, & Burrington, 2011, p. 150). Several studies have found that working more than 20 hours per week can lead to declines in grades, a general disengagement from school (Staff, Schulenberg, & Bachman, 2010; Lee & Staff, 2007; Marsh & Kleitman, 2005), an increase in substance abuse (Longest & Shanahan, 2007), engaging in earlier sexual behavior, and pregnancy (Staff et al., 2011).

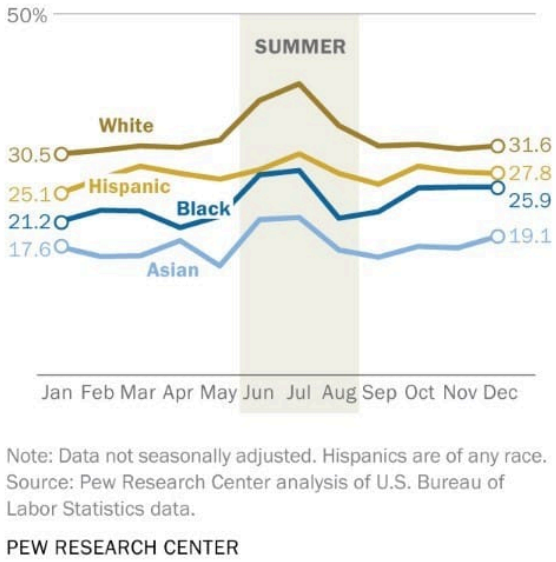



**Figure 7.4.1.** Percentage of U.S. 16- to 19-year-olds who are employed by month, 2018.

Teen employment rates have declined dramatically since 2000. Currently, only about a third of teens work. Since the late 1940s, the start of this data collection, through the 1980s, teen employment followed a predictable pattern—employment was up when the economy was good and fell when the economy was bad, but it typically remained between 46% and 58%. This trend changed following the recession of 1990-91 when teen employment did not recover as usual. Teen employment fell again during the 2001 recession, and even more during and after the 2007-09 recession. Teen employment bottomed out at about 30% in 2010, and while it has edged up slightly, it is still well below pre-recession levels. This trend is not purely American—similar declines in youth employment have been observed in other advanced economies (DeSilver, 2018).

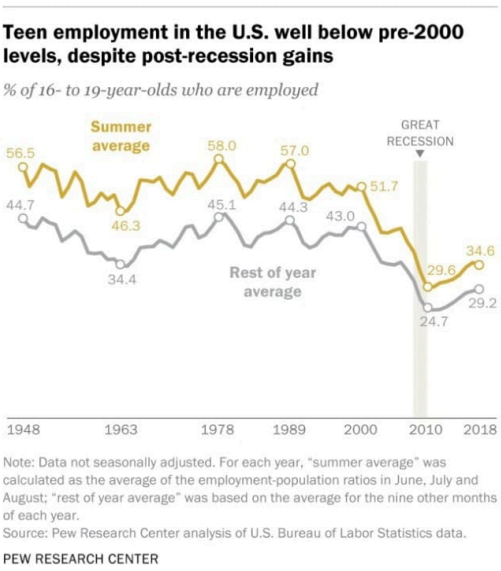



**Figure 7.4.2.** Percentage of 16- to 19-year-olds where are employed by year.

Research has examined reasons for the decline in teen employment rates since 2000 and has discovered multiple possibilities. There are fewer low-skill, entry-level jobs, such as sales clerks or office assistants, than in decades past. While most industries have seen losses in teen workers, food service is the one industry hiring more teens than in previous decades. Another reason may have to do with changes to the academic calendar. More schools are ending in late June and starting back in late August. A shortened summer break makes finding summer employment challenging. In addition, more students are taking classes over the summer, including getting a head start on college credits. More teens are also completing community service hours, often a requirement for graduation or a bolster to their college applications. Finally, more students are doing unpaid internships, which do not count toward employment statistics (DeSilver, 2018).

## Why are Fewer Teens Working Summer Jobs?

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 7.4.1.** Why are Fewer Teens Working Summer Jobs? is an interview with The Atlantic's Derek Thompson, author of "Teenagers Have Stopped Getting Summer Jobs—Why?" and discusses some of the reasons for the forward trend in teen employment.

# Career Development

Work plays a significant role in the lives of people, and adolescence is a time when we begin to explore our career options and set a course for establishing a career. Career development has a number of stages:

*Table 7.4.1. Stages of career development*

| # | STAGE | DESCRIPTION |
|---|---|---|
| 1 | GROWING | This is a time in the early years (4–13 years old) when you begin to have a sense of the future. You begin to realize that your participation in the world is related to being able to do certain tasks and accomplish certain goals. |
| 2 | EXPLORING | This period begins when you are a teenager, and it extends into your mid-twenties. In this stage, you find that you have specific interests and aptitudes. You are aware of your inclinations to perform and learn about some subjects more than others. You may try out jobs in your community or at your school. You may begin to explore a specific career. At this stage, you have some detailed "data points" about careers, which will guide you in certain directions. |
| 3 | ESTABLISHING | This period covers your mid-twenties through mid-forties. By now, you are selecting or entering a field you consider suitable, and you are exploring job opportunities that will be stable. You are also looking for upward growth, so you may be thinking about an advanced degree. |
| 4 | MAINTAINING | This stage is typical for people in their mid-forties to mid-sixties. You may be in an upward pattern of learning new skills and staying engaged. But you might also be merely "coasting and cruising" or even feeling stagnant. You may be taking stock of what you've accomplished and where you still want to go. |
| 5 | REINVENTING | In your mid-sixties, you are likely transitioning into retirement. But retirement in our technologically advanced world can be just the beginning of a new career or pursuit—a time when you can reinvent yourself. There are many new interests to pursue, including teaching others what you've learned, volunteering, starting online businesses, consulting, etc. |

The American School Counselor Association (2017) recommends that school counselors aid students in their career development beginning as early as kindergarten and continue this development throughout their education.

One of the most well-known theories about career choice is from John Holland (1985), who proposed six categories of personality types based on career interests, as well as varying types of work environments. People with similar interests and personalities gravitate toward similar careers. The better matched one's personality is to the workplace characteristics, the more satisfied and successful one is predicted to be with that career or vocational choice. Research support has been mixed, and we should note that there is more to satisfaction and success in a career than one's personality traits or likes and dislikes. For instance, education, training, and abilities need to match the expectations and demands of the job, plus the state of the economy, availability of positions, and salary rates may play practical roles in choices about work.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 7.4.2.** Holland's Personality Types explained.

The six personality types are:

- **Realistic.** These people describe themselves as honest, loyal, and practical. They are doers more than thinkers. They may have strong mechanical, motor, and athletic abilities; like the outdoors; and prefer working with machines, tools, plants, and animals.
- **Investigative.** These people love problem-solving and analytical skills. They are intellectually stimulated and often mathematically or scientifically inclined; like to observe, learn, and evaluate; prefer working alone; might be described as reserved.
- **Artistic.** These people are the "free spirits." They are creative, emotional, intuitive, and idealistic; have a flair for communicating ideas; dislike structure, and prefer working independently; like to sing, write, act, paint, and think creatively. They are similar to the investigative type but are interested in the artistic and aesthetic aspects of things more than the

scientific.

- **Social.** These are “people” people. They are friendly and outgoing; love to help others, make a difference, or both; have strong verbal and personal skills and teaching abilities.
- **Enterprising.**These people are confident, assertive risk-takers. They are sociable; enjoy speaking and leadership; like to persuade rather than guide; like to use their influence; have strong interpersonal skills; are status-conscious.
- **Conventional.** These people are dependable, detail-oriented, disciplined, precise, persistent, and practical; value order; and are good at clerical and numerical tasks. They work well with people and data, so they are good organizers, schedulers, and project managers.

*Table 7.4.2. Holland’s occupational options*

| Type | Ideal Environments | Career Options |
|---|---|---|
| **Realistic** | • Structured<br>• Clear lines of authority<br>• Work with things and tools<br>• Motivated to use hands-on skills to produce tangible results | • Contractor<br>• Emergency medical technician (EMT)<br>• Mechanic<br>• Military career<br>• Packaging engineer |
| **Investigative** | • Nonstructured<br>• Research-oriented<br>• Intellectual<br>• Work with ideas and data<br>• Motivated to probe questions of intellectual curiosity | • Pharmacist<br>• Lab technician<br>• Nanotechnologist<br>• Geologist<br>• College professor |
| **Artistic** | • Non-structured, creative<br>• Rewards unconventional and aesthetic approaches<br>• Creation of products and ideas<br>• Motivated to express themselves through their work | • Advertising career<br>• Architect<br>• Animator<br>• Musician<br>• Journalist |
| **Social** | • Collaborative, collegial<br>• Work with people and on people-related problems/issues<br>• Work as a team or community<br>• Motivated to help and empower others | • Teacher<br>• Counselor<br>• Correctional officer<br>• Coach<br>• Nurse |
| **Enterprising** | • Typical business environment<br>• Results-oriented, driven<br>• Work with people and data<br>• Entrepreneurial<br>• Motivated to persuade others on the merits of an idea or product | • Sales manager<br>• Banker<br>• Lawyer<br>• Business owner<br>• Restaurant manager |

| Type | Ideal Environments | Career Options |
|---|---|---|
| **Conventional** | • Orderly<br>• Clear rules and policies<br>• Consistent processes<br>• Work with systems to manipulate and organize data<br>• Motivated to organize information and bring order to data and things | • Auditor<br>• Insurance underwriter<br>• Bank teller<br>• Office manager<br>• Database manager |

**Link to Learning: What'S Your Right Career?**

To complete a free online career questionnaire and identify potential careers based on your preferences, go to: Career One Stop Questionnaire

## Career Trends

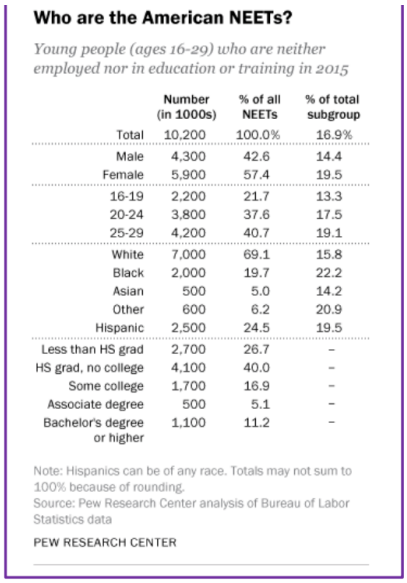
In recent years, young adults are more likely to find themselves job-hopping and periodically returning to school for further education and retraining than in prior generations. However, researchers find that occupational interests remain fairly stable. Thus, despite the more frequent change in jobs, most people are generally seeking jobs with similar interests rather than entirely new careers (Rottinghaus, Coon, Gaffey & Zytowski, 2007).

Recent research also suggests that Millennials are looking for something different in their place of employment. According to a recent Gallup poll report (2016), Millennials want more than a paycheck; they want a purpose. Unfortunately, only 29% of Millennials surveyed by Gallup reported that they were "engaged" at work. In fact, they report being less engaged than Gen Xers and Baby Boomers, with 55% of Millennials saying they are not engaged at all with their job. This indifference to their workplace may explain the greater tendency to switch jobs. With their current job giving them little reason to stay, they are more likely to take any new opportunity to move on. Only half of Millennials saw themselves working at the same company a year later. Gallup estimates that this employment turnover and lack of engagement costs businesses $30.5 billion a year.

### Neet: Neither Employed nor in Education or Training

Since teens and young adults were some of the hardest hit by the economic downturn in recent years (DeSilver, 2016), a number of young people have become **NEET**s, neither employed nor in education or training. While the number of young people who are NEETs has declined, there is concern that "without assistance, economically inactive young people won't gain critical job skills and will never fully integrate into the wider economy or achieve their full earning potential" (DeSilver, 2016, para. 3). In Europe, where the rates of NEETs are persistently high, there is also concern that having such large numbers of young adults with little opportunity may increase the chances of social unrest.

In the United States, in 2015, nearly 17% of 16 to 29 year-olds were neither employed nor in school, according to data Desilver (2016) obtained from the Bureau of Labor Statistics. This is down slightly from 2013 when approximately 18.5% of this age group fit the category. As noted in Table 7.2, more women than men find themselves unemployed and not in school. Additionally, most NEETs have high school or less education, and Asians are less likely to be NEETs than any other ethnic group.



**Who are the American NEETs?**

*Young people (ages 16-29) who are neither employed nor in education or training in 2015*

| | Number (in 1000s) | % of all NEETs | % of total subgroup |
|---|---|---|---|
| Total | 10,200 | 100.0% | 16.9% |
| Male | 4,300 | 42.6 | 14.4 |
| Female | 5,900 | 57.4 | 19.5 |
| 16-19 | 2,200 | 21.7 | 13.3 |
| 20-24 | 3,800 | 37.6 | 17.5 |
| 25-29 | 4,200 | 40.7 | 19.1 |
| White | 7,000 | 69.1 | 15.8 |
| Black | 2,000 | 19.7 | 22.2 |
| Asian | 500 | 5.0 | 14.2 |
| Other | 600 | 6.2 | 20.9 |
| Hispanic | 2,500 | 24.5 | 19.5 |
| Less than HS grad | 2,700 | 26.7 | – |
| HS grad, no college | 4,100 | 40.0 | – |
| Some college | 1,700 | 16.9 | – |
| Associate degree | 500 | 5.1 | – |
| Bachelor's degree or higher | 1,100 | 11.2 | – |

Note: Hispanics can be of any race. Totals may not sum to 100% because of rounding.
Source: Pew Research Center analysis of Bureau of Labor Statistics data

PEW RESEARCH CENTER

**Figure 7.4.3.** The American NEETs: young people (ages 16-19) who are neither employed nor in education or training in 2015.

## Gender Differences in Careers

Gender also has an impact on career choices. Despite the rise in the number of women who work outside of the home, there are some career fields that are still pursued more by men than women. Jobs held by women still tend to cluster in the service sector, such as education, nursing, and child-care worker. While in more technical and scientific careers, women are greatly outnumbered by men. Jobs that have been traditionally held by women tend to have lower status, pay, benefits, and job security (Ceci & Williams, 2007).

In recent years, women have made inroads into fields once dominated by males, and today women are almost as likely as men to become medical doctors or lawyers. Despite these changes, women are more likely to have lower-status, and thus less pay than men in these professions. For instance, women are more likely to be a family practice doctor than a surgeon or are less likely to make partner in a law firm (Ceci & Williams, 2007).

# Candela Citations

CC licensed content, Original

- Work and Career. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...rk-and-career/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Career Development. **Authored by**: Linda Bruce. **Provided by**: Lumen Learning. **Retrieved from**: https://courses.lumenlearning.com/lu...development-2/. **License**: CC BY: Attribution
- Career Exploration. **Provided by**: Monroe Community College. **Retrieved from**: https://courses.lumenlearning.com/co...r-exploration/. **License**: Public Domain: No Known Copyright

All rights reserved content

- Why are Fewer Teens Working Summer Jobs? . **Provided by**: CBS This Morning. **Retrieved from**: https://youtu.be/x0mNAQtN8oE. **License**: All Rights Reserved
- Holland's Personality Types. **Authored by**: Karlee Alexandra. **Retrieved from**: https://youtu.be/NI9tVEKXQdQ. **License**: Public Domain: No Known Copyright

This page titled 7.4: Work and Career is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 7.4: Work and Career by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

**attention deficit hyperactivity disorder:** a neurological and behavioral disorder in which a person has difficulty staying on task, screening out distractions, and inhibiting behavioral outbursts

**autism or autism spectrum disorder:** a developmental disorder that affects communication and behavior

**dyslexia:** a specific learning disability that is neurobiological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities

**ecological systems model:** Brofenbrenner's theory that we all belong to many communities and are influenced in the context of multiple environments, also known as ecological systems; organized into five levels of external influence: microsystem, mesosystem, exosystem, macrosystem and chronosystem

**hidden curriculum:** cultural values, concepts, behaviors and roles that are part of the school experience but are not part of the formal curriculum

**home state:** occurs when parents or siblings visit the school. Children in this state may enjoy special privileges such as going home early or being exempt from certain school rules in the mother's presence, or it can be difficult if the parent is there to discuss trouble at school with a staff member

**middle school:** a school for children in the grades between elementary school and high school. Middle school usually begins with grade 6 and ends with grade 8

**sanctity state:** a time in which the child is contemplative, quiet, or prayerful. It is often only a very brief part of the day

**secondary education:** the period after primary education (elementary or grade school) and before tertiary education (college). It usually occurs from about ages 12 to 18, although there is some variation by school and by nation

**street corner state:** state in which the child is playful, energetic, excited, and expresses personal opinions, feelings, and beliefs

**student state:** this state is one in which the student focuses on a task or tries to stay focused on a task, is passive, compliant, and often frustrated

This page titled 7.5: Glossary is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 7.5: Glossary by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 8: IDENTITY DEVELOPMENT

## Learning Objectives

- Define self-concept
- Describe self-esteem and differentiate the different self-esteem types
- Explain Erikson's stages of psychosocial development as it applies to adolescence
- Explain Marcia's four identity statuses
- Identify major domains of identity formation and the developmental processes for each

Adolescence is a period of personal and social identity formation, in which different roles, behaviors, and ideologies are explored. In the United States, adolescence is seen as a time to develop independence from parents while remaining connected to them. Some key points related to social development during adolescence include the following:

- Adolescence is the period of life known for the formation of personal and social identity.
- Adolescents must explore, test limits, become autonomous, and commit to an identity or sense of self.
- Erik Erikson referred to the task of the adolescent as one of identity versus role confusion. Thus, in Erikson's view, an adolescent's central questions are "Who am I?" and "Who do I want to be?"
- Early in adolescence, cognitive developments result in greater self-awareness, the ability to think about abstract, future possibilities, and the ability to consider multiple possibilities and identities at once.
- Changes in the levels of certain neurotransmitters (such as dopamine and serotonin) influence how adolescents experience emotions, typically making them more emotional and more sensitive to stress.
- When adolescents have advanced cognitive development and maturity, they tend to resolve identity issues more efficiently than peers who are less cognitively developed.
- As adolescents work to form their identities, they pull away from their parents, and peer groups become very important; despite this, relationships with parents still play a significant role in identity formation.

8.1: Identity Formation

8.2: Identity Development Theory

8.3: Domains of Identity

8.4: Glossary

This page titled 8: Identity Development is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 8: Identity Development by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 8.1: Identity Formation



Identity development is a stage in the adolescent life cycle. For most, the search for identity begins in the adolescent years. During these years, adolescents are more open to 'trying on' different behaviors and appearances to discover who they are. In an attempt to find their identity, adolescents are likely to cycle through several identities to find one that suits them best.

Developing and maintaining identity (in adolescent years) is difficult due to multiple factors such as family life, environment, and social status. Empirical studies suggest that this process might be more accurately described as identity development rather than formation, but confirm a normative process of change in both the content and structure of one's thoughts about the self.

Main aspects of identity development include self-concept, self-efficacy, and self-esteem.

## Self-Concept

**Self-concept** is the idea of self-constructed from opinions and beliefs about one's self. These concepts are defined confidently, consistently, and with stability. Early in adolescence, cognitive developments result in greater self-awareness, greater awareness of others and their thoughts and judgments, the ability to think about abstract, future possibilities, and the ability to consider multiple possibilities at once. As a result, adolescents experience a significant shift from the simple, concrete, and global self-descriptions typical of young children; as children, they defined themselves by physical traits, whereas adolescents define themselves based on their values, thoughts, and opinions.

During adolescence, several factors contribute to the formation of self-concept, which is the individual's perception and evaluation of themselves. The first factor is personal experiences and achievements. Adolescents' perceptions of their abilities, skills, and accomplishments contribute to their sense of self-worth and self-efficacy. The second factor is that cultural and societal norms influence adolescents' self-concept by shaping their beliefs, values, and attitudes. The third factor is the influence of family and peers. Family members provide a secure base for adolescents to explore their sense of self, while peers offer social comparison and feedback. Understanding these factors and their interaction can help caregivers and educators better support adolescents as they navigate this critical period of identity development.

### Cognitive Influences on Self-Concept

The development of self-awareness begins in early childhood. During adolescence, the development of self-concept continues and becomes more complex and abstract. The development of adolescents' cognitive functioning gives them the ability for abstract thinking, such as thinking of various possibilities and versions of themselves in different contexts. While self-description in childhood tends to be in concrete terms, "I have a cat named Socks," self-concept in adolescence becomes more trait-focused, "I am honest and talkative." Ask an adolescent girl to describe herself, she may say, "My friends see me as being outgoing and carefree, but I am actually really anxious and can be shy." Adolescents are able to make the distinction between how others perceive them and how they view themselves; they are able to describe themselves, taking both their own and others' views into account (Cole et al., 2001; Updegraff et al., 2004). Due to their increased awareness of themselves, adolescents are able to think about themselves in more comprehensive terms than they did during childhood – they can perceive multiple traits of themselves

simultaneously.

Adolescent identity is a complex and multifaceted concept that is characterized by a plethora of contradictory understandings of the self. During this developmental stage, young people are trying to make sense of their own identity, trying to figure out who they are and what their place is in the world. This process is often fraught with tension, as adolescents may hold conflicting beliefs, values, and desires that can be difficult to reconcile. For instance, they may feel a strong need to belong to a peer group while simultaneously wanting to assert their individuality. Additionally, they may struggle to reconcile the expectations and values of their family and community with their own emerging sense of self. These contradictions can lead to confusion and anxiety, but they are also a natural part of the process of identity formation, as adolescents navigate the complex terrain of growing up and figuring out who they are.

The increase in adolescents' cognitive functioning and abstract thinking also gives them the ability to think about an **actual self**, who they perceive themselves to be currently, and a **possible self**, who they perceive they can be potentially (Markus & Nurius, 1986; Oyserman Destin, & Novin, 2015). The possible self can be either positive or negative. The positive possible self is called an **ideal self**, and this is the person that the adolescent wishes to be, such as getting good grades, graduating, and being accepted to their college of choice. The negative possible self is called a **feared self**, and this is the person that the adolescent is afraid of becoming, such as a high school dropout. (Chalk et al., 2005). Having the cognitive ability to think of abstract possible selves can result in either a positive or a negative psychological impact, depending on the self-concept of the adolescent. If the adolescent's self-concept leads to the belief that there is too great a difference between their ideal self and their actual self, then this may result in hopelessness and depression. However, having an ideal self can be an incredible motivator for behavior that leads to that ideal self; in the example above, such behavior would be attending school, completing assignments, and being attentive and engaged in classes. Having both an ideal self and a feared self can be beneficial to adolescents as a motivator to behave in ways that help them reach the ideal self and prevent the feared self. Having these possible selves illustrates adolescents' growing cognitive abilities, which lead to a more abstract self-concept.

Further distinctions in self-concept, called **differentiation**, occur as the adolescent recognizes the contextual influences on their behavior and the perceptions of others, and begins to qualify their traits when asked to describe themselves. Differentiation appears fully developed by mid-adolescence. Peaking in the 7th-9th grades, the personality traits adolescents use to describe themselves refer to specific contexts and, therefore, may contradict one another. The recognition of inconsistent content in the self-concept is a common source of distress in these years, but this distress may benefit adolescents by encouraging structural development.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 8.2.1.** Self-Concept, Self-Identity, and Social Identity explains the various types of self and the formation of identity.

## Cooley's Looking-Glass Self

Charles Horton Cooley (1964) suggested that our self-concept comes from looking at how others respond to us. This process, known as the looking-glass self, involves looking at how others seem to view us and interpreting this as we make judgments about whether we are good or bad, strong or weak, beautiful or ugly, and so on. Of course, we do not always interpret their responses accurately so our self-concept is not simply a mirror reflection of the views of others. After forming an initial self-concept, we may use our existing self-concept as a mental filter, screening out those responses that do not seem to fit our ideas of who we are. So compliments may be negated, for example.

Think of times in your life when you felt more self-conscious. The process of the looking-glass self is pronounced when we are preschoolers. Later in life, we also experience this process when we are in a new school, new job, or taking on a new role in our personal lives and trying to gauge our own performance. When we feel more sure of who we are, we focus less on how we appear to others.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 8.2.2.** Charles Cooley–Looking Glass Self explains more about this theory.

### Mead's I and Me

George Herbert Mead (1967) explained how we develop a social sense of self by being able to see ourselves through the eyes of others. There are two parts of the self: the "I," which is spontaneous, creative, and innate and is not concerned with how others view us, and the "me," which is the social definition of who we are.

When we are born, we are all "I" and act without concern about how others view us. However, the socialized self begins when we are able to consider how one important person views us. This initial stage is called "taking the role of the significant other." For example, a child may pull a cat's tail and be told by his mother, "No! Don't do that, that's bad," while receiving a slight slap on the hand. Later, the child may mimic the same behavior toward the self and say aloud, "No, that's bad" while patting his own hand. What has happened? The child is able to see himself through the eyes of the mother. As the child grows and is exposed to many situations and rules of culture, he begins to view the self in the eyes of many others through these cultural norms or rules. This is referred to as "taking the role of the generalized other" and results in a sense of self with many dimensions. The child comes to have a sense of self as a student, as a friend, as a son, and so on.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 8.2.3.** George Herbert Mead–The I and the Me explains more about this theory.

## Cultural Influences on Self-Concept

Cultural beliefs and values play an important role in the development of self-concept in adolescence. The value that different cultures place on self-reflection and self-knowledge can greatly affect the development of self-concept. Cultures that value individualism and independence, which are referred to as individualistic cultures, can foster the development of a sense of self by emphasizing the value of self-reflection and personal accomplishment. Another type of culture, collectivistic cultures, place less value on individualism and more value on collectivism, which puts groups' needs over individuals' needs, such as the needs of the family or the community.

Culture can also influence an adolescent's self-concept by placing value on certain behaviors and characteristics over others; this can lead to a more positive or negative self-concept, depending on whether the adolescent's characteristics align with those valued by their culture. For example, in a culture like the United States, where independence, assertiveness, and being outgoing are highly valued characteristics, an adolescent who has those characteristics may have a more positive self-concept than an adolescent who is shy and reserved.

A sense of belonging and self-identity are important aspects of self-concept. Self-concept can also be influenced by culture if the adolescent is in a marginalized or excluded group, such as a Black adolescent or an adolescent with disabilities, in

a discriminating community. This can lead to feelings of isolation and being disconnected from the community, which can negatively impact self-concept.

## Self-Efficacy

Imagine two students, Sally and Lucy, who are about to take the same math test. Sally and Lucy have the same exact ability to do well in math, the same level of intelligence, and the same motivation to do well on the test. They also studied together. They even have the same brand of shoes on. The only difference between the two is that Sally is very confident in her mathematical and test-taking abilities, while Lucy is not. So, who is likely to do better on the test? Sally, of course, because she has the confidence to use her mathematical and test-taking abilities to deal with challenging math problems and to accomplish goals that are important to her, in this case, doing well on the test. This difference between Sally and Lucy—the student who got the A and the student who got the B-, respectively—is self-efficacy. Self-efficacy influences behavior and emotions in particular ways that help people better manage challenges and achieve valued goals.

A concept introduced by Albert Bandura in 1977, **self-efficacy** refers to a person's belief that he or she can effectively perform the tasks needed to attain a valued goal (Bandura, 1977). Since then, self-efficacy has become one of the most thoroughly researched concepts in psychology. Just about every important domain of human behavior has been investigated using self-efficacy theory (Bandura, 1997; Maddux, 1995; Maddux & Gosselin, 2011, 2012). Self-efficacy does not refer to your abilities but rather to your beliefs about what you can do with your abilities. Also, self-efficacy is not a trait—there are not certain types of people with high self-efficacies and others with low self-efficacies (Stajkovic & Luthans, 1998). Rather, people have self-efficacy beliefs about specific goals and life domains. For example, if you believe that you have the skills necessary to do well in school and believe you can use those skills to excel, then you have high academic self-efficacy.

Self-efficacy may sound similar to a concept you may be familiar with already—*self-esteem*—but these are very different notions. Self-esteem refers to how much you like or "esteem" yourself, to what extent you believe you are a good and worthwhile person. Self-efficacy, however, refers to your self-confidence to perform well and to achieve in specific areas of life, such as school, work, and relationships. Self-efficacy does influence self-esteem because how you feel about yourself overall is greatly influenced by your confidence in your ability to perform well in areas that are important to you and to achieve valued goals. For example, if performing well in athletics is very important to you, then your self-efficacy for athletics will greatly influence your self-esteem; however, if performing well in athletics is not at all important to you, then your self-efficacy for athletics will probably have little impact on your self-esteem.

Self-efficacy begins to develop in very young children. Once self-efficacy is developed, it does not remain constant—it can change and grow as an individual has different experiences throughout his or her lifetime. When children are very young, their parents' self-efficacy is important (Jones & Prinz, 2005). Children of parents who have high parental self-efficacy perceive their parents as more responsive to their needs (Gondoli & Silverberg, 1997). Around the ages of 12 through 16, adolescents' friends also become an important source of self-efficacy beliefs. Adolescents who associate with peer groups that are not academically motivated tend to experience a decline in academic self-efficacy (Wentzel, Barry, & Caldwell, 2004). Adolescents who watch their peers succeed, however, experience a rise in academic self-efficacy (Schunk & Miller, 2002). As discussed above, this is an example of gaining self-efficacy through vicarious performances. The effects of self-efficacy that develop in adolescence are long-lasting. One study found that greater social and academic self-efficacy measured in people ages 14 to 18 predicted greater life satisfaction five years later (Vecchio, Gerbino, Pastorelli, Del Bove, & Caprara, 2007).

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 8.2.4.** Self-Esteem, Self-Efficacy, and Locus of Control.

# Major Influences on Self-Efficacy

Self-efficacy beliefs are influenced in five different ways (Bandura, 1997), which are summarized in the table below.

*Table 8.2.1. Major Influences on Self-efficacy.*

| Influence | Definition |
|---|---|
| Performance Experiences | When you do well and succeed at a particular task to attain a valued goa, you usually believe that you will succeed again at this task. When you fail you often expect that you will fail again in the future if you try that task. |
| Vicarious Performances | If someone who seems similar to you succeeds, then you may come to believe that you will succeed as well. |
| Verbal Persuasion | This involves people telling you what they believe you are and are not capable of doing. Not all people will be equally persuasive. |
| Imaginal Performances | What you imagine yourself doing and how well or poorly you imagine yourself doing it. |
| Affective States & Physical Sensations | When you associate negative moods and negative physical sensations with failure, and positive physical sensations with success. |

These five types of self-efficacy influence can take many real-world forms that almost everyone has experienced. You may have had previous performance experiences that affected your academic self-efficacy when you did well on a test and believed that you would do well on the next test. A vicarious performance may have affected your athletic self-efficacy when you saw your best friend skateboard for the first time and thought that you could skateboard well, too. Verbal persuasion could have affected your academic self-efficacy when a teacher that you respect told you that you could get into the college of your choice if you studied hard for the SATs. It's important to know that not all people are equally likely to influence your self-efficacy through verbal persuasion. People who appear trustworthy or attractive, or who seem to be experts, are more likely to influence your self-efficacy than are people who do not possess these qualities (Petty & Brinol, 2010). That's why a teacher you respect is more likely to influence your self-efficacy than a teacher you do not respect. Imaginal performances are an effective way to increase your self-efficacy. For example, imagining yourself doing well on a job interview actually leads to more effective interviewing (Knudstrup, Segrest, & Hurley, 2003). Affective states and physical sensations abound when you think about the times you have given presentations in class. For example, you may have felt your heart racing while giving a presentation. If you believe your heart was racing because you had just had a lot of caffeine, it likely would not affect your performance. If you believe your heart was racing because you were doing a poor job, you might believe that you cannot give the presentation well. This is because you associate the feeling of anxiety with failure and expect to fail when you are feeling anxious.

# Benefits of High Self-Efficacy

## Academic Performance

Consider academic self-efficacy in your own life and recall the earlier example of Sally and Lucy. Are you more like Sally, who has high academic self-efficacy and believes that she can use her abilities to do well in school, or are you more like Lucy, who does not believe that she can effectively use her academic abilities to excel in school? Do you think your own self-efficacy has ever affected your academic ability? Do you think you have ever studied more or less intensely because you did or did not believe in your abilities to do well? Many researchers have considered how self-efficacy works in academic settings, and the short answer is that academic self-efficacy affects every possible area of academic achievement (Pajares, 1996).

Students who believe in their ability to do well academically tend to be more motivated in school (Schunk, 1991). When self-efficacious students attain their goals, they continue to set even more challenging goals (Schunk, 1990). This can all lead to better performance in school in terms of higher grades and taking more challenging classes (Multon, Brown, & Lent, 1991). For example, students with high academic self-efficacy might study harder because they believe that they are able to use their abilities to study effectively. Because they studied hard, they received an A on their next test. Teachers' self-efficacy can also affect how well a student performs in school. Self-efficacious teachers encourage parents to take a more active role in their children's learning, leading to better academic performance (Hoover-Dempsey, Bassler, & Brissie, 1987).

Although there is a lot of research about how self-efficacy is beneficial to school-aged children, college students can also benefit from self-efficacy. Freshmen with higher self-efficacies about their ability to do well in college tend to adapt to their first year in college better than those with lower self-efficacies (Chemers, Hu, & Garcia, 2001). The benefits of self-efficacy continue beyond the school years: people with strong self-efficacy beliefs toward performing well in school tend to perceive a wider range of career options (Lent, Brown, & Larkin, 1986). In addition, people who have stronger beliefs of self-efficacy toward their professional work tend to have more successful careers (Stajkovic & Luthans, 1998).

One question you might have about self-efficacy and academic performance is how a student's actual academic ability interacts with self-efficacy to influence academic performance. The answer is that a student's actual ability does play a role, but it is also influenced by self-efficacy. Students with greater ability perform better than those with lesser ability. But among a group of students with the same exact level of academic ability, those with stronger academic self-efficacy outperform those with weaker self-efficacy. One study (Collins, 1984) compared performance on difficult math problems among groups of students with different levels of math ability and different levels of math self-efficacy. Among a group of students with average levels of math ability, the students with weak math self-efficacy got about 25% of the math problems correct. The students with average levels of math ability and strong math self-efficacy got about 45% of the questions correct. This means that by just having stronger math self-efficacy, a student of average math ability will perform 20% better than a student with similar math ability but weaker math self-efficacy. You might also wonder if self-efficacy makes a difference only for people with average or below-average abilities. Self-efficacy is important even for above-average students. In this study, those with above-average math abilities and low math self-efficacies answered only about 65% of the questions correctly; those with above-average math abilities and high math self-efficacies answered about 75% of the questions correctly.

## Healthy Behaviors

Think about a time when you tried to improve your health, whether through dieting, exercising, sleeping more, or any other way. Would you be more likely to follow through on these plans if you believed that you could effectively use your skills to accomplish your health goals? Many researchers agree that people with stronger self-efficacies for doing healthy things (e.g., exercise self-efficacy, dieting self-efficacy) engage in more behaviors that prevent health problems and improve overall health (Strecher, DeVellis, Becker, & Rosenstock, 1986). People who have strong self-efficacy beliefs about quitting smoking are able to quit smoking more easily (DiClemente, Prochaska, & Gibertini, 1985). People who have strong self-efficacy beliefs about being able to reduce their alcohol consumption are more successful when treated for drinking problems (Maisto, Connors, & Zywiak, 2000). People who have stronger self-efficacy beliefs about their ability to recover from heart attacks do so more quickly than those who do not have such beliefs (Ewart, Taylor, Reese, & DeBusk, 1983).

One group of researchers (Roach Yadrick, Johnson, Boudreaux, Forsythe, & Billon, 2003) conducted an experiment with people trying to lose weight. All people in the study participated in a weight loss program that was designed for the U.S. Air Force. This program had already been found to be very effective, but the researchers wanted to know if increasing people's self-efficacy could make the program even more effective. So, they divided the participants into two groups: one group received an intervention that was designed to increase weight loss self-efficacy along with the diet program, and the other group received only the diet program. The researchers tried several different ways to increase self-efficacy, such as having participants read a copy of *Oh, The Places You'll Go!* by Dr. Seuss (1990) and having them talk to someone who had successfully lost weight. The people who received the diet program and an intervention to increase self-efficacy lost an average of 8.2 pounds over the 12 weeks of the study; those participants who had only the diet program lost only 5.8 pounds. Thus, just by increasing weight loss self-efficacy, participants were able to lose over 50% more weight.

Studies have found that increasing a person's nutritional self-efficacy can lead them to eat more fruits and vegetables (Luszczynska, Tryburcy, & Schwarzer, 2006). Self-efficacy plays a large role in successful physical exercise (Maddux & Dawson, 2014). People with stronger self-efficacies for exercising are more likely to plan on beginning an exercise program, actually begin that program (DuCharme & Brawley, 1995), and continue it (Marcus, Selby, Niaura, & Rossi, 1992). Self-efficacy is especially important when it comes to safe sex. People with greater self-efficacy about condom usage are more likely to engage in safe sex (Kaneko, 2007), making them more likely to avoid sexually transmitted diseases, such as HIV (Forsyth & Carey, 1998).

## Athletic Performance

If you are an athlete, self-efficacy is especially important in your life. Professional and amateur athletes with stronger self-efficacy beliefs about their athletic abilities perform better than athletes with weaker levels of self-efficacy (Wurtele, 1986). This holds true for athletes in all types of sports, including track and field (Gernigon & Delloye, 2003), tennis (Sheldon & Eccles, 2005), and golf (Bruton, Mellalieu, Shearer, Roderique-Davies, & Hall, 2013). One group of researchers found that basketball players with strong

athletic self-efficacy beliefs hit more foul shots than did basketball players with weak self-efficacy beliefs (Haney & Long, 1995). These researchers also found that the players who hit more foul shots had greater increases in self-efficacy after they hit the foul shots, compared to those who hit fewer foul shots and did not experience increases in self-efficacy. This is an example of how we gain self-efficacy through performance experiences.

## Self-Regulation

One of the major reasons that higher self-efficacy usually leads to better performance and greater success is that self-efficacy is an important component of self-regulation. Self-regulation is the complex process through which you control your thoughts, emotions, and actions (Gross, 1998). It is crucial to success and well-being in almost every area of your life. Every day, you are exposed to situations where you might want to act or feel a certain way that would be socially inappropriate or that might be unhealthy for you in the long run. For example, when sitting in a boring class, you might want to take out your phone and text your friends, take off your shoes and take a nap, or perhaps scream because you are so bored. Self-regulation is the process that you use to avoid such behaviors and instead sit quietly through class. Self-regulation takes a lot of effort, and it is often compared to a muscle that can be exhausted (Baumeister, Bratslavsky, Muraven, & Tice, 1998). For example, a child might be able to resist eating a pile of delicious cookies if he or she is in the room with the cookies for only a few minutes, but if that child were forced to spend hours with the cookies, his or her ability to regulate the desire to eat the cookies would wear down. Eventually, his or her self-regulatory abilities would be exhausted, and the child would eat the cookies. A person with strong self-efficacy beliefs might become less distressed in the face of failure than might someone with weak self-efficacy. Because self-efficacious people are less likely to become distressed, they draw less on their self-regulation reserves; thus, self-efficacious people persist longer in the face of a challenge.

Self-efficacy influences self-regulation in many ways to produce better performance and greater success (Maddux & Volkmann, 2010). First, people with stronger self-efficacy have greater *motivation to perform* in the area for which they have stronger self-efficacy (Bandura & Locke, 2003). This means that people are motivated to work harder in those areas where they believe they can effectively perform. Second, people with stronger self-efficacy are more likely to *persevere through challenges* in attaining goals (Vancouver, More, & Yoder, 2008). For example, people with high academic self-efficacy are better able to motivate themselves to persevere through such challenges as taking a difficult class and completing their degrees because they believe that their efforts will pay off. Third, self-efficacious people believe that *they have more control over a situation*. Having more control over a situation means that self-efficacious people might be more likely to engage in the behaviors that will allow them to achieve their desired goal. Finally, self-efficacious people *have more confidence* in their problem-solving abilities and, thus, are able to better use their cognitive resources and make better decisions, especially in the face of challenges and setbacks (Cervone, Jiwani, & Wood, 1991).

Self-regulation is the capacity to alter one's responses. It is broadly related to the term "self-control". The term "regulate" means to change something, but not just any change, rather change to bring it into agreement with some idea, such as a rule, a goal, a plan, or a moral principle. To illustrate, when the government regulates how houses are built, that means the government inspects the buildings to check that everything is done "up to code" or according to the rules about good building. In a similar fashion, when you regulate yourself, you watch and change yourself to bring your responses into line with some ideas about how they should be.

People regulate four broad categories of responses. They control their thinking, such as trying to concentrate or shut some annoying earworm tune out of their mind. They control their emotions, as in trying to cheer themselves up or to calm down when angry (or to stay angry, if that's helpful). They control their impulses, such as trying not to eat fattening food, trying to hold their tongue, or trying to quit smoking. Last, they try to control their task performances, such as in pushing themselves to keep working when tired and discouraged, or deciding whether to speed up (to get more done) or slow down (to make sure to get it right).

## Benefits of Self-Control

People who are good at self-regulation do better than others in life. Follow-up studies with Mischel's samples found that the children who resisted temptation and delayed gratification effectively grew into adults who were better than others in school and work, more popular with other people, and who were rated as nicer, better people by teachers and others (Mischel, Shoda, & Peake, 1988; Shoda, Mischel, & Peake, 1990). College students with high self-control get better grades, have better close relationships, manage their emotions better, have fewer problems with drugs and alcohol, are less prone to eating disorders, are better adjusted, have higher self-esteem, and get along better with other people, as compared to people with low self-control (Tangney, Baumeister, & Boone, 2004). They are happier and have less stress and conflict (Hofmann, Vohs, Fisher, Luhmann, & Baumeister, 2013). Longitudinal studies have found that children with good self-control go through life with fewer problems,

are more successful, are less likely to be arrested or have a child out of wedlock, and enjoy other benefits (Moffitt et al., 2011). Criminologists have concluded that low self-control is a—if not the—key trait for understanding the criminal personality (Gottfredson & Hirschi, 1990; Pratt & Cullen, 2000).

Some researchers have searched for evidence that too much self-control can be bad (Tangney et al., 2004)—but without success. There is such a thing as being highly inhibited or clinically "over-controlled," which can impair initiative and reduce happiness, but that does not appear to be an excess of self-regulation. Rather, it may stem from having been punished excessively as a child and, therefore, adopting a fearful, inhibited approach to life. In general, self-control resembles intelligence in that the more one has, the better off one is, and the benefits are found through a broad range of life activities.

## Three Ingredients of Effective Self-Regulation

For self-regulation to be effective, three parts or ingredients are involved. The first is standards, which are ideas about how things should (or should not) be. The second is monitoring, which means keeping track of the target behavior that is to be regulated. The third is the capacity to change.

Standards are an indispensable foundation for self-regulation. We have already seen that self-regulation means a change in relation to some idea; without such guiding ideas, the change would largely be random and lack direction. Standards include goals, laws, moral principles, personal rules, other people's expectations, and social norms. Dieters, for example, typically have a goal in terms of how much weight they wish to lose. They help their self-regulation further by developing standards for how much or how little they eat and what kinds of foods they will eat.

The second ingredient is monitoring. It is hard to regulate something without being aware of it. For example, dieters count their calories. That is, they keep track of how much they eat and how fattening it is. In fact, some evidence suggests that dieters stop keeping track of how much they eat when they break their diet or go on an eating binge, and the failure of monitoring contributes to eating more (Polivy, 1976). Alcohol has been found to impair all sorts of self-regulation, partly because intoxicated persons fail to keep track of their behavior and compare it to their standards.

The combination of standards and monitoring was featured in an influential theory about self-regulation by Carver and Scheier (1981, 1982, 1998). Those researchers started their careers studying self-awareness, which is a key human trait. The study of self-awareness recognized early on that people do not simply notice themselves the way they might notice a tree or a car. Rather, self-awareness always seemed to involve comparing oneself to a standard. For example, when a man looks in a mirror, he does not just think, "Oh, there I am," but more likely thinks, "Is my hair a mess? Do my clothes look good?" Carver and Scheier proposed that the reason for this comparison to standards is that it enables people to regulate themselves, such as by changing things that do not measure up to their standards. In the mirror example, the man might comb his hair to bring it into line with his standards for personal appearance. Good students keep track of their grades, credits, and progress toward their degree and other goals. Athletes keep track of their times, scores, and achievements as a way to monitor improvement.

The process of monitoring oneself can be compared to how a thermostat operates. The thermostat checks the temperature in the room and compares it to a standard (the setting for the desired temperature), and if those do not match, it turns on the heat or air conditioner to change the temperature. It checks again and again, and when the room temperature matches the desired setting, the thermostat turns off the climate control. In the same way, people compare themselves to their personal standards, make changes as needed, and stop working on change once they have met their goals. People feel good not just when they reach their goals but even when they deem they are making good progress (Carver & Scheier, 1990). They feel bad when they are not making sufficient progress.

That brings up the third ingredient, which is the capacity to change oneself. In effective self-regulation, people operate on themselves to bring about these changes. The popular term for this is "willpower," which suggests some kind of energy is expended in the process. Psychologists hesitate to adopt terms associated with folk wisdom because there are many potential implications. Here, the term is used to refer specifically to some energy that is involved in the capacity to change oneself.

Consistent with the popular notion of willpower, people do seem to expend some energy during self-regulation. Many studies have found that after people exert self-regulation to change some response, they perform worse on the next unrelated task if it too requires self-regulation (Hagger, Wood, Stiff, & Chatzisarantis, 2010). That pattern suggests that some energy, such as willpower, was used up during the first task, leaving less available for the second task. The term for this state of reduced energy available for self-regulation is ego depletion (Baumeister, Bratslavsky, Muraven, & Tice, 1998). Current research provides mixed results on ego depletion, and we need further study to better understand when and how it occurs. It may be that as people go about their daily lives, they gradually become ego-depleted because they are exerting self-control and resisting temptations. Some research

suggests that during the state of ego depletion, people become less helpful and more aggressive, prone to overeat, misbehave sexually, and express more prejudice (Hofmann, Vohs, & Baumeister, 2012).

Thus, a person's capacity for self-regulation is not constant, but rather it fluctuates. To be sure, some people are generally better than others at controlling themselves (Tangney et al., 2004). However, even someone with excellent self-control may occasionally find that control breaks down due to ego depletion. In general, self-regulation can be improved by getting enough sleep and healthy food, and by minimizing other demands on one's willpower.

There is some evidence that regular exercise of self-control can build up one's willpower, like strengthening a muscle (Baumeister & Tierney, 2011; Oaten & Cheng, 2006). Even in early adulthood, one's self-control can be strengthened. Furthermore, research has shown that disadvantaged, minority children who take part in preschool programs such as Head Start (often based on the Perry program) end up doing better in life even as adults. This was thought for a while to be due to increases in intelligence quotient (IQ), but changes in IQ from such programs are at best temporary. Instead, recent work indicates that improvement in self-control and related traits may be what produces the benefits (Heckman, Pinto, & Savelyev, in press). It's not doing math problems or learning to spell at age 3 that increases subsequent adult success, but rather the benefit comes from having some early practice at planning, getting organized, and following rules.

## Self-Esteem

Another aspect of identity formation is self-esteem. **Self-esteem** is defined as one's thoughts and feelings about one's self-concept and identity. Most theories on self-esteem state that there is a grand desire, across all genders and ages, to maintain, protect, and enhance their self-esteem. Contrary to popular belief, there is no empirical evidence for a significant drop in self-esteem throughout adolescence. "Barometric self-esteem" fluctuates rapidly and can cause severe distress and anxiety, but baseline self-esteem remains highly stable across adolescence. The validity of global self-esteem scales has been questioned, and many suggest that more specific scales might reveal more about the adolescent experience.

There are several self-concepts and situational factors that tend to impact an adolescent's self-esteem. Teens who are close to their parents and whose parents are authoritative tend to have higher self-esteem. Further, when adolescents are recognized for their successes, have set high vocational aspirations, are athletic, or feel attractive, they have higher self-esteem. Teens tend to have lower self-esteem when entering middle school, feel peer rejection, and experience academic failure. Also, adolescents who have authoritarian or permissive parents, need to relocate, or have low socioeconomic status, are more likely to experience lower self-esteem.

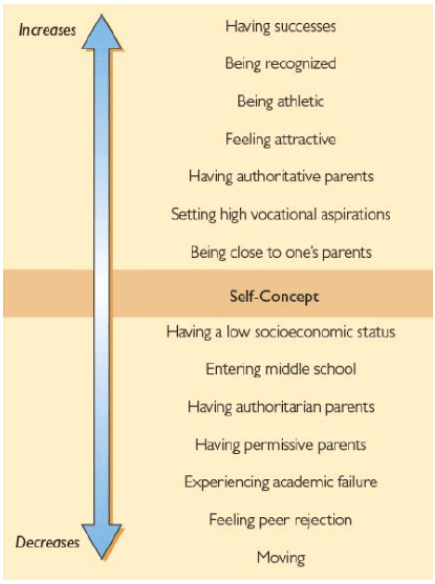



**Figure 8.2.2.** Factors that affect self-esteem in adolescents.

Girls are most likely to enjoy high self-esteem when engaged in supportive relationships with friends; the most important function of friendship to them is having someone who can provide social and moral support. When they fail to win friends' approval or cannot find someone with whom to share common activities and interests, in these cases, girls suffer from low self-esteem.

In contrast, boys are more concerned with establishing and asserting their independence and defining their relation to authority. As such, they are more likely to derive high self-esteem from their ability to influence their friends. On the other hand, the lack of romantic competence, for example, failure to win or maintain the affection of a romantic interest, is the major contributor to low self-esteem in adolescent boys.

## Self-Esteem Types

According to Mruk (2003), self-esteem is based on two factors: competence and worthiness. The relationship between competence and worthiness defines one's self-esteem type. As these factors are a spectrum, we can even further differentiate self-esteem types and potential issues associated with each (Figure 8.2.3).

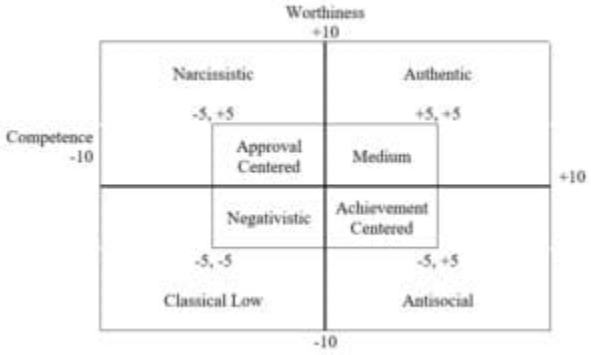



**Figure 8.2.3.** Self-Esteem meaning matrix with basic types and levels. Adapted from Mruk, 2003.

Those with high levels of competence and those who feel highly worthy will have high self-esteem. This self-esteem type tends to be stable and characterized by openness to new experiences and a tendency towards optimism. Those at the medium-high self-esteem type feel adequately competent and worthy. At the authentic level, individuals are realistic about their competence and feel worthy. They will actively pursue a life of positive, intrinsic values.

Individuals with low levels of competence and worthiness will have low self-esteem. At the negativistic level, people tend to be cautious and protective of what little self-esteem they do possess. Those at the classic low self-esteem level experience impaired function due to their low feelings of competence and worth, and are at risk for depression and giving up.

It is also possible to have high levels of competence but feel unworthy. This combination is a defensive or fragile self-esteem type, called competence-based self-esteem, where the person tends to compensate for their low levels of worthiness by focusing on their competence. At the success-seeking level, these individuals' self-esteem is contingent on their achievements, and they are often anxious about failure. The Antisocial level includes an exaggerated need for success and power, even to the point of acting out aggressively to achieve it.

Worthiness-based self-esteem is the combination of low competence and high worthiness. This type is another defensive or fragile self-esteem in which the individual has a low level of competence and compensates by focusing instead on their worthiness. At the approval-seeking level, these individuals are sensitive to criticism and rejection and base their self-esteem on the approval of others. At the narcissistic level, people will have an exaggerated sense of self-worth regardless of a lack of competencies. They also tend to be highly reactive to criticism and are very defensive.

## Influences on Self-Esteem

Adolescence is a crucial time in the development of self-esteem. Many factors influence an adolescent's self-esteem.

### Family Influences on Self-Esteem

One of the most important factors that influences an adolescent's self-esteem is family. Whether or not an adolescent feels supported and loved in their family can impact their self-worth. Family relationships that impact self-esteem include not only parents but also siblings. If an adolescent has a loving family environment and feels a sense of emotional security, support, and belonging, this will most likely lead to higher self-esteem than an adolescent who does not. Being in a family environment that

lacks a sense of security due to constant conflict and criticism, either between parents or siblings, may lead to lower self-esteem. Parents having unrealistic, high expectations can also lead to feelings of inadequacy and lower self-esteem.

### Peer Influences on Self-Esteem

Being accepted and fitting in social groups is a critical element in adolescent socio-emotional development, and peers become an increasingly significant influence on self-esteem. Positive peer influences, such as having close friends who they feel connected to and who provide emotional support and encouragement, can make a positive impact on adolescents' self-worth, leading to higher self-esteem, while not having this social support can lead to feelings of isolation and lower self-esteem.

### Cognitive Influences on Self-Esteem

In addition to family and peer influences, cognitive factors, such as how adolescents perceive themselves and how they interpret incidents, can also influence self-esteem. If adolescents perceive themselves as being capable, of being liked, and of comparing well in terms of their peer group, then their self-esteem is likely to be higher than that of adolescents who do not see themselves as being liked or capable, or believe that they are inferior to their peers. There are also **cognitive distortions** that lead to lower self-esteem, these cognitive distortions are patterns of inaccurate negative thinking, such as personalization (taking things personally when they are in fact not connected to you at all), overgeneralization (generalizing about the outcome of one event to all future events – thinking that if you did poorly on one math quiz then you will keep doing poorly and fail math class), and catastrophizing (assuming the worst will happen). Cognitive distortions like these lead to negative self-talk and lower self-esteem (Shirk, Burwell & Harter, 2003).

### Cultural Influences on Self-Esteem

Cultural beliefs and values can influence self-esteem by affecting how people in that culture perceive their worth. Two particularly important cultural beliefs that can influence the self-esteem of adolescents are values of appearance and gender roles. For example, if a culture values males who are tall and have a muscular appearance, then a male adolescent who does not fit this ideal standard may experience lower self-esteem. The same concept applies to cultural values of gender roles. If a culture values females who are outgoing and confident, this ideal may negatively affect the self-esteem of a reserved and timid female adolescent due to not fitting in with the cultural ideal. Research studies have found that adolescent females tend to have lower self-esteem than adolescent males (Baumeister, 1993; Pipher, 1994). Cultural values and beliefs are thought to be one of the contributing factors to this phenomenon –in Western countries, the cultural emphasis on physical attractiveness for females contributes to lower self-esteem in those who do not feel like they fit the cultural standards.

Studies have found that different cultures share four key factors that contribute to adolescents' self-esteem: controlling one's life, doing one's duty, benefiting others, and achieving social status (Becker et al., 2014). However, the value that is placed individually on these four factors differs by culture. For example, in Western European cultures that value individual freedom, having control over one's life was the factor that was most associated with high self-esteem. In cultures that value tradition and conformity, such as some Asian or Middle Eastern cultures, the factor that is most associated with high self-esteem is doing one's duty (Becker et al., 2014).

## Boosting Self-Esteem in Late Adolescence

During late adolescence, self-esteem tends to increase (Savin-Williams & Demo, 1983; Harter, 1990). Peer relationships have been found to play an important role in this increase in self-esteem. As we discussed earlier, peer relations are an important influence on self-esteem, and having the emotional support of friends can lead to increased feelings of self-worth and higher self-esteem. The social support of parents and siblings is also an important influence on adolescents' self-esteem (Harter, 1990; Savin-Williams & Demo, 1983). Doing things well in areas that they care about, such as academics, dance, or sports, and receiving recognition from important people in their lives, will increase adolescents' feelings of self-worth. Having the emotional support, encouragement, and praise from these important peer and family relationships is an important contributor to self-esteem in late adolescence, as is highlighting and reinforcing the domains in which they are doing well.

## Candela Citations

CC licensed content, Original

- Identity Formation. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...ity-formation/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Introduction to Emotional and Social Development in Adolescence. **Authored by**: Tera Jones. **Provided by**: Lumen Learning. **Retrieved from**: https://courses.lumenlearning.com/wm...n-adolescence/. **License**: CC BY-SA: Attribution-ShareAlike
- Identity Formation. **Authored by**: Tera Jones. **Provided by**: Lumen Learning. **Retrieved from**: https://courses.lumenlearning.com/wm...ity-formation/. **License**: CC BY-SA: Attribution-ShareAlike
- Introduction to Emotional and Social Development in Early Childhood. **Authored by**: Stephanie Loalada. **Provided by**: Lumen Learning. **Retrieved from**: https://courses.lumenlearning.com/wm...rly-childhood/. **License**: CC BY: Attribution
- Self-Efficacy. **Authored by**: James E Maddux and Evan Kleiman. **Provided by**: NOBA. **Retrieved from**: https://nobaproject.com/textbooks/in.../self-efficacy. **License**: CC BY-SA: Attribution-ShareAlike
- Self-Esteem, Self-Efficacy, and Locus of Control. **Provided by**: Khan Academy. **Retrieved from**: https://youtu.be/xcLKlPTG97k. **License**: CC BY: Attribution
- Developing the Self-Concept. **Authored by**: Tamara Ross . **License**: CC BY: Attribution

All rights reserved content

- Charles Cooley: Looking Glass Self. **Authored by**: Brooke Miller. **Provided by**: Khan Academy. **Retrieved from**: https://www.youtube.com/watch?v=bU0BQUa11ek. **License**: All Rights Reserved
- Self-Concept, Self-Identity, and Social Identity. **Authored by**: Shreena Desai. **Provided by**: Khan Academy. **Retrieved from**: https://youtu.be/PaA0mLVQd3k. **License**: All Rights Reserved
- George Herbert Mead--The I and the Me. **Authored by**: Brooke Miller. **Provided by**: Khan Academy. **Retrieved from**: https://youtu.be/PaA0mLVQd3k. **License**: All Rights Reserved

This page titled 8.1: Identity Formation is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 8.1: Identity Formation by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 8.2: Identity Development Theory

A well-developed identity is comprised of goals, values, and beliefs to which a person is committed. It is the awareness of the consistency in self over time, the recognition of this consistency by others (Erikson, 1980). The process of identity development is both an individual and social phenomenon (Adams & Marshall, 1996). Much of this process is assumed during adolescence when cognitive development allows for an individual to construct a 'theory of self' (Elkind, 1998) based on exposure to role models and identity options (Erikson, 1980). Erikson (1968) believed this period of development to be an 'identity crisis,' a crucial turning point in which an individual must develop in one way or another, ushering the adolescent toward growth and differentiation. Identity is formed through a process of exploring options or choices and committing to an option based upon the outcome of their exploration. Failure to establish a well-developed sense of identity can result in identity confusion. Those experiencing identity confusion do not have a clear sense of who they are or their role in society.

Identity development is vital to a person's understanding of self and participation in their social systems. Adams and Marshall (1996) established that identity formation provides five functions: a structure and order to self-knowledge; a sense of consistency and coherence to beliefs, goals, and self-knowledge; a sense of continuity for one's history and future; goals and direction; a sense of personal control of their choices and outcomes.

## Erikson's Identity vs. Role Confusion



**Figure 8.3.1**. Erik Erikson

Erik Erikson's theory of **psychosocial development** emphasizes the social nature of our development. His theory proposed that our psychosocial development takes place throughout our lifespan. Erikson suggested that how we interact with others is what affects our sense of self, or what he called the ego identity. He also believed that we are motivated by a need to achieve competence in certain areas of our lives.

According to psychosocial theory, we experience eight stages of development over our lifespan (Table 8.1), from infancy through late adulthood. At each stage, there is a conflict, or task, that we need to resolve. Successful completion of each developmental task results in a sense of competence and a healthy personality. Failure to master these tasks leads to feelings of inadequacy.

*Table 8.3.1. Erikson's psychosocial Stages of Development*

| Stage | Age (years) | Developmental Task | Description |
|---|---|---|---|
| 1 | 0–1 | Trust vs. mistrust | Trust (or mistrust) that basic needs, such as nourishment and affection, will be met |

| Stage | Age (years) | Developmental Task | Description |
|---|---|---|---|
| 2 | 1–3 | Autonomy vs. shame/ doubt | Develop a sense of independence in many tasks |
| 3 | 3–6 | Initiative vs. guilt | Take the initiative on some activities—may develop guilt when unsuccessful or boundaries overstepped |
| 4 | 7–11 | Industry vs. inferiority | Develop self-confidence in abilities when competent or sense of inferiority when not |
| 5 | 12–18 | Identity vs. confusion | Experiment with and develop identity and roles |
| 6 | 19–29 | Intimacy vs. isolation | Establish intimacy and relationships with others |
| 7 | 30–64 | Generativity vs. stagnation | Contribute to society and be part of a family |
| 8 | 65– | Integrity vs. despair | Assess and make sense of life and meaning of contributions |

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 8.3.1.** Erikson's Psychosocial Development explains all stages of this theory.

Erik Erikson believed that the primary psychosocial task of adolescence was establishing an identity. Erikson referred to life's fifth psychosocial task as one of **identity versus role confusion** when adolescents must work through the complexities of finding one's own identity. This stage includes questions regarding their appearance, vocational choices and career aspirations, education, relationships, sexuality, political and social views, personality, and interests. Erikson saw this as a period of confusion and experimentation regarding identity and one's life path. During adolescence, we experience **psychological moratorium**, *where teens put on hold commitment to an identity while exploring the options*.

Individual identity development is influenced by how they resolved all of the previous childhood psychosocial crises, and this adolescent stage is a bridge between the past and the future, childhood, and adulthood. Thus, in Erikson's view, an adolescent's central questions are, "Who am I?" and "Who do I want to be?" Identity formation was highlighted as the primary indicator of successful development during adolescence (in contrast to role confusion, which would be an indicator of not successfully meeting the task of adolescence). This crisis is resolved positively with **identity achievement** and the gain of fidelity (ability to be faithful) as a new virtue when adolescents have reconsidered the goals and values of their parents and culture. Some adolescents adopt the values and roles that their parents expect of them. Other teens develop identities that are in opposition to their parents but align with a peer group. This change is common as peer relationships become a central focus in adolescents' lives.

The culmination of this exploration is a more coherent view of oneself. Those who are unsuccessful at resolving this stage may withdraw further into social isolation or become lost in the crowd. However, more recent research suggests that few leave this age period with identity achievement and that most identity formation occurs during young adulthood (Côté, 2006).

## Marcia's Identity Statuses

Expanding on Erikson's theory, Marcia (1966) described identity formation during adolescence as involving both *exploration* and *commitment* with respect to ideologies and occupations (e.g., religion, politics, career, relationships, gender roles). Identity development begins when individuals identify with role models who provide them with options to explore for whom they can become. As identity development progresses, adolescents are expected to make choices and commit to options within the confines of their social contexts. In some cases, options are not provided or are limited, and the individual will fail to commit or will commit without the opportunity to explore various options (Marcia, 1980).

**Identity confusion/diffusion** occurs when adolescents neither explore nor commit to any identities. **Foreclosure** occurs when an individual commits to an identity without exploring options. **A moratorium** is a state in which adolescents are actively exploring options but have not yet made commitments. As mentioned earlier, individuals who have explored different options, discovered their purpose, and have made identity commitments are in a state of **identity achievement.**

| | | Individual has committed to identity: Yes | Individual has committed to identity: No |
|---|---|---|---|
| Individual has explored identity options | Yes | Identity Achievement | Moratorium |
| | No | Foreclosure | Identity Diffusion |

**Figure 8.3.2.** Marcia's identity statuses. Adapted from Discovering the Lifespan, by R. S. Feldman, 2009.

The least mature status, and one common in many children, is identity diffusion. **Identity diffusion** *is a status that characterizes those who have neither explored the options nor made a commitment to an identity*. Marcia (1980) proposed that when individuals enter the identity formation process, they have little awareness or experience with identity exploration or the expectation to commit to an identity. This period of identity diffusion is typical of children and young adolescents, but adolescents are expected to move out of this stage as they are exposed to role models and experiences that present them with identity possibilities. Those who persist in this identity may drift aimlessly with little connection to those around them or have little sense of purpose in life. Characteristics associated with prolonged diffusion include low self-esteem, being easily influenced by peers, a lack of meaningful friendships, little commitment or fortitude in activities or relationships, being self-absorbed, and self-indulgent.

Those in **identity foreclosure** *have committed to an identity without having explored the options*. Often, younger adolescents will enter a phase of foreclosure where they may, at least preliminarily, commit to an identity without an investment in the exploration process. This commitment is often a response to anxiety about uncertainty or change during adolescence or pressure from parents, social groups, or cultural expectations. It is expected that most adolescents will progress beyond the foreclosure phase as they can think independently, and we have multiple identity options. However, sometimes foreclosure will persist into late adolescence or even adulthood.

In some cases, parents may make these decisions for their children and do not grant the teen the opportunity to make choices. In other instances, teens may strongly identify with parents and others in their lives and wish to follow in their footsteps. Characteristics associated with prolonged foreclosure include well-behaved and obedient children with a high need for approval, authoritarian parenting style, low levels of tolerance or acceptance of change, high levels of conformity, and conventional thinking.

During high school and college years, teens and young adults move from identity diffusion and foreclosure toward moratorium and achievement. The most significant gains in identity development are in college, as college students are exposed to a greater variety of career choices, lifestyles, and beliefs. This experience is likely to spur questions regarding identity. A great deal of the identity work we do in adolescence and young adulthood is about values and goals, as we strive to articulate a personal vision or dream for what we hope to accomplish in the future (McAdams, 2013).

**Identity moratorium** *is a status that describes those who are actively exploring in an attempt to establish an identity but have yet to make any commitment*. This time can be an anxious and emotionally tense period as the adolescent experiments with different roles and explores various beliefs. Nothing is guaranteed, and there are many questions, but few answers. This moratorium phase is the precursor to identity achievement. During the moratorium period, it is normal for adolescents to be rebellious and uncooperative, avoid dealing with problems, procrastinate, experience low self-esteem, feel anxious, and be uncertain about decisions.

**Identity achievement** *refers to those who, after exploration, have committed*. It is a long process and is not often realized by the end of adolescence. Individuals who do reach identity achievement feel self-acceptance, stable self-definition, and commitment to their identity.

While Marcia's statuses help us understand the process of developing identity, there are several criticisms of this theory. First, identity status may not be global; different aspects of your identity may be in different statuses. An individual may be in multiple identity statuses at the same time for different aspects of identity. For example, one could be in the foreclosure status for their

religious identity, but in moratorium for career identity, and achievement for gender identity.

Further, identity statuses do not always develop in the sequence described above, although it is the most common progression. Not all people will reach identity achievement in all aspects of their identity, and not all may remain in identity achievement. There may be a third aspect of identity development, beyond exploration and commitment, which is the reconsideration of commitment. This addition would create a fifth status, **searching moratorium**. This status is a re-exploration after a commitment has been made (Meesus et al., 2012). It is not usual that commitments to aspects of our identity may change as we gain experience, and more options become available to explore. This searching moratorium may continue well into adulthood.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 8.3.2.** Macia's Stages of Adolescent Identity Development summarizes the various identity statuses and how individuals may move through them.

## Meeus-Crocetti's Identity Statuses

The Meeus-Crocetti model also holds that individuals enter adolescence with a set of commitments of at least minimal strength in important ideological and interpersonal identity domains, and that adolescents do not begin the identity development process with a "blank slate." In early adolescence, individuals may make commitments that build upon the ways in which adolescents have resolved the earlier Eriksonian psychosocial crises during childhood and have developed the ego strengths of hope, will, purpose, and competence (Erikson 1968).

The Meeus-Crocetti model differs from Marcia's in that adolescents manage their commitments in two ways: in-depth exploration and reconsideration. In-depth exploration is a process whereby individuals continuously monitor present commitments, which makes them more conscious and maintains them. Reconsideration is the process of comparing present commitments with alternative ones and deciding whether they need to be changed. The Meeus-Crocetti model, therefore, focuses on the dynamic between certainty (exploration in depth) and uncertainty (reconsideration), and distinguishes moratorium from **searching moratorium**, with the first trajectory indicating the inability to find a fitting identity, and the latter a purposeful and potentially productive exploration of alternative commitments.

Secondly, the Meeus-Crocetti model has a stronger process orientation than Marcia's model. Marcia views commitments as the outcome of the exploration process; after exploring various alternative commitments, adolescents choose one or more to which they will adhere. In contrast, the Meeus-Crocetti model assumes that commitments are formed and revised in an iterative process of choosing and reconsidering them. In addition, the model assumes that adolescents regularly reflect upon their present commitments.

Whereas commitment and in-depth exploration imply attempts to develop and maintain a sense of self (i.e., identity coherence or synthesis), reconsideration represents questioning and rethinking this sense of self (identity confusion).

## Supporting Identity Development

As the process of identity development can be a confusing and challenging period, how can adults support adolescents through this process? First, affirm that the anxiety, doubts, and confusion are reasonable and that most teens do not complete identity achievement before graduating from high school. Exposing adolescents to various role models can help them imagine different roles or options for their future selves. Role models can come from within the family, schools, or community. Adults should talk with adolescents about their values, goals, and identities to help build awareness. They may be interested in knowing how others make decisions while developing their own identities. Finally, support the commitments that adolescents have made. Identity commitments can help someone feel grounded and less confused while exploring identity.

# Candela Citations

CC licensed content, Original

- Identity Development Theory. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...opment-theory/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Identity Formation. **Authored by**: Tera Jones. **Provided by**: Lumen Learning. **Retrieved from**: https://courses.lumenlearning.com/wm...ity-formation/. **License**: CC BY-SA: Attribution-ShareAlike
- Psychology. **Provided by**: OpenStax. **Retrieved from**: http://cnx.org/contents/4abf04bf-93a...espan-Theories. **License**: CC BY: Attribution
- Identity Statuses as Developmental Trajectories: A Five-Wave Longitudinal Study in Early-to-Middle and Middle-to-Late Adolescents. **Authored by**: Wim Meeus, Rens van de Schoot, Loes Keijsers & Susan Branje . **Retrieved from**: https://link.springer.com/article/10...964-011-9730-y. **License**: CC BY-NC: Attribution-NonCommercial

All rights reserved content

- Erikson's Psychosocial Development . **Authored by**: Shreena Desai. **Provided by**: Khan Academy. **Retrieved from**: https://youtu.be/SIoKwUcmivk. **License**: All Rights Reserved
- Macia's Stages of Adolescent Identity Development. **Authored by**: Tiffany Dickie. **Retrieved from**: https://youtu.be/a8HIY_bqrVo. **License**: All Rights Reserved

This page titled 8.2: Identity Development Theory is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 8.2: Identity Development Theory by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 8.3: Domains of Identity

As mentioned previously, there are several significant areas of identity development, and each domain may progress through the identity development process independently. Some of the most widely studied domains of identity development include cultural, gender, sexual, ideological, and occupational identity.

## Cultural Identity

**Cultural identity:** Cultural identity refers to how people come to terms with whom they are based on their ethnic, racial, and cultural ancestry. According to the U.S. Census (2012), more than 40% of Americans under the age of 18 are from ethnic minorities. At this point, you are probably aware of the cultural groups to which you belong (i.e., "I am a Latino, middle-class, (almost) college-educated male"). Do you remember the process of coming to awareness of your cultural identity—when did you know you were white and what that meant? Was it during childhood, as a teenager, or reading this chapter? Has your understanding, or acceptance, of your racial heritage changed during your lifetime?

For most people, it does. Just as Piaget organized the growth of children according to various stages of development, cultural scholars have similarly organized racial awareness along models and stages. Before explaining the various models, let us make a couple of general comments about models. One, a model is not the thing it represents. Is the model car you played with as a child the same as the actual automobile? What were the differences? Size, time, maneuverability, details? These same kinds of differences exist between the model of racial identity development and the actual personal process. However, just like the car model gives a relatively accurate picture of the actual automobile, so do the racial identity models. Two, these models are general and not meant to fit perfectly to every individual's experience. With that said, let us examine the process of coming to an understanding of our racial identity.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 8.4.1.** Demographic Structure of Society–Race and Ethnicity provides more information on the structures of race and ethnicity and how minority and majority identity is constructed.

To better understand this complex process, and in recognition of the above discussion regarding the distinctions in experiences for various cultural groups, we will present four cultural identity models—-Minority, Majority, Bi-racial, and Global Nomads.

## Minority Identity Development

**Acculturation** is a process of social, psychological, and cultural change that stems from the balancing of two cultures while adapting to the prevailing culture of the society. Acculturation is a process in which an individual adopts, acquires, and adjusts to a new cultural environment. Individuals of a differing culture try to incorporate themselves into the more prevalent culture by participating in aspects of the more prevalent culture, such as their traditions, but still hold onto their original cultural values and traditions. The effects of acculturation can be seen at multiple levels in both the devotee of the prevailing culture and those who are assimilating into the culture (Cole, 2018).

At the individual level, the process of acculturation refers to the socialization process by which someone from outside of the dominant culture blends the values, customs, norms, cultural attitudes, and behaviors of the dominant culture. This process has been linked to changes in daily behavior, as well as numerous changes in psychological and physical well-being. As enculturation is used to describe the process of first-culture learning, acculturation can be thought of as second-culture learning.

The fourfold model is a bilinear model that categorizes acculturation strategies along two dimensions. The first dimension concerns the retention or rejection of an individual's minority or native culture (i.e. "Is it considered to be of value to maintain one's identity and characteristics?"). Whereas the second dimension concerns the adoption or rejection of the dominant group or host culture. ("Is it considered to be of value to maintain relationships with the larger society?") From this, four acculturation strategies emerge (Berry, 1997).

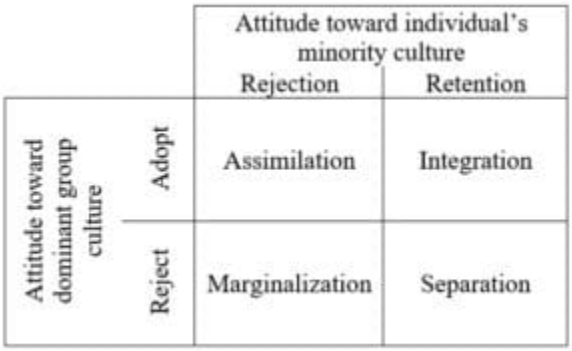



**Figure 8.4.1.** Berry's acculturation model.

- **Assimilation** occurs when individuals adopt the cultural norms of a dominant or host culture over their original culture. Sometimes this is forced by the dominant culture.
- **Separation** occurs when individuals reject the dominant or host culture in favor of preserving their culture of origin. Separation is often facilitated by immigration to ethnic enclaves.
- **Integration** occurs when individuals can adopt the cultural norms of the dominant or host culture while maintaining their culture of origin. Integration leads to, and is often synonymous with, biculturalism.
- **Marginalization** occurs when individuals reject both their culture of origin and the dominant culture.

Studies suggest that individuals' respective acculturation strategies can differ between their private and public life spheres (Arends-Tóth & van de Vijver, 2004). For instance, an individual may reject the values and norms of the dominant culture in his private life (separation), while simultaneously adapting to the dominant culture in public parts of his life (i.e., integration or assimilation).

Because people who identify as members of a minority group in the United States tend to stand out or get noticed as "other" or "different," they also tend to become aware of their identity sooner than individuals who are part of the majority group. For many ethnic minority teens, discovering one's ethnic identity is an integral part of identity formation. Phinney (1989) proposed a model of ethnic identity development that included stages of unexplored ethnic identity, ethnic identity search, and achieved ethnic identity.

**Stage 1: Unexamined Identity**. As the name of this stage suggests, the person in stage one of Phinney's model has little or no concern with ethnicity. They may be too young to pay attention to such matters or just not see the relationship between racial identity and their own life. One may accept the values and beliefs of the majority culture, even if they work against their cultural group.

**Stage 2: Conformity**. In stage two, the individual moves from a passive acceptance of the dominant culture's value system to a more active one. They consciously make choices to assimilate or fit in with the dominant culture even if this means putting down or denying their heritage. They may remain at this stage until a precipitating event forces them to question their belief system.

**Stage 3: Resistance and Separation**. The move from stage two to stage three can be a complicated process as it necessitates a certain level of critical thinking and self-reflection. If you have ever tried to wrestle with aspects of your belief system, then you can imagine the struggle. The move may be triggered by a national event such as the case of "Michael Brown, an unarmed black teenager, was shot and killed on August 9, by Darren Wilson, a white police officer, in Ferguson, MO (Buchanan). It may be fostered on a more individual scale, such as enrolling in a Women's Studies class and learning about the specifics of women's history in America. Martin Luther King Jr. moved to this stage around age six after the mother of King's White neighborhood friends told them that he could not play with her children anymore because he was Black. A person in this stage may simply reject all of their previously held beliefs and positive feelings about the dominant culture with those of their group, or they may learn how to critically examine and hold beliefs from a variety of cultural perspectives, which leads to stage four.

**Stage 4: Integration**. The final stage is one where the individual reaches an achieved identity. They learn to value diversity, seeing race, gender, class, and ethnic relations as a complex process instead of an either/or dichotomy. Their aim is to end oppression against all groups, not just their own.

## Majority Identity Development

Since White is still considered normative in the United States, White people may take their identity and the corresponding privilege for granted. While we are using the following four stages of development to refer to racial and ethnic identity development, they may also be useful when considering other minority aspects of our identity, such as gender, class, or sexual orientation. Moreover, there is no set age or time period that a person reaches or spends in a particular stage, and not everyone will reach the final stage.

The following model was developed by Rita Hardiman (1994) and contains some similarities with Phinney's minority identity development model.

**Stage 1: Unexamined Identity**. This stage is the same for both minority and majority individuals. While children may notice that some of their playmates have different colored skin, they do not fear or feel superior to them.

**Stage 2: Acceptance**. The move to stage two signals a passive or active acceptance of the dominant ideology—either way, the individual does not recognize that he or she has been socialized into accepting it. When a White person goes the route of passive acceptance, they have no conscious awareness of being White. However, they may hold some subtly racist assumptions such as "[p]eople of color are culturally different, whereas Whites are individuals with no group identity, culture, or shared experience of racial privilege." Alternatively, White art forms are "classical," whereas works of art by people of color are considered "ethnic art," "folk art," or "crafts" (Martin and Nakayama 132). People in this stage may minimize contact with minorities or act in a "let me help you" fashion toward them. If a White person in this stage follows the active acceptance path, then they are conscious of their White identity and may act in ways that highlight it. Refusing to eat food from other cultures or watch foreign films are examples of the active acceptance path.

**Stage 3: Resistance**. Just as the move from stage two to stage three in the minority development model required a great deal of critical thought, so does this juncture. Here the members of the majority group cease blaming the members of minority groups for their conditions and see socioeconomic realities as a result of an unjust and biased sociopolitical system. There is an overall move from seeing one's station in life as a purely individual event or responsibility to a more systemic issue. Here, people may feel guilty about being White and ashamed of some of the historical actions taken by some White people. They may try to associate with only people of color, or they may attempt to exorcise aspects of White privilege from their daily lives.

**Stage 4: Redefinition**. In this stage, people attempt to redefine what it means to be White without the racist baggage. They can move beyond White guilt and recognize that White people and people of all cultures contain both racist and nonracist elements and that there are many historical and cultural events of which White people can be proud.

**Stage 5: Integration**. In the last phase, individuals can accept their Whiteness or other majority aspects of their identity and integrate it into other parts of their lives. There is simultaneous self-acceptance and acceptance of others.

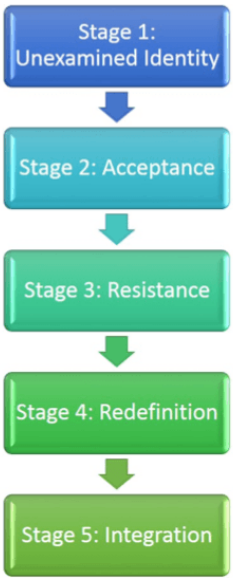



**Figure 8.4.2.** Hardiman's stages of majority identity development

## Bi- or Multiracial Identity Development

Originally, people thought that bi-racial individuals followed the development model of minority individuals. However, given that we now know that race is a social construct, it makes sense to realize that a person of mixed racial ancestry is likely to be viewed differently (from both the dominant culture and the individual's own culture) than a minority individual. Thus, they are likely to experience a social reality unique to their experience. The following five-stage model is derived from the work of W.S. Carlos Poston.

**Stage 1: Personal Identity**. Poston's first stage is much like the unexamined identity stage in the previous two models. Again, children are not aware of race as a value-based social category and derive their personal identity from individual personality features instead of cultural ones.

**Stage 2: Group Categorization**. In the move from stage one to two, the person goes from no racial or cultural awareness to having to choose between one or the other. In a family where the father is Black, and the mother is Japanese, the child may be asked by members of both families to decide if he or she is Black or Japanese. Choosing both is not an option in this stage.

**Stage 3: Enmeshment/Denial**. Following the choice made in stage two, individuals attempt to immerse themselves in one culture while denying ties to the other. This process may result in guilt or feelings of distance from the parent and family whose culture was rejected in stage two. If these feelings are resolved, then the child moves to the next stage. If not, they remain here.

**Stage 4: Appreciation**. When feelings of guilt and anger are resolved, the person can work to appreciate all of the cultures that shape their identity. While there is an attempt to learn about the diversity of their heritage, they will still identify primarily with the culture chosen in stage two.

**Stage 5: Integration**. In the fifth and final stage, the once fragmented parts of the person's identity are brought together to create a unique whole. There is an integration of cultures throughout all facets of a person's life—dress, food, holidays, spirituality, language, and communication.

# Global Nomads

People who move around a lot may develop a multicultural identity as a result of their extensive international travel. International teachers, business people, and military personnel are examples of global nomads (Martin & Nakayama). One of the earlier theories to describe this model of development was called the U-curve theory because the stages were thought to follow the pattern of the letter U. The model has since been revised in the form of a W or a series of ups and downs. This pattern is thought better to represent the up and down nature of this process.

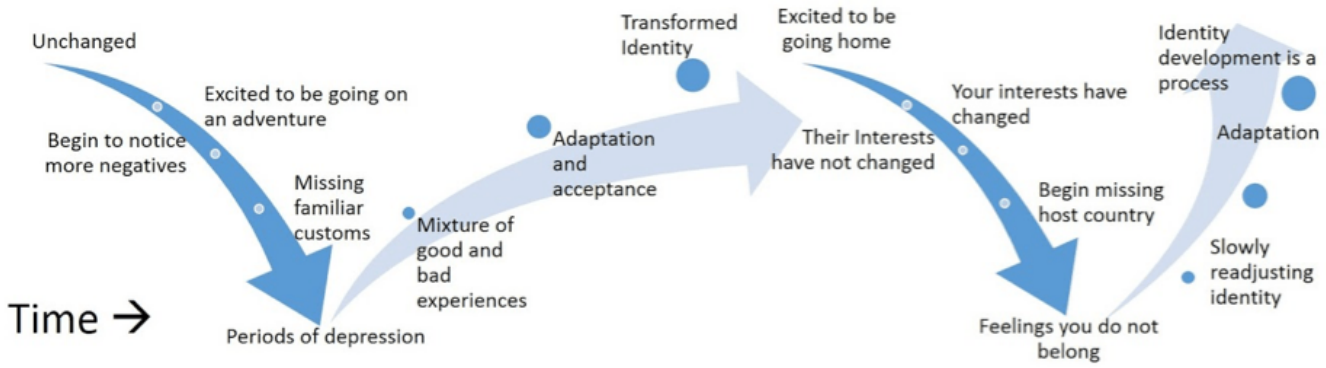



**Figure 8.4.3.** Identity development model for global nomads.

**Stage 1: Anticipation and Excitement**. If you have ever planned for an international trip, what were some of the things you did to prepare? Did you do something like buy a guide book to learn some of the native customs, figure out the local diet to see if you would need to make any special accommodations, learn the language, or at least some handy phrases perhaps? All of these acts characterize stage one in which people are filled with positive feelings about their upcoming journey and try to ready themselves.

**Stage 2: Culture Shock**. Once the excitement has worn off or you are confronted with an unexpected or unpleasant event, you may experience culture shock. This experience is the move from the top of the U or W to the bottom. Culture shock can result from physical, psychological, or emotional causes often correlating with an unpleasant and unfamiliar event. When individuals have spent most of their lives in a particular country, they will most likely experience culture shock when they travel overseas. The differences in cultural language, customs, and even food may be overwhelming to someone that has never experienced them before.

**Stage 3: Adaptation**. The final stage at the top of the U and W is a feeling of comfortableness: being somewhat familiar with the new cultural patterns and beliefs. After spending more time in a new country and learning its cultural patterns and beliefs, individuals may feel more welcomed into the society by accepting and adapting to these cultural differences.

## Gender Identity



**Gender identity** is one's self-conception of their gender. Sex is the term to refer to the biological differences between males and females, such as the genitalia and genetic differences. While gender refers to the socially constructed characteristics of women and men, such as norms, roles, and relationships between groups of women and men. **Cisgender** is an umbrella term used to describe people whose sense of personal identity and gender corresponds with their birth sex, while **transgender** is a term used to describe people whose sense of personal identity does not correspond with their birth sex.

**Gender expression**, or how one demonstrates gender (based on traditional gender role norms related to clothing, behavior, and

interactions), can be feminine, masculine, androgynous, or somewhere along a spectrum. Many adolescents use their analytic, hypothetical thinking to question traditional gender roles and expression. If their genetically assigned sex does not line up with their gender identity, they may refer to themselves as transgender, non-binary, or gender-nonconforming.

Fluidity and uncertainty regarding sex and gender are especially common during early adolescence when hormones increase and fluctuate, creating a difficulty of self-acceptance and identity achievement (Reisner et al., 2016). Gender identity is becoming an increasingly prolonged task as attitudes and norms regarding gender keep changing. The roles appropriate for males and females are evolving, and some adolescents may foreclose on a gender identity as a way of dealing with this uncertainty by adopting more stereotypic male or female roles (Sinclair & Carlsson, 2013). Those that identify as transgender or 'other' face even more significant challenges.

## Biological Approach to Gender Identity Development

The biological approach explores how gender identity development is influenced by genetics, biological sex characteristics, brain development, and hormone exposure.

Humans usually have 23 pairs of chromosomes, each containing thousands of genes that govern various aspects of our development. The 23rd pair of chromosomes are called the sex chromosomes. This pair determines a person's sex, among other functions. Most often, if a person has an XX pair, they will develop into a female, and if they have an XY pair, then they will be male.

Around the sixth week of prenatal development, the SRY gene on the Y chromosome signals the body to develop as a male. This chemical signal triggers a cascade of other hormones that will tell the gonads to develop into testes. If the embryo does not have a Y or the if, for some reason, the SRY gene is missing or not activate, then the embryo will develop female characteristics. The baby is born and lives as a female, but genetically her chromosomes are XY. Rat studies have found that the reverse is also possible. Researchers implanted the SRY gene in rats with XX chromosomes, and the result was male baby mice.

Individuals with atypical chromosomes may also develop differently than their typical XX or XY counterparts. These chromosomal abnormalities include syndromes where a person may have only one sex chromosome or three sex chromosomes. Turner's Syndrome is a condition where a female has only one X chromosome (XO). This missing chromosome results in a female external appearance but lacking ovaries. These XO females do not mature through puberty like XX females and they may also have webbed skin around the neck. Cognitively, these females tend to have high verbal skills, poor spatial and math skills, and poor social adjustment.

Klinefelter's Syndrome is a condition where a male has an extra X chromosome (XXY). This XXY combination results in male genitals, although their genitals may be underdeveloped even into adulthood. Even after puberty, they tend to have less body and facial hair and may develop breasts. From infancy, these children often have a passive, cooperative, and shy personality that remains into adulthood. Cognitively, they are often late to talk and have poor language and reading skills.

As we learned in the physical development chapter, sex hormones cause biological changes to the body and brain. While the same sex hormones are present in males and females, the amount of each hormone and the effect of that hormone on the body is different. Males have much higher levels of testosterone than females. In the womb, testosterone causes the development of male sex organs. It also impacts the hypothalamus, causing an enlarged sexually dimorphic nucleus, and results in the 'masculinization' of the brain. Around the same time, testosterone may contribute to greater lateralization of the brain, resulting in the two halves working more independently of each other. Testosterone also affects what we often consider male behaviors, such as aggression, competitiveness, visual-spatial skills, and higher sex drive.

## Cognitive Approaches to Gender Identity Development

Cognitive learning theory states that children develop gender at their own levels. At each stage, the child thinks about gender characteristically. As a child moves forward through stages, their understanding of gender becomes more complex.

The following cognitive model, formulated by Kohlberg, asserts that children recognize their gender identity around age three but do not see it as relatively fixed until the ages of five to seven. This identity marker provides children with a schema, a set of observed or spoken rules for how social or cultural interactions should happen. Information about gender is gathered from the environment; thus, children look for role models to emulate maleness or femaleness as they grow.

**Stage 1: Gender Labeling** (2-3.5 years). The child can label their gender correctly.

**Stage 2: Gender Stability** (3.5-4.5 years). The child's gender remains the same across time.

**Stage 3: Gender Constancy** (6 years). The child's gender is independent of external features (e.g., clothing, hairstyle).

Once children form a basic gender identity, they start to develop gender schemas. These gender schemas are organized set of gender-related beliefs that influence behaviors. The formation of these schemas explains the process by which gender stereotypes become so psychologically ingrained in our society.

According to Sandra Bem's Gender Schema Theory, gender schemas can be organized into four general categories. The **sex-type schema** is the belief that gender matches biological sex. **Sex-reversed schema** is when gender is the opposite of biological sex. Possessing both masculine and feminine traits is an **androgynous schema**. While possessing few masculine or feminine traits is an **undifferentiated schema**.

## Social learning approach to gender identity development

**Social Learning Theory** is based on outward motivational factors that argue that if children receive positive reinforcement, they are motivated to continue a particular behavior. If they receive punishment or other indicators of disapproval, they are more motivated to stop that behavior. In terms of gender development, children receive praise if they engage in culturally appropriate gender displays and punishment if they do not. When aggressiveness in boys is met with acceptance or a "boys will be boys" attitude, but a girl's aggressiveness earns them little attention, the two children learn different meanings for aggressiveness as it relates to their gender development. Thus, boys may continue being aggressive while girls may drop it out of their repertoire.

## Transgender Identity Development

Individuals who identify with the role that is different from their biological sex are called **transgender**. Approximately 1.4 million U.S. adults or .6% of the population are transgender, according to a 2016 report (Flores et al., 2016).

Transgender individuals may choose to alter their bodies through medical interventions such as surgery and hormonal therapy so that their physical being is better aligned with gender identity. They may also be known as male-to-female (MTF) or female-to-male (FTM). Not all transgender individuals choose to alter their bodies; many will maintain their original anatomy but may present themselves to society as another gender. This expression is typically done by adopting the dress, hairstyle, mannerisms, or other characteristics typically assigned to another gender. It is important to note that people who cross-dress or wear clothing that is traditionally assigned to a different gender is not the same as identifying as transgender. Cross-dressing is typically a form of self-expression, entertainment, or personal style, and it is not necessarily an expression against one's assigned gender (APA 2008).

After years of controversy over the treatment of sex and gender in the American Psychiatric Association Diagnostic and Statistical Manual for Mental Disorders (Drescher 2010), the most recent edition, DSM-5, responded to allegations that the term "gender identity disorder" is stigmatizing by replacing it with "**gender dysphoria**." Gender identity disorder as a diagnostic category stigmatized the patient by implying there was something "disordered" about them. Removing the word "disorder" also removed some of the stigmas while still maintaining a diagnosis category that will protect patient access to care, including hormone therapy and gender reassignment surgery.

In the DSM-5, gender dysphoria is a condition of people whose gender at birth is contrary to the one with which they identify. For a person to be diagnosed with gender dysphoria, there must be a marked difference between the individual's expressed/experienced gender and the gender others would assign him or her, and it must continue for at least six months. In children, the desire to be of the other gender must be present and verbalized (APA, 2013). Changing the clinical description may contribute to greater acceptance of transgender people in society. A 2017 poll showed that 54% of Americans believe gender is determined by sex at birth, and 32% say society has "gone too far" in accepting transgender people; views are sharply divided along political and religious lines (Salam, 2018).

Many psychologists and the transgender community are now advocating an affirmative approach to transgender identity development. This approach advocates that gender non-conformity is not a pathology but a normal human variation. Gender non-conforming children do not systemically need mental health treatment if they are not "pathological." However, care-givers of gender non-conforming children can benefit from a mixture of psycho-educational and community-oriented interventions. Some children or teens may benefit from counseling or other interventions to help them cope with familial or societal reactions to their gender-nonconformity.

Studies show that people who identify as transgender are twice as likely to experience assault or discrimination as non-transgender individuals; they are also one and a half times more likely to experience intimidation (National Coalition of Anti-Violence Programs 2010; Giovanniello, 2013). Trans women of color are most likely to be victims of abuse. There are also systematic aggressions, such as "deadnaming," (whereby trans people are referred to by their birth name and gender), laws restricting transpersons from accessing gender-specific facilities (e.g., bathrooms), or denying protected-class designations to prevent discrimination in housing, schools, and workplaces. Organizations such as the National Coalition of Anti-Violence Programs and Global Action for Trans Equality work to prevent, respond to and end all types of violence against transgender and homosexual individuals. These organizations hope that by educating the public about gender identity and empowering transgender individuals, this violence will end.

Like other domains of identity, stage models for transgender identity development have helped describe a typical progression in identity formation. Lev's Transgender Emergence Model looks at how trans people come to understand their identity. Lev is working from a counseling/therapeutic point of view, thus this model talks about what the individual is going through and the responsibility of the counselor.

**Stage 1: Awareness.** In this first stage of awareness, gender-variant people are often in great distress; the therapeutic task is the normalization of the experiences involved in emerging as transgender.

**Stage 2: Seeking Information/Reaching Out.** In the second stage, gender-variant people seek to gain education and support about transgenderism; the therapeutic task is to facilitate linkages and encourage outreach.

**Stage 3: Disclosure to Significant Others.** The third stage involves the disclosure of transgenderism to significant others (spouses, partners, family members, and friends); the therapeutic task involves supporting the transgender person's integration in the family system.

**Stage 4: Exploration (Identity & Self-Labeling).** The fourth stage involves the exploration of various (transgender) identities; the therapeutic task is to support the articulation and comfort with one's gendered identity.

**Stage 5: Exploration (Transition Issues & Possible Body Modification)**. The fifth stage involves exploring options for transition regarding identity, presentation, and body modification; the therapeutic task is the resolution of the decision and advocacy toward their manifestation.

**Stage 6: Integration (Acceptance & Post-Transition Issues).** In the sixth stage, the gender-variant person can integrate and synthesize (transgender) identity; the therapeutic task is to support adaptation to transition-related issues.

## Sexual Identity

**Sexual identity** is how one thinks of oneself in terms of to whom one is romantically or sexually attracted (Reiter, 1989). Sexual identity may also refer to **sexual orientation identity**, which is when people identify or dis-identify with a sexual orientation or choose not to identify with a sexual orientation (APA, 2009). Sexual identity and sexual behavior are closely related to sexual orientation but they are distinguished (Reiter, 1989), with *identity* referring to an individual's conception of themselves, *behavior* referring to actual sexual acts performed by the individual, and *sexual orientation* referring to romantic or sexual attractions toward persons of the opposite sex or gender, the same sex or gender, to both sexes or more than one gender, or no one.

Sexual orientation is typically discussed as four categories: *heterosexuality*, the attraction to individuals of the other sex; *homosexuality*, the attraction to individuals of the same sex; *bisexuality*, the attraction to individuals of either sex; and *asexuality*, no attraction to either sex. However, others view sexual orientation as less categorical and more of a continuum.

Alfred Kinsey was among the first to conceptualize sexuality as a continuum rather than a strict dichotomy of gay or straight. He created a six-point rating scale that ranges from exclusively heterosexual to exclusively homosexual (Figure 8.4.4). In his 1948 work, *Sexual Behavior in the Human Male*, Kinsey writes, "Males do not represent two discrete populations, heterosexual and homosexual. The world is not to be divided into sheep and goats … The living world is a continuum in each and every one of its aspects" (Kinsey, 1948).

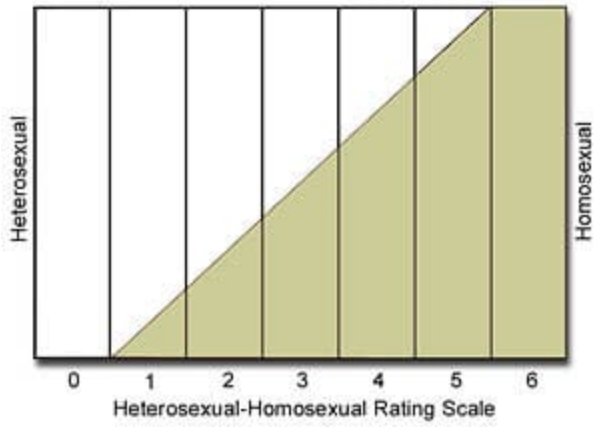



**Figure. 8.4.4.** The Kinsey scale indicates that sexuality can be measured by more than just heterosexuality and homosexuality.

Later scholarship by Eve Kosofsky Sedgwick expanded on Kinsey's notions. She coined the term "homosocial" to oppose "homosexual," describing nonsexual same-sex relations. Sedgwick recognized that in U.S. culture, males are subject to a clear divide between the two sides of this continuum, whereas females enjoy more fluidity. This difference can be illustrated by the way women in the United States can express homosocial feelings (nonsexual regard for people of the same sex) through hugging, handholding, and physical closeness. In contrast, U.S. males refrain from these expressions since they violate the heteronormative expectation that male sexual attraction should be exclusively for females. Research suggests that it is easier for women to violate these norms than men because men are subject to more social disapproval for being physically close to other men (Sedgwick, 1985).

The issue of sexual identity and orientation can be further complicated when considering differences in romantic attraction versus sexual attraction. A person could be romantically interested in the same sex, different sex, or any gender but could feel sexually attracted to the same or different group. For example, an individual could be interested in a romantic relationship with males but be sexually attracted to males and females. Alternatively, someone may be open to a romantic relationship with any gender but is primarily only sexually attracted to one sex.

The United States is a **heteronormative society**, meaning it assumes that heterosexuality is the norm and that sexual orientation is biologically determined and unambiguous. Consider that homosexuals are often asked, "When did you know you were gay?" but heterosexuals are rarely asked, "When did you know that you were straight?" (Ryle 2011). However, there is no scientific consensus regarding the exact reasons why an individual holds a particular sexual orientation. Research has been conducted to study the possible genetic, hormonal, developmental, social, and cultural influences on sexual orientation, but there has been no definitive evidence that links sexual orientation to one factor (APA, 2008).

According to current understanding, individuals are usually aware of their sexual orientation between middle childhood and early adolescence (APA, 2008). They do not have to participate in sexual activity to be aware of these emotional, romantic, and physical attractions; people can be celibate and still recognize their sexual orientation. Homosexual women (also referred to as lesbians), homosexual men (also referred to as gays), and bisexuals of both genders may have very different experiences of discovering and accepting their sexual orientation. At the point of puberty, some may be able to announce their sexual orientations, while others may be unready or unwilling to make their homosexuality or bisexuality known since it goes against U.S. society's historical norms (APA 2008).

Most of the research on sexual orientation identity development focuses on the development of people who are attracted to the same sex. Many people who feel attracted to members of their own sex 'come out' at some point in their lives. *Coming out* is described in three phases. The first phase is the phase of "knowing oneself," and the realization emerges that one is sexually and emotionally attracted to members of one's own sex. This step is often described as an internal coming out and can occur in childhood or at puberty, but sometimes as late as age 40 or older. The second phase involves a decision to come out to others, e.g., family, friends, and/or colleagues. The third phase involves living openly as an LGBT person (Human Rights Campaign, 2007). In the United States today, people often come out during high school or college age. At this age, they may not trust or ask for help from others, especially when their orientation is not accepted in society. Sometimes they do not inform their own families.

According to Rosario, Schrimshaw, Hunter, Braun (2006), "the development of a lesbian, gay, or bisexual (LGB), sexual identity is a complex and often difficult process. Unlike members of other minority groups (e.g., ethnic and racial minorities), most LGB individuals are not raised in a community of similar others from whom they learn about their identity. Their identity may not be

reinforced and supported by their community. Instead, “LGB individuals are often raised in communities that are either ignorant of or openly hostile toward homosexuality.”

## Cass’ Homosexual Identity Model

Cass (1979) was one of the early creators of a model for explaining how individuals progress through the development of a homosexual identity. Cass proposed six stages. It may take several years to get through a particular stage and not all make it to stage 6. “Foreclosure” (when an individual denies their identity or hides it from others) can occur at any stage and halt the process.

**Stage 1: Identity Awareness**. The individual is aware of being “different” from others.

**Stage 2: Identity Comparison**. The individual compares their feelings and emotions to those they identify as heterosexual.

**Stage 3: Identity Tolerance**. The individual tolerates their identity as being non-heterosexual.

**Stage 4: Identity Acceptance**. The individual accepts their new identity and begins to become active in the “gay community.”

**Stage 5: Identity Pride**. The individual becomes proud of their identity and becomes fully immersed in “gay culture.”

**Stage 6: Identity Synthesis**. The individual fully accepts their identity and synthesizes their former “heterosexual life” and their new identity.

A criticism of Cass’ model is that her research primarily studied white gay men and lesbian women of middle- to upper-class status. This stage model is not necessarily reflective of the process a bisexual or transgender individual may experience and, ultimately, may not be reflective of the process experienced by all non-heterosexual individuals.

Some individuals with unwanted sexual attractions may choose to actively dis-identify with a sexual minority identity, which creates a different sexual orientation identity from their actual sexual orientation. Sexual orientation identity, but not sexual orientation, can change through psychotherapy, support groups, and life events. A person who has homosexual feelings can self-identify in various ways. An individual may come to accept an LGB identity, to develop a heterosexual identity, to reject an LGB identity while choosing to identify as ex-gay or to refrain from specifying a sexual identity (APA, 2009).

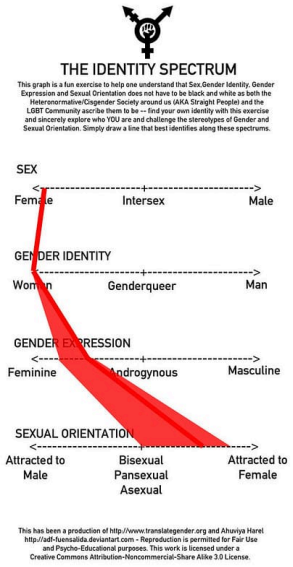



**Figure 8.4.5**. This identity spectrum shows the fluidity between sex, gender identity, gender expression, and sexual orientation.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 8.4.2.** Demographic Structure of Society–Sex, Gender, and Sexual Orientation explains various aspects of gender and sexual identity.

## Ideological Group Identity

**Religious identity** is a specific type of identity formation. Particularly, it is the sense of group membership to a religion and the importance of this group membership as it pertains to one's self-concept. Religious identity is not necessarily the same as religiousness or religiosity. Although these terms share a commonality, religiousness and religiosity refer to both the value of religious group membership as well as participation in religious events (e.g., going to church) (Arweck & Nesbitt, 2010; King et al., 1997). Religious identity, on the other hand, refers specifically to religious group membership regardless of religious activity or participation.

Similar to other forms of identity formation, such as ethnic and cultural identity, the religious context can generally provide a perspective from which to view the world, opportunities to socialize with a spectrum of individuals from different generations, and a set of fundamental principles to live out (King & Boratzis, 2004). These foundations can come to shape an individual's identity.

The religious views of teens are often similar to those of their families (Kim-Spoon, Longo, & McCullough, 2012). Most teens may question specific customs, practices, or ideas in the faith of their parents, but few reject the religion of their families entirely.

An adolescent's political identity is also influenced by their parents' political beliefs. A new trend in the 21st century is a decrease in party affiliation among adults. Many adults do not align themselves with either the democratic or republican party, and their teenage children reflect their parents' lack of party affiliation. Although adolescents do tend to be more liberal than their elders, especially on social issues (Taylor, 2014), like other aspects of identity formation, adolescents' interest in politics is predicted by their parents' involvement and by current events (Stattin et al., 2017).

## Occupational Identity Development

While adolescents in earlier generations envisioned themselves as working in a particular job and often worked as an apprentice or part-time in such occupations as teenagers, this is rarely the case today. Occupational identity takes longer to develop, as most of today's occupations require specific skills and knowledge that will require additional education or are acquired on the job itself. Besides, many of the jobs held by teens are not in occupations that most teens will seek as adults. (See career development theories in Chapter 7 for more information).

## Candela Citations

CC licensed content, Original

- Domains of Identity. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...s-of-identity/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Acculturation. **Provided by**: Wikipedia. **Retrieved from**: https://en.wikipedia.org/wiki/Accult...ite_note-:0-22. **License**: CC BY: Attribution
- Religious Identity. **Provided by**: Wikipedia. **Retrieved from**: https://en.wikipedia.org/wiki/Religious_identity. **License**: CC BY: Attribution

- Sexual Identity. **Provided by**: Wikipedia. **Retrieved from**: https://en.wikipedia.org/wiki/Sexual_identity. **License**: CC BY: Attribution
- Knowing Where We Belong. **Provided by**: Lumen Leaning. **Retrieved from**: https://courses.lumenlearning.com/in...ere-we-belong/. **License**: CC BY-SA: Attribution-ShareAlike
- Introduction to Sociology 2e. **Provided by**: Open Stax. **Retrieved from**: https://openstax.org/books/introduct...sex-and-gender. **License**: CC BY: Attribution
- Identity Formation. **Authored by**: Tera Jones. **Provided by**: Lumen Learning. **Retrieved from**: https://courses.lumenlearning.com/wm...ity-formation/. **License**: CC BY-SA: Attribution-ShareAlike


All rights reserved content


- Demographic structure of society - sex, gender, and sexual orientation. **Authored by**: Sydney Brown. **Provided by**: Khan Academy. **Retrieved from**: https://youtu.be/Hkmsu9Tl7NE. **License**: All Rights Reserved
- Demographic Structure of Society--Race and Ethnicity. **Authored by**: Sydney Brown. **Provided by**: Khan Academy. **Retrieved from**: http://Demographic%20Structure%20of%20Society--Race%20and%20Ethnicity. **License**: All Rights Reserved


This page titled 8.3: Domains of Identity is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 8.3: Domains of Identity by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

**cisgender:** an umbrella term used to describe people whose sense of personal identity and gender corresponds with their birth sex

**foreclosure:** a term for premature identity formation, which occurs when an adolescent adopts his or her parents' or society's role and values without questioning or analysis, according to Marcia's theory

**gender:** a term that refers to social or cultural distinctions of behaviors that are considered male or female

**gender dysphoria:** a condition listed in the DSM-5 in which people whose gender at birth is contrary to the identity with which they identify. This condition replaces "gender identity disorder."

**gender expression:** how one demonstrates gender (based on traditional gender role norms related to clothing, behavior, and interactions); can be feminine, masculine, androgynous, or somewhere along a spectrum

**gender identity:** the way that one thinks about gender and self-identifies can be woman, man, or genderqueer

**identity achievement:** Erikson's term for the attainment of identity, or the point at which a person understands who he or she is as a unique individual, in accord with past experiences and future plans; already questioned and made commitment according to Marcia's theory

**identity vs. role confusion:** Erikson's term for the fifth stage of development, in which the person tries to figure out "Who am I?" but is confused as to which of many possible roles to adopt

**moratorium:** an adolescent's choice of a socially acceptable way to postpone making identity-achievement decisions. Going to college is a typical example. Engaged in questioning, but not yet committing, according to Marcia's theory

**role confusion:** a situation in which an adolescent does not seem to know or care what his or her identity is. (Sometimes called identity diffusion or role diffusion)

**self-concept:** our perceptions of our behavior, abilities, and unique characteristics. It is essentially a mental picture of who you are as a person. For example, beliefs such as "I am a good friend" or "I am a kind person" are part of an overall self-concept

**self-esteem:** considered an essential component of emotional health, self-esteem encompasses both self-confidence and self-acceptance. It is the way individuals perceive themselves and their self-value

**sex:** a term that denotes the presence of physical or physiological differences between males and females

**transgender:** a term used to describe people whose sense of personal identity does not correspond with their birth sex

This page titled 8.4: Glossary is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 8.4: Glossary by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 9: MORAL DEVELOPMENT

## Learning Objectives

- Identify perspectives on moral development
- Describe Piaget's theory of moral development
- Describe Kohlberg's theory of moral development
- Describe Gilligan's theory of moral development
- Identify influences on moral development
- Describe moral development during adolescence

**Morality** is a system of beliefs about what is right and good compared to what is wrong or bad. These are principles for how individuals ought to treat one another with respect to justice, others' welfare, and rights. In order to investigate how individuals understand morality, it is essential to measure their attitudes, beliefs, emotions, and behaviors that contribute to moral understanding. **Moral beliefs** are related to, but not identical to, moral behavior. It is possible to know the right thing to do but not actually do it. Moral belief is also not the same as knowledge of social conventions, which are arbitrary customs needed for the smooth operation of society.

Moral development focuses on the emergence, change, and understanding of morality over the lifespan. As it pertains to morality, developmentalists study the role of peers and parents in facilitating moral development, the role of conscience and values, socialization and cultural influences, empathy and altruism, and positive development. The interest in morality spans many disciplines (e.g., philosophy, economics, biology, and political science) and specializations within psychology (e.g., social, cognitive, and cultural). Moral developmental psychology research focuses on questions of origins and changes in morality across the lifespan.


9.1: Theories of Moral Development

9.2: Modern Views of Moral Development

9.3: Influences on Moral Development

9.4: Moral Reasoning in Adolescence

9.5: Glossary



This page titled 9: Moral Development is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 9: Moral Development by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 9.1: Theories of Moral Development

The founder of psychoanalysis, Freud (1962), proposed the existence of a tension between the needs of society and the individual. According to Freud, moral development proceeds when the individual's selfish desires are repressed and replaced by the values of important socializing agents in one's life (for instance, one's parents). A proponent of behaviorism, Skinner (1972) similarly focused on socialization as the primary force behind moral development. In contrast to Freud's notion of a struggle between internal and external forces, Skinner focused on the power of external forces (reinforcement contingencies) to shape an individual's development. While both Freud and Skinner focused on the external forces that bear on morality (parents in the case of Freud, and behavioral contingencies in the case of Skinner), Piaget (1965) focused on the individual's construction, construal, and interpretation of morality from a social-cognitive and social-emotional perspective.

Kohlberg (1963) expanded upon Piagetian notions of moral development. While they both viewed moral development as a result of a deliberate attempt to increase the coordination and integration of one's orientation to the world, Kohlberg provided a systematic 3-level, 6-stage sequence reflecting changes in moral judgment throughout the lifespan. Specifically, Kohlberg argued that development proceeds from a selfish desire to avoid punishment (personal), to a concern for group functioning (societal), to a concern for the consistent application of universal ethical principles (moral).

Turiel (1983) argued for a social domain approach to social cognition, delineating how individuals differentiate moral (fairness, equality, justice), societal (conventions, group functioning, traditions), and psychological (personal, individual prerogative) concepts from early in development throughout the lifespan. Over the past 40 years, research findings have supported this model, demonstrating how children, adolescents, and adults differentiate moral rules from conventional rules, identify the personal domain as a nonregulated domain, and evaluate multifaceted (or complex) situations that involve more than one domain.

For the past 20 years, researchers have expanded the field of moral development, applying moral judgment, reasoning, and emotion attribution to topics such as prejudice, aggression, theory of mind, emotions, empathy, peer relationships, and parent-child interactions.

## Piaget's Theory of Moral Development

To understand adult morality, Piaget believed that it was necessary to study both how morality manifests in the child's world as well as the factors that contribute to the emergence of central moral concepts such as welfare, justice, and rights. By interviewing children, Piaget (1965) found that young children were focused on authority mandates and that with age, children become autonomous, evaluating actions from a set of independent principles of morality.

He developed two phases of moral development, one common among children and the other common among adults.

### Heteronomous Phase

The first is the Heteronomous Phase. This phase, more common among children, is characterized by the idea that rules come from authority figures in one's life, such as parents, teachers, and God. It also involves the idea that rules are permanent no matter what. Thirdly, this phase of moral development includes the belief that "naughty" behavior must always be punished and that the punishment will be proportional. This absolutism in moral development is seen in children's play from the age of 5, where they exhibit a blind belief in the rules and ideas of right and wrong passed to them by their elders.

### Autonomous Phase

The second phase in Piaget's theory of moral development is referred to as the Autonomous Phase. This phase is more common after one has matured and is no longer a child. In this phase, people begin to view the intentions behind actions as more important than their consequences. For instance, if a person who is driving swerves in order to not hit a dog and then knocks over a road sign, adults are likely to be less angry at the person than if he or she had done it on purpose just for fun. Even though the outcome is the same, people are more forgiving because of the good intention of saving the dog. This phase also includes the idea that people have different morals and that morality is not necessarily universal. People in the Autonomous Phase also believe rules may be broken under certain circumstances. For instance, Rosa Parks broke the law by refusing to give up her seat on a bus, which was against the law but something many people consider moral nonetheless. In this phase, people also stop believing in

the idea of immanent justice.

# Kohlberg's Theory of Moral Development

Psychologist Lawrence Kohlberg (1927–1987) extended upon the foundation that Piaget built regarding moral and cognitive development. Kohlberg, like Piaget, was interested in moral reasoning. Moral reasoning does not necessarily equate to moral behavior. Holding a particular belief does not mean that our behavior will always be consistent with the belief. To develop this theory, Kohlberg posed moral dilemmas to people of all ages, and then he analyzed their answers to find evidence of their particular stage of moral development. After presenting people with this and various dilemmas, Kohlberg reviewed people's responses and placed them in different stages of moral reasoning. According to Kohlberg, an individual progresses from the capacity for pre-conventional morality (before age 9) to the capacity for conventional morality (early adolescence), and toward attaining post-conventional morality (once formal operational thought is attained), which only a few fully achieve.

## Moral Stages According to Kohlberg

Using a stage model similar to Piaget's, Kohlberg proposed three levels, with six stages, of moral development. Individuals experience the stages universally and in sequence as they form beliefs about justice. He named the levels simply preconventional, conventional, and postconventional.

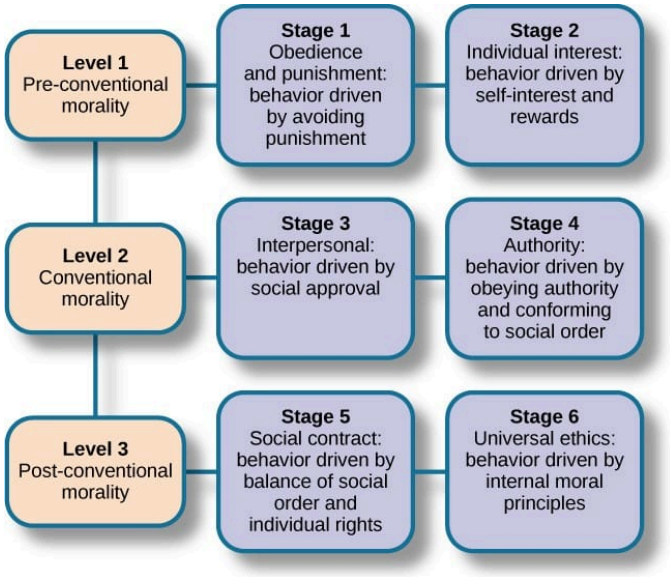



**Figure 9.2.1.** Kohlberg identified three levels of moral reasoning: pre-conventional, conventional, and post-conventional: Each level is associated with increasingly complex stages of moral development.

## Preconventional: Obedience and Mutual Advantage

The preconventional level of moral development coincides approximately with the preschool period of life and with Piaget's preoperational period of thinking. At this age, the child is still relatively self-centered and insensitive to the moral effects of actions on others. The result is a somewhat short-sighted orientation to morality. Initially (Kohlberg's Stage 1), the child adopts an **ethics of obedience and punishment** —a sort of "morality of keeping out of trouble." The rightness and wrongness of actions are determined by whether actions are rewarded or punished by authorities, such as parents or teachers. If helping yourself to a cookie brings affectionate smiles from adults, then taking the cookie is considered morally "good." If it brings scolding instead, then it is morally "bad." The child does not think about why an action might be praised or scolded; in fact, says Kohlberg, he would be incapable, at Stage 1, of considering the reasons even if adults offered them.

Eventually, the child learns not only to respond to positive consequences but also learns how to **produce** them by exchanging favors with others. The new ability creates Stage 2, **ethics of market exchange**. At this stage, the morally "good" action is one that favors not only the child but another person directly involved. A "bad" action is one that lacks this reciprocity. If trading the

sandwich from your lunch for the cookies in your friend's lunch is mutually agreeable, then the trade is morally good; otherwise, it is not. This perspective introduces a type of fairness into the child's thinking for the first time. However, it still ignores the larger context of actions—the effects on people not present or directly involved. In Stage 2, for example, it would also be considered morally "good" to pay a classmate to do another student's homework—or even to avoid bullying—provided that both parties regard the arrangement as being fair.

## Conventional: Conformity to Peers and Society

As children move into the school years, their lives expand to include a larger number and range of peers and (eventually) of the community as a whole. The change leads to **conventional morality**, which are beliefs based on what this larger array of people agree on—hence Kohlberg's use of the term "conventional." At first, in Stage 3, the child's reference group are immediate peers, so Stage 3 is sometimes called the **ethics of peer opinion**. If peers believe, for example, that it is morally good to behave politely with as many people as possible, then the child is likely to agree with the group and to regard politeness as not merely an arbitrary social convention, but a moral "good." This approach to moral belief is a bit more stable than the approach in Stage 2 because the child is taking into account the reactions not just of one other person, but of many. But it can still lead astray if the group settles on beliefs that adults consider morally wrong, like "Shoplifting for candy bars is fun and desirable."

Eventually, as the child becomes a youth and the social world expands, even more, he or she acquires even larger numbers of peers and friends. He or she is, therefore, more likely to encounter disagreements about ethical issues and beliefs. Resolving the complexities lead to Stage 4, the **ethics of law and order**, in which the young person increasingly frames moral beliefs in terms of what the majority of society believes. Now, an action is morally good if it is legal or at least customarily approved by most people, including people whom the youth does not know personally. This attitude leads to an even more stable set of principles than in the previous stage, though it is still not immune from ethical mistakes. A community or society may agree, for example, that people of a certain race should be treated with deliberate disrespect, or that a factory owner is entitled to dump wastewater into a commonly shared lake or river. To develop ethical principles that reliably avoid mistakes like these require further stages of moral development.

## Postconventional: Social Contract and Universal Principles

As a person becomes able to think abstractly (or "formally," in Piaget's sense), ethical beliefs shift from acceptance of what the community **does** believe to the **process** by which community beliefs are formed. The new focus constitutes Stage 5, the **ethics of social contract**. Now an action, belief, or practice is morally good if it has been created through fair, democratic processes that respect the rights of the people affected. Consider, for example, the laws in some areas that require motorcyclists to wear helmets. In what sense are the laws about this behavior ethical? Was it created by consulting with and gaining the consent of the relevant people? Were cyclists consulted, and did they give consent? Or how about doctors or the cyclists' families? Reasonable, thoughtful individuals disagree about how thoroughly and fairly these **consultation** processes should be. In focusing on the processes by which the law was created; however, individuals are thinking according to Stage 5, the ethics of social contract, regardless of the position they take about wearing helmets. In this sense, beliefs on both sides of a debate about an issue can sometimes be morally sound, even if they contradict each other.

Paying attention to due process certainly seems like it should help to avoid mindless conformity to conventional moral beliefs. As an ethical strategy, though, it too can sometimes fail. The problem is that an ethics of social contract places more faith in the democratic process than the process sometimes deserves, and does not pay enough attention to the content of what gets decided. In principle (and occasionally in practice), a society could decide democratically to kill off every member of a racial minority, but would deciding this by due process make it ethical? The realization that ethical means can sometimes serve unethical ends leads some individuals toward Stage 6, the **ethics of self-chosen, universal principles**. At this final stage, the morally good action is based on personally held principles that apply both to the person's immediate life as well as to the larger community and society. The universal principles may include a belief in democratic due process (Stage 5 ethics), but also other principles, such as a belief in the dignity of all human life or the sacredness of the natural environment. At Stage 6, the universal principles will guide a person's beliefs even if the principles mean occasionally disagreeing with what is customary (Stage 4) or even with what is legal (Stage 5).

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 9.2.1.** *Kohlberg's Six Stages of Moral Development* explains the stages of moral reasoning and applies it to an example scenario.

## Kohlberg and the Heinz Dilemma

The Heinz dilemma is a frequently used example to help us understand Kohlberg's stages of moral development. How would you answer this dilemma? Kohlberg was not interested in whether you answer yes or no to the dilemma: Instead, he was interested in the reasoning behind your answer.

In Europe, a woman was near death from a special kind of cancer. There was one drug that the doctors thought might save her. It was a form of radium that a druggist in the same town had recently discovered. The drug was expensive to make, but the druggist was charging ten times what the drug cost him to make. He paid $200 for the radium and charged $2,000 for a small dose of the drug. The sick woman's husband, Heinz, went to everyone he knew to borrow the money, but he could only get together about $1,000, which is half of what it cost. He told the druggist that his wife was dying and asked him to sell it cheaper or let him pay later. But the druggist said: "No, I discovered the drug and I'm going to make money from it." So Heinz got desperate and broke into the man's store to steal the drug for his wife. Should the husband have done that? (Kohlberg, 1969, p. 379)

From a theoretical point of view, it is not important what the participant thinks that Heinz should do. Kohlberg's theory holds that the justification the participant offers is what is significant, the form of their response. Below are some of the many examples of possible arguments that belong to the six stages:

- Stage one (obedience): Heinz should not steal the medicine because he will consequently be put in prison, which will mean he is a bad person. OR Heinz should steal the medicine because it is only worth $200 and not how much the druggist wanted for it; Heinz had even offered to pay for it and was not stealing anything else.
- Stage two (self-interest): Heinz should steal the medicine because he will be much happier if he saves his wife, even if he will have to serve a prison sentence. OR Heinz should not steal the medicine because prison is an awful place, and he would more likely languish in a jail cell than over his wife's death.
- Stage three (conformity): Heinz should steal the medicine because his wife expects it; he wants to be a good husband. OR Heinz should not steal the drug because stealing is bad, and he is not a criminal; he has tried to do everything he can without breaking the law, you cannot blame him.
- Stage four (law-and-order): Heinz should not steal the medicine because the law prohibits stealing, making it illegal. OR Heinz should steal the drug for his wife but also take the prescribed punishment for the crime as well as paying the druggist what he is owed. Criminals cannot just run around without regard for the law; actions have consequences.
- Stage five (social contract orientation): Heinz should steal the medicine because everyone has a right to choose life, regardless of the law. OR Heinz should not steal the medicine because the scientist has a right to fair compensation. Even if his wife is sick, it does not make his actions right.
- Stage six (universal human ethics): Heinz should steal the medicine because saving a human life is a more fundamental value than the property rights of another person. OR Heinz should not steal the medicine because others may need medicine just as badly, and their lives are equally significant.

Think It Over

Consider your decision-making processes. What guides your decisions? Are you primarily concerned with your personal well-being? Do you make choices based on what other people will think about your decision? Or are you guided by other principles? To what extent is this approach guided by your culture?

# Candela Citations

CC licensed content, Original

- Theories of Moral Development. **Authored by**: Nicole Arduini-Van Hoose. **Retrieved from**: https://courses.lumenlearning.com/ad...l-development/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Piaget's Theory of Moral Development. **Provided by**: Psychology Wiki. **Retrieved from**: https://psychology.wikia.org/wiki/Pi...al_development. **License**: CC BY-SA: Attribution-ShareAlike
- Moral Development. **Authored by**: Stephanie Loalada. **Provided by**: Lumen Learning. **Retrieved from**: https://courses.lumenlearning.com/wm...l-development/. **License**: CC BY-SA: Attribution-ShareAlike
- Educational Psychology. **Authored by**: Kelvin Seifert and Rosemary Sutton. **Provided by**: The Saylor Foundation . **Retrieved from**: https://resources.saylor.org/wwwreso...Psychology.pdf. **License**: CC BY: Attribution
- Psychology. **Provided by**: Open Stax. **Retrieved from**: https://cnx.org/contents/Sr8Ev5Og@12...espan-Theories. **License**: CC BY: Attribution

All rights reserved content

- Kohlberg's Six Stages of Moral Development. **Provided by**: Sprouts. **Retrieved from**: https://youtu.be/bounwXLkme4. **License**: All Rights Reserved

This page titled 9.1: Theories of Moral Development is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 9.1: Theories of Moral Development by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 9.2: Modern Views of Moral Development

Kohlberg continued to explore his theory after he published his research. He postulated that there could be other stages and that there could be transitions into each stage. One thing that Kohlberg never fully addressed was his use of nearly all-male samples. Men and women tend to have very different styles of moral decision making; men tend to be very justice-oriented, while women tend to be more compassion oriented. In terms of Kohlberg's stages, women tend to be in lower stages than men because of their compassion orientation.

Carol Gilligan was one of Kohlberg's research assistants. She believed that Kohlberg's theory was inherently biased against women. Gilligan suggests that the biggest reason that there is a gender bias in Kohlberg's theory is that males tend to focus on logic and rules. In contrast, women focus on caring for others and relationships. She suggests, then, that in order to truly measure women's moral development, it was necessary to create a measure specifically for women. Gilligan was clear that she did not believe neither male nor female moral development was better, but rather that they were equally important.

## Gilligan's Morality of Care

As logical as they sound, Kohlberg's stages of moral justice are not sufficient for understanding the development of moral beliefs. To see why, suppose that you have a student who asks for an extension of the deadline for an assignment. The justice orientation of Kohlberg's theory would prompt you to consider issues of whether granting the request is fair. Would the late student be able to put more effort into the assignment than other students? Would the extension place a difficult demand on you, since you would have less time to mark the assignments? These are important considerations related to the rights of the students and the teacher. In addition to these, however, are considerations having to do with the responsibilities that you and the requesting student have for each other and others. Does the student have a valid personal reason (illness, death in the family, etc.) for the assignment being late? Will the assignment lose its educational value if the student has to turn it in prematurely? These latter questions have less to do with fairness and rights and more to do with taking care of and responsibility for students. They require a framework different from Kohlberg's to be understood fully.

One such framework has been developed by Carol Gilligan, whose ideas center on a **morality of care**, or system of beliefs about human responsibilities, care, and consideration for others. Gilligan proposed three moral positions that represent different extents or breadth of ethical care. Unlike Kohlberg or Piaget, she does not claim that the positions form a strictly developmental sequence, but only that they can be ranked hierarchically according to their depth or subtlety. In this respect, her theory is "semi-developmental" in a way similar to Maslow's theory of motivation (Brown & Gilligan, 1992; Taylor, Gilligan, & Sullivan, 1995). Table 9.1 summarizes the three moral positions from Gilligan's theory.

*Table 9.3.1. Positions of moral development according to Gilligan*

| Moral position | Definition of what is morally good |
|---|---|
| Position 1: Survival orientation | Action that considers one's personal needs only |
| Position 2: Conventional care | Action that considers others' needs or preferences, but not one's own |
| Position 3: Integrated care | Action that attempts to coordinate one's own personal needs with those of others |

## Position 1: Caring as Survival

The most basic kind of caring is a **survival orientation**, in which a person is concerned primarily with his or her welfare. If a teenage girl with this ethical position is wondering whether to get an abortion, for example, she will be concerned entirely with the effects of the abortion on herself. The morally good choice will be whatever creates the least stress for herself, and that disrupts her own life the least. Responsibilities to others (the baby, the father, or her family) play little or no part in her thinking.

As a moral position, a survival orientation is obviously not satisfactory for classrooms on a widespread scale. If every student only looked out for himself or herself, classroom life might become rather unpleasant! Nonetheless, there are situations in which focusing primarily on yourself is both a sign of good mental health and relevant to teachers. For a child who has been bullied at school or sexually abused at home, for example, it is both healthy and morally desirable to speak out about how bullying or abuse has affected the victim. Doing so means essentially looking out for the victim's own needs at the expense of others' needs,

including the bully's or abuser's. Speaking out, in this case, requires a survival orientation and is healthy because the child is taking care of herself.

## Position 2: Conventional Caring

A more subtle moral position is **caring for others**, in which a person is concerned about others' happiness and welfare, and about reconciling or integrating others' needs where they conflict with each other. In considering an abortion, for example, the teenager at this position would think primarily about what other people prefer. Do the father, her parents, and/or her doctor want her to keep the child? The morally good choice becomes whatever will please others the best. This position is more demanding than Position 1, ethically, and intellectually, because it requires coordinating several persons' needs and values. Nevertheless, it is often morally insufficient because it ignores one crucial person: the self.

In classrooms, students who operate from Position 2 can be very desirable in some ways; they can be eager to please, considerate, and good at fitting in and at working cooperatively with others. Because these qualities are usually welcome in a busy classroom, teachers can be tempted to reward students for developing and using them. The problem with rewarding Position 2 ethics, however, is that doing so neglects the student's development—his or her own academic and personal goals or values. Sooner or later, personal goals, values, and identity need attention and care, and educators have a responsibility for assisting students in discovering and clarifying them.

## Position 3: Integrated Caring

The most developed form of moral caring in Gilligan's model is **integrated caring**, the coordination of personal needs and values with those of others. Now the morally good choice takes account of everyone, *including* yourself, not everyone *except* yourself. In considering an abortion, a woman at Position 3 would think not only about the consequences for the father, the unborn child, and her family but also about the consequences for herself. How would bearing a child affect her own needs, values, and plans? This perspective leads to moral beliefs that are more comprehensive but ironically are also more prone to dilemmas because the widest possible range of individuals is being considered.

In classrooms, integrated caring is most likely to surface whenever teachers give students wide, sustained freedom to make choices. If students have little flexibility in their actions, there is little room for considering *anyone's* needs or values, whether their own or others'. If the teacher says simply: "Do the homework on page 50 and turn it in tomorrow morning," then the main issue becomes compliance, not a moral choice. Suppose instead that she says something like this: "Over the next two months, figure out an inquiry project about the use of water resources in our town. Organize it any way you want—talk to people, read widely about it, and share it with the class in a way that all of us, including yourself, will find meaningful." An assignment like this poses moral challenges that are not only educational but also moral since it requires students to make value judgments. Why? For one thing, students must decide what aspect of the topic matters to them. Such a decision is partly a matter of personal values. For another thing, students have to consider how to make the topic meaningful or important to *others* in the class. Third, because the timeline for completion is relatively far in the future, students may have to weigh personal priorities (like spending time with friends or family) against educational priorities (working on the assignment a bit more on the weekend). As you might suspect, some students might have trouble making good choices when given this sort of freedom—and their teachers might, therefore, be cautious about giving such an assignment. Nevertheless, the difficulties in making choices are part of Gilligan's point: integrated caring is indeed more demanding than the caring based only on survival or on consideration of others. Not all students may be ready for it.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 9.3.1.** *Carol Gilligan's Theory of Moral Development* explains the difference in moral development from the care perspective that females often take in society.

## Try It

https://assessments.lumenlearning.co...essments/16616

## Candela Citations

CC licensed content, Original

- Modern Views of Moral Development. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...l-development/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Moral Development. **Authored by**: Stephanie Loalada. **Provided by**: Lumen Learning. **Retrieved from**: https://courses.lumenlearning.com/wm...l-development/. **License**: CC BY-SA: Attribution-ShareAlike

All rights reserved content

- Carol Gilligan's Theory of Moral Development. **Retrieved from**: https://youtu.be/HctzZwwueL4. **License**: All Rights Reserved

This page titled 9.2: Modern Views of Moral Development is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 9.2: Modern Views of Moral Development by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 9.3: Influences on Moral Development

Like most aspects of development, influencing factors are multifaceted. Moral development is strongly influenced by interpersonal factors, such as family, peers, and culture. Intrapersonal factors also impact moral development, such as cognitive changes, emotions, and even neurodevelopment.

## Interpersonal Influences

Children's interactions with caregivers and peers have been shown to influence their development of moral understanding and behavior. Researchers have addressed the influence of interpersonal interactions on children's moral development from two primary perspectives: socialization/internalization (Grusec & Goodnow, 1994; Kochanska & Askan, 1995; Kochanska, Askan, & Koenig, 1995) and social domain theory (Turiel, 1983; Smetana 2006). Research from the social domain theory perspective focuses on how children actively distinguish moral from conventional behavior based in part based on the responses of parents, teachers, and peers (Smetana, 1997). Adults tend to respond to children's moral transgressions (e.g., hitting or stealing) by drawing the child's attention to the effect of his or her action on others and doing so consistently across various contexts.

In contrast, adults are more likely to respond to children's conventional misdeeds (e.g., wearing a hat in the classroom, eating spaghetti with fingers) by reminding children about specific rules and doing so only in certain contexts (e.g., at school but not at home) (Smetana, 1984; 1985). Peers respond mainly to moral but not conventional transgressions and demonstrate emotional distress (e.g., crying or yelling) when they are the victim of moral but not conventional transgressions (Smetana, 1984). Children then use these different cues to help determine whether behaviors are morally or conventionally wrong.

Research from a socialization/internalization perspective focuses on how adults pass down standards of behavior to children through parenting techniques and why children do or do not internalize those values (Grusec & Goodnow, 1994; Kochanska & Askan, 1995). From this perspective, moral development involves children's increasing compliance with and internalization of adult rules, requests, and standards of behavior. Using these definitions, researchers find that parenting behaviors vary in the extent to which they encourage children's internalization of values and that these effects depend partially on child attributes, such as age and temperament (Grusec & Goodnow, 1994). For instance, Kochanska (1997) showed that gentle parental discipline best promotes conscience development in temperamentally fearful children. However, the same parental responsiveness and a mutually responsive parent-child orientation best promote conscience development in temperamentally fearless children. These parental influences exert their effects through multiple pathways, including increasing children's experience of moral emotions (e.g., guilt, empathy) and their self-identification as moral individuals (Kochanska, 2010).

### Moral Development in the Family

In the formation of children's morals, no outside influence is greater than that of the family. Through punishment, reinforcement, and both direct and indirect teaching, families instill morals in children and help them to develop beliefs that reflect the values of their culture. Although families' contributions to children's moral development are broad, there are particular ways in which morals are most effectively conveyed and learned.

### Justice

Families establish rules for right and wrong behavior, which are maintained through positive reinforcement and punishment. Positive reinforcement is the reward for good behavior and helps children learn that certain actions are encouraged above others. Punishment, by contrast, helps to deter children from engaging in bad behaviors, and from an early age helps children to understand that actions have consequences. This system additionally helps children to make decisions about how to act, as they begin to consider the outcomes of their behavior.

### Fairness

The notion of what is fair is one of the central moral lessons that children learn in the family context. Families set boundaries on the distribution of resources, such as food and living spaces, and allow members different privileges based on age, gender, and employment. The way in which a family determines what is fair affects children's development of ideas about rights and

entitlements, and also influences their notions of sharing, reciprocity, and respect.

## Personal Balance

Through understanding principles of fairness, justice, and social responsibilities, children learn to find a balance between their own needs and wants and the interests of the greater social environment. By placing limits on their desires, children benefit from a greater sense of love, security, and shared identity. At the same time, this connectedness helps children to refine their own moral system by providing them with a reference for understanding right and wrong.

## Social Roles

In the family environment, children come to consider their actions not only in terms of justice but also in terms of emotional needs. Children learn the value of social support from their families and develop motivations based on kindness, generosity, and empathy, rather than on only personal needs and desires. By learning to care for the interests and well-being of their family, children develop concern for society as a whole.

## Morality and Culture

The role of culture on moral development is an important topic that raises fundamental questions about what is universal and what is culturally specific regarding morality and moral development. Many research traditions have examined this question, with social-cognitive and structural-developmental positions theorizing that morality has a universal requirement to it, drawing from moral philosophy. The expectation is that if morality exists, it has to do with those values that are generalizable across groups and cultures. Alternatively, relativistic cultural positions have been put forth mostly by socialization theories that focus on how cultures transmit values rather than what values are applied across groups and individuals.

As an example of some of the debates, Shweder, Mahapatra, and Miller (1987) argued for moral relativism or the notion that different cultures defined the boundaries of morality differently. In contrast, Turiel and Perkins (2004) argued for the universality of morality, focusing largely on evidence throughout the history of resistance movements that fight for justice through the affirmation of individual self-determination rights. In an update on the debate between moral relativism and moral universality, Miller (2006) provides a thoughtful review of the cultural variability of moral priorities. Miller argues that rather than variability in what individuals consider moral (fairness, justice, rights), there is cultural variability in the priority given to moral considerations (e.g., the importance of prosocial helping). Wainryb (2006), in contrast, reviews extensive literature that has demonstrated that children in diverse cultures such as the U.S., India, China, Turkey, and Brazil share a pervasive view about upholding fairness and the wrongfulness of inflicting harm on others. Cultures vary in terms of conventions and customs, but not principles of fairness, which appear to emerge very early in development, before socialization influences. Wainryb (1991; 1993) shows that many apparent cultural differences in moral judgments are actually due to different informational assumptions or beliefs about the way the world works. When people hold different beliefs about the effects of actions or the status of different groups of people, their judgments about the harmfulness or fairness of behaviors often differ, even when they are applying the same moral principles.

Another powerful socializing mechanism by which values are transmitted is religion, which is for many inextricably linked to cultural identity. Nucci and Turiel (1993) assessed individuals' reactions to dictates from God, and the distinctions in their reactions to God's moral (e.g., stealing) and conventional (e.g., day of worship) dictates. One explicit manner in which societies can socialize individuals is through moral education. Solomon and colleagues (1988) present evidence from a study that integrated both direct instruction and guided reflection approaches to moral development, with evidence for resultant increases in spontaneous prosocial behavior. Finally, studies of moral development and cultural issues cover many subtopics. For instance, a recent review of studies examining social exclusion identifies cultural similarities in the evaluation of exclusion across a range of societies and cultures (Hitti, Mulvey & Killen, 2011).

# Intrapersonal Influences

Moral questions tend to be emotionally charged issues that evoke strong affective responses. Consequently, emotions likely play an important role in moral development. However, there is currently little consensus among theorists on how emotions influence moral development. Psychoanalytic theory, founded by Freud, emphasizes the role of guilt in repressing primal drives. Research on prosocial behavior has focused on how emotions motivate individuals to engage in moral or altruistic acts. Social-cognitive development theories have recently begun to examine how emotions influence moral judgments. Intuitionist theorists assert that moral judgments can be reduced to immediate, instinctive emotional responses elicited by moral dilemmas.

Research on socioemotional development and prosocial development has identified several “moral emotions,” which are believed to motivate moral behavior and influence moral development (Eisenberg, 2000, for a review). The primary emotions consistently linked with moral development are guilt, shame, empathy, and sympathy. Guilt has been defined as “an agitation-based emotion or painful feeling of regret that is aroused when the actor causes, anticipates causing or is associated with an aversive event” (Fergusen & Stegge, 1998). Shame is often used synonymously with guilt but implies a more passive and dejected response to a perceived wrong. Guilt and shame are considered “self-conscious” emotions because they are of primary importance to an individual’s self-evaluation.

In contrast to guilt and shame, empathy and sympathy are considered other-oriented moral emotions. Empathy is commonly defined as an affective response produced by the apprehension or comprehension of another’s emotional state, which mirrors the other’s affective state. Similarly, sympathy is defined as an emotional response produced by the apprehension or comprehension of another’s emotional state, which does not mirror the other’s affect but instead causes one to express concern or sorrow for the other (Eisenberg, 2000).

The relation between moral action and moral emotions has been extensively researched. Very young children have been found to express feelings of care, and empathy towards others, showing concerns for other’s well being (Eisenberg, Spinard, & Sadovsky, 2006). Research has consistently demonstrated that when empathy is induced in an individual, he or she is more likely to engage in subsequent prosocial behavior (Batson 1998; Eisenberg, 200 for review). Additionally, other research has examined emotions of shame and guilt concerning children’s emphatic and prosocial behavior (Zahn-Waxler & Robinson, 1995).

While emotions serve as information for children in their interpretations about the moral consequences of acts, the role of emotions in children’s moral judgments has only recently been investigated. Some approaches to studying emotions in moral judgments come from the perspective that emotions are automatic intuitions that define morality (Greene, 2001; Haidt, 2001). Other approaches emphasize the role of emotions as evaluative feedback that help children interpret acts and consequences (Turiel & Killen, 2010). Research has shown that children attribute different emotional outcomes to actors involved in moral transgressions than those involved in conventional transgressions (Arsenio, 1988; Arsenio & Fleiss, 1996). Emotions may help individuals prioritize among different information and possibilities and reduce information processing demands in order to narrow the scope of the reasoning process (Lemerise & Arsenio, 2000). In addition, Malti, Gummerum, Keller, and Buchmann (2009), found individual differences in how children attribute emotions to victims and victimizers.

**Link To Learning**

Parenting has the largest impact on adolescent moral development. Read more here in this article, “Building Character: Moral Development in Adolescence” from the Center for Parent and Teen Communication.

## Candela Citations

CC licensed content, Original

- Influences on Moral Development. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...l-development/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Moral Development During Adolescence . **Authored by**: Tera Jones. **Provided by**: Lumen Learning. **Retrieved from**: https://courses.lumenlearning.com/wm...g-adolescence/. **License**: CC BY: Attribution
- Moral Development. **Provided by**: Psychology Wiki. **Retrieved from**: https://psychology.wikia.org/wiki/Moral_development. **License**: CC BY-SA: Attribution-ShareAlike

This page titled 9.3: Influences on Moral Development is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 9.3: Influences on Moral Development by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 9.4: Moral Reasoning in Adolescence



As adolescents become increasingly independent, they also develop more nuanced thinking about morality, or what is right or wrong. As adolescents' cognitive, emotional, and social development continue to mature, their understanding of morality expands, and their behavior becomes more closely aligned with their values and beliefs. Therefore, moral development describes the evolution of these guiding principles and is demonstrated by the ability to apply these guidelines in daily life. Understanding moral development is important in this stage, where individuals make so many important decisions and gain more and more legal responsibility.

Adolescents are receptive to their culture, to the models they see at home, in school, and in the mass media. These observations influence moral reasoning and moral behavior. When children are younger, their family, culture, and religion greatly influence their moral decision-making. During the early adolescent period, peers have a much greater influence. Peer pressure can exert a powerful influence because friends play a more significant role in teens' lives.

Furthermore, the new ability to think abstractly enables youth to recognize that rules are simply created by other people. As a result, teens begin to question the absolute authority of parents, schools, government, and other traditional institutions (Vera-Estay, Dooley, & Beauchamp, 2014). By late adolescence, most teens are less rebellious as they have begun to establish their own identity, their own belief system, and their place in the world.

Unfortunately, some adolescents have life experiences that may interfere with their moral development. Traumatic experiences may cause them to view the world as unjust and unfair. Additionally, social learning also impacts moral development. Adolescents may have observed the adults in their lives, making immoral decisions that disregarded the rights and welfare of others, leading these youth to develop beliefs and values that are contrary to the rest of society. That being said, adults have opportunities to support moral development by modeling the moral character that we want to see in our children. Parents are particularly important because they are generally the original source of moral guidance. Authoritative parenting facilitates children's moral growth better than other parenting styles, and one of the most influential things a parent can do is to encourage the right kind of peer relations (McDevitt & Ormrod, 2004). While parents may find this process of moral development difficult or challenging, it is important to remember that this developmental step is essential to their children's well-being and ultimate success in life.

As mentioned previously, Lawrence Kohlberg (1984) argued that moral development moves through a series of stages, and reasoning about morality becomes increasingly complex (somewhat in line with increasing cognitive skills, as per Piaget's stages of cognitive development). In early adolescence, young people begin to care about how situational outcomes impact others and want to please and be accepted (conventional morality). At this developmental phase, people are able to value the good that can be derived from holding to social norms in the form of laws or less formalized rules. From adolescence and beyond, adolescents begin to employ abstract reasoning to justify behaviors. Moral behavior is based on self-chosen ethical principles that are generally comprehensive and universal, such as justice, dignity, and equality, which is postconventional morality.

## Forming a Sense of Rights and Responsibilities

When it comes to schooling and teaching, moral choices are not restricted to occasional dramatic incidents but are woven into almost every aspect of classroom life. Imagine this simple example. Suppose that you are teaching, reading to a small group of

second-graders, and the students are taking turns reading a story out loud. Should you give every student the same amount of time to read, even though some might benefit from having additional time? Or should you give more time to the students who need extra help, even if doing so bores classmates and deprives others of equal shares of "floor time"? Which option is fairer, and which is more considerate? Simple dilemmas like this happen every day at all grade levels simply because students are diverse, and because class time and a teacher's energy are finite.

Embedded in this rather ordinary example are moral themes about fairness or justice, on the one hand, and about consideration or care on the other. It is important to keep both themes in mind when thinking about how students develop beliefs about right or wrong. A **morality of justice** is about human rights—or, more specifically, about respect for fairness, impartiality, equality, and individuals' independence. A **morality of care**, on the other hand, is about human responsibilities—more specifically, about caring for others, showing consideration for individuals' needs, and interdependence among individuals. Students and teachers need both forms of morality. In the next sections, therefore, we explain a major example of each type of developmental theory, beginning with the morality of justice.

## Character Development: Integrating Ethical Understanding, Care, and Action

The theories described so far all offer frameworks for understanding how children grow into youth and adults. Those by Maslow, Kohlberg, and Gilligan are more specific than the one by Erikson in that they focus on the development of understanding about ethics. From a teacher's point of view, though, the theories are all limited in two ways. One problem is that they focus primarily on cognition—on what children *think* about ethical issues—more than on emotions and actions. The other is that they say little about how to encourage ethical development. Encouragement is part of teachers' jobs, and doing it well requires understanding not only what students know about ethics, but also how they feel about it and what ethical actions they are prepared to take.

Many educators have recognized the need for children to be guided in the development of ethics and morals, and a number of them have, therefore, developed practical programs that integrate ethical understanding, care, and action. As a group, the programs are often called **character education**. However, individual programs have a variety of specific names (for example, moral dilemma education, integrative ethical education, social competence education, and many more). Details of the programs vary, but they all combine a focus on ethical knowledge with attention to ethical feelings and actions (Elkind & Sweet, 2004; Berkowitz & Bier, 2006; Narvaez, 2010). Character education programs go well beyond just teaching students to obey ethical rules, such as "Always tell the whole truth" or "Always do what the teacher tells you to do." Such rules require very little thinking on the part of the student, and there are usually occasions in which a rule that is supposedly universal needs to be modified, "bent," or even disobeyed. (For example, if telling the whole truth might hurt someone's feelings, it might sometimes be more considerate—and thus more ethical—to soften the truth a bit, or even to say nothing at all.)

Instead, character education is about inviting students to think about the broad questions of his or her life, such as "What kind of person should I be?" or "How should I live my life?" Thoughtful answers to such broad questions help to answer a host of more specific questions that have ethical implications. For example, "Should I listen to the teacher right now, even if she is a bit boring, or just tune out?" or "Should I offer to help my friend with the homework she is struggling with, or hold back, so that learns to do it herself?" Most of the time, there is not enough time to reason about questions like these deliberately or consciously. Responses have to become intuitive, automatic and **embodied** —meaning that they have to be based on fairly immediate emotional responses (Narvaez, 2009). The goal of character education is to develop students' capacities to respond to daily ethical choices not only consciously and cognitively, but also intuitively and emotionally. To the extent that this goal is met, students can indeed live a good, ethically responsible life.

## Schoolwide Programs of Character Education

In the most comprehensive approaches to character education, an entire school commits itself to develop students' ethical character, despite the immense diversity among students (Minow, Schweder, & Markus, 2008). All members of the staff—not just teachers and administrators, but also custodians and educational assistants—focus on developing positive relationships with students. The underlying theme that develops is one of cooperation and mutual care, not competition. Fairness, respect, and honesty pervade class and school activities; discipline, for example, focuses on solving conflicts between students and between students and teachers, rather than on rewarding obedience or punishing wrong-doers. The approach requires significant reliance on democratic meetings and discussions, both in classrooms and wherever else groups work together in school.

Building a Culture of Kindness

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 9.5.1.** *Building a Culture of Kindness* with a Day of Services discusses ways that schools are building character education into their programs and the impact it is having on students.

## Classroom Programs of Character Education

Even if a teacher is teaching character education simply within her classroom, there are many strategies available. The goal, in this case, is to establish the classroom as a place where everyone feels included, and where everyone treats everyone else with civility and respect. Conflicts and disagreements may still occur, but in a caring community, they can be resolved without undue anger or hostility. Here are a few ways to work toward this sort of classroom:

- Use class meetings to decide on as many important matters as possible—such as the expected rules of behavior, important classroom activities, or ongoing disagreements.
- Try arranging for students to collaborate on significant projects and tasks.
- Arrange a "Buddies" program in which students of different grade levels work together on a significant task. Older students can sometimes assist younger students by reading to them, by listening to them read, or both. If an older student is having trouble with reading himself or herself, furthermore, a reading buddies program can sometimes also be helpful to the older student.
- Familiarize students with conflict resolution strategies and practice using them when needed.
- Many areas of curriculum lend themselves to discussions about ethical issues. Obvious examples are certain novels, short stories, and historical events. However, ethical issues lurk elsewhere as well. Teaching nutrition, for example, can raise issues about the humane treatment of animals that will be slaughtered for food, and about the ethical acceptability of using a large number of grains to feed animals even though many people in the world do not have enough to eat.
- Service learning projects can be very helpful in highlighting issues of social justice. Planning, working at, and reflecting about a local soup kitchen, tutoring students from low-income families, performing simple repairs on homes in need: projects like these broaden knowledge of society and the needs of its citizens.

## Candela Citations

CC licensed content, Original

- Moral Reasoning in Adolescence . **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...n-adolescence/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Moral Development During Adolescence . **Authored by**: Tera Jones. **Provided by**: Lumen Learning. **Retrieved from**: https://courses.lumenlearning.com/wm...g-adolescence/. **License**: CC BY: Attribution
- Educational Psychology. **Authored by**: Kelvin Seifert and Rosemary Sutton. . **Provided by**: The Saylor Foundation. **Retrieved from**: https://resources.saylor.org/wwwreso...Psychology.pdf. **License**: CC BY: Attribution

All rights reserved content

- Building a Culture of Kindness with a Day of Services. **Provided by**: Edutopia. **Retrieved from**: https://youtu.be/QsVpdaZ5W-0. **License**: All Rights Reserved

This page titled 9.4: Moral Reasoning in Adolescence is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 9.4: Moral Reasoning in Adolescence by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

**conventional moral development:** stages 3 and 4 of moral development where morality is internalized, and the concern is on society norms

**pre-conventional moral development:** first 2 stages of moral development where morality comes from outside the person, and the concern is on physical consequences of actions

**post-conventional moral development:** stages 5 and 6 of moral development where morality comes from personal understanding of rights and justice, regardless of whether that understanding matches societal norms

This page titled 9.5: Glossary is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 9.5: Glossary by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 10: CHANGING FAMILY RELATIONSHIPS

## Learning Objectives

- Examine changes in family relationships during adolescence
- Identify the three key components of good parenting
- Describe the impact of different parenting styles on children's development
- Examine short-term and long-term consequences of non-traditional family structures
- Describe issues regarding abuse and neglect
- Examine concerns about childhood stress and trauma

As adolescents work to form their identities, they pull away from their parents, and the peer group becomes very important (Shanahan, McHale, Osgood, & Crouter, 2007). Despite spending less time with their parents, most teens report positive feelings toward them (Moore, Guzman, Hair, Lippman, & Garrett, 2004). Warm and healthy parent-child relationships have been associated with positive child outcomes, such as better grades and fewer school behavior problems, in the United States as well as in other countries (Hair et al., 2005).

Although peers take on greater importance during adolescence, family relationships remain essential too. One of the fundamental changes during adolescence involves a renegotiation of parent-child relationships. As adolescents strive for more independence and autonomy during this time, different aspects of parenting become more salient.

In this chapter, we will explore the changing relationship between adolescents and their families. We will consider the key components of effective parenting and how to implement them with teenagers. We will discuss the impact of child maltreatment on the developing teen. Finally, we will review other family dynamics that may impact development.

10.1: Key Components of Good Parenting
10.2: Family Life
10.3: Child Maltreatment
10.4: Stress and Development
10.5: Glossary

This page titled 10: Changing Family Relationships is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 10: Changing Family Relationships by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 10.1: Key Components of Good Parenting

While the relationships between adolescents and their parents are changing, parents still have a tremendous influence on their child's behavior. Research into which parenting behaviors tend to be critical components of good parenting has revealed connection, appropriate autonomy, and parental regulation to be fundamental (Barber, 1997).

## Connection

Parents often become less involved in the lives of their children as they enter the middle grades. However, adolescents still need to maintain a positive connection with their caregivers. Parents maintain connections with their teens by showing love and positive affect, listening and demonstrating empathetic understanding, building trust, showing acceptance, and giving approval. A good relationship with caring adults is one of the best safeguards an adolescent has as they develop.

There are a great variety of attitudes, opinions, and values, which can affect how parents choose to raise their children. Across these differences, however, research has shown that being effective parents involves the following qualities:

- **Show love.** Adolescents need adults who are there for them—people who connect with them, communicate with them, spend time with them, and show a genuine interest in them. This attention is how they learn to care for and love others.
- **Listen.** To listen means to avoid interrupting and it means to pay close attention. Listening is best done in a quiet place with no distractions. It is hard to listen carefully if the parent is also trying to cook dinner or watch television. Often just talking with children about a problem or an issue helps to clarify things. Sometimes the less advice that the parents offer, the more teens may ask for it. Listening can also be the best way to uncover a more serious problem that requires attention.
- **Provide support.** Adolescents need support as they struggle with problems that may seem unimportant to their parents and families. They need praise when they have done their best. They need encouragement to develop interests and personal characteristics.
- **Show respect.** Adolescents can be difficult, rebellious, outrageous, and even mean-spirted. Despite this, teens need to be treated with respect. Modeling respect teaches adolescents appropriate behavior and reinforces unconditional love—parents may not always love their child's behavior, but they always love their child. Parents can demonstrate respect by recognizing and appreciating their teen's differences and treating them as an individual. Respect also requires compassion and empathy. Try to see things from their point of view and to consider their needs and feelings.
- **Talk over differences**. Communication breaks down for some parents because they find it hard to manage differences with their child. Differences of opinion are easier to manage when we recognize that these differences can provide meaningful opportunities for us to rethink our positions and to negotiate, a skill that is valuable for adolescents to develop. When differences arise, parents should communicate concerns firmly but calmly and explain their position to help their teen understand the reasoning. Responding too strongly can lead to yelling and screaming, and it can shut down the conversation. At a time when they are already judging themselves critically, adolescents make themselves vulnerable when they open up to their parents. We know that the best way to encourage a behavior is to reward it. If parents are critical when their teenager talks to them, what the teen learns is that their openness gets punished rather than rewarded.
- **Be a role model.** Adolescents need strong role models. Adults should live the behavior and values that they hope their child will develop. When parents set high standards for themself and treat others with kindness and respect, the child stands a better chance of following their example. As adolescents explore possibilities of who they may become, they look to their parents, peers, well-known personalities, and others to define who they may become.

## Autonomy

**Emotional autonomy** is a psychological separation from one's caregivers. It includes a progressive decrease in dependency on their caregivers, individualization, parental de-idealization, and perceiving one's parents as people (Steinberg & Silberberg, 1986). Despite previous thinking, this is not meant to be the 'storm and stress' of adolescent detachment from their family; instead, it is a peaceful process of becoming an individual. Teens are not detaching from their caregivers, but changing their childhood perceptions and dependencies on them. Adolescents will de-idolize their parents and thinking of them more as people.

While the process of developing emotional autonomy is a normal one that usually adaptive in the long-run, it can be distressing at the time. Teens may be experiencing a loss as they lose these childhood conceptualizations of the parents (Hill & Holmbeck, 1986). However, in the end, this emotional distance will allow adolescents to rely more on themselves and develop independence.

**Behavioral autonomy**, also called decisional autonomy, is the ability to make decisions about one's behavior (Bosma et al., 1996). Emotional autonomy and behavioral autonomy are highly correlated. As teens become more emotionally autonomous, they desire to make more of their own decisions. With maturation comes increased emotional and behavioral autonomy. However, too much behavioral autonomy too early has been associated with poor adjustment in young teens. Behavioral autonomy in early adolescence has been found to result in higher risk for deviance and poor academic performance (Beyers & Goossens, 1999). Often, parents wonder how much autonomy to allow their teen and at what age.

## How Much Independence and When?

Some parents allow too much of the wrong kind of freedom, or they offer freedom before the adolescent is ready to accept it. Other parents cling too tightly, denying young teens both the responsibilities they require to develop maturity and the opportunities they need to make choices and accept their consequences.

Research tells us that adolescents do best when they remain closely connected to their parents but at the same time are allowed to have their own points of view and even to disagree with their parents. Here are some tips to help balance closeness and independence:

- **Set limits**. All children sometimes resist limits, but they want them, and they need them. In a world that can seem too hectic for adults and adolescents alike, limits provide security. Often, adolescents whose parents do not set limits feel unloved. Setting limits is most effective when it begins early. It is harder, but not impossible, to establish limits during early adolescence.
- **Be clear**. Most teens respond best to specific instructions, which are repeated regularly. Do not give vague requests, like, "I want your room clean." Instead, be specific about what is expected and when.
- **Give reasonable choices**. Choices make teens more open to guidance. For example, establishing the rule that homework must be done before bed, but allowing the teen to decide when they will do it. Alternatively, when denying a teen something that they want to do, suggest an acceptable alternative choice.
- **Be open to negotiation**. As adolescents get older, rules may become more flexible and open to negotiation. Listen to teens' concerns when discussing chores, curfews, access to the car, and other rules and privileges. By discussing guidelines with teens, parents can foster their child's ability to think independently, compromise, and negotiate agreements—all-important life skills.
- **Grant independence in stages**. The more mature and responsible a teen's behavior is, the more privileges parents can grant. For example, allow a young teen to pick out new sneakers within a specific price range. Later, teens may be able to manage their school clothes shopping with a given budget, but the parent will approve purchases before removing the tags. Eventually, teens can manage their clothing allowance without supervision.
- **Health and safety come first**. A crucial responsibility as a parent is to protect their child's health and safety. The child needs to know that it is love for them that requires parents to veto activities and choices that threaten either of these. Let the child know what things threaten her health and safety—and often the health and safety of others—and be firm. This decision may be an area of disagreement, as adolescents often believe that nothing bad will happen to them. At the same time that they feel that everything they experience is new and unique (see Elkind's Personal Fable).
- **Say no to choices that cut off future options**. Choose battles carefully. Not all things are worth an argument. Too many battles may desensitize teens to when parents must insist that the answer is "No," such as health and safety issues, or when the choice can cut off future options for them. Teens may have a growing sense of the future, but they still lack the experiences required to fully understand how a decision they make today can affect them tomorrow. Talk to teens about the lifelong consequences of the choices they make. Help them understand there are good and bad decisions and that knowing one from the other can make all the difference in their lives.
- **Guide, but resist the temptation to control**. It is important to strike the right balance between laying down the law and allowing too much freedom. With most teens, it is easiest to maintain this balance by guiding but not controlling. Teens need opportunities to explore different roles, try on new personalities, and experiment. They need to learn that choices have consequences. That means making some mistakes and accepting the results. Nevertheless, parents need to provide guidance so that teens avoid making too many poor choices. Parents can guide by being a good listener and by asking questions that help the teen to think about the results of her actions. The fine line between guiding and controlling may be different for different children. Some children, whether they are 7 or 17, need firmer guidance and fewer privileges than do other children at the same age.
- **Let kids make mistakes.** We want our children to grow into adults who can solve problems and make good choices. These abilities are a critical part of being independent. To develop these abilities, however, teens, on occasion, need to fail, provided the stakes are not too high, and no one's health or safety is at risk. Making mistakes also allows teens to learn one critical skill—how to bounce back. It is hard for a child to learn how to pick himself up and start over if his parents always rescue him from difficulties.

- **Make actions have consequences.** Consequences are a result of choices and how people evaluate their choices and decision-making processes. Parents can help children learn to follow the rules, respect authority, and understand good decision-making by providing consequences. If a consequence is threatened or expected, it is critical to follow through. When adults do not follow through on consequences, they lose credibility with the child. However, the punishment should fit the crime. Overly punitive consequences may undermine the lesson that the parents hoped to teach because the child focuses on the consequence more than their behavior.

Despite what we often hear and read, adolescents look to their parents first and foremost in shaping their lives. When it comes to morals and ethics, political beliefs, and religion, teenagers almost always have more in common with their parents than their parents believe. Parents should look beyond the surface, beyond the specific behaviors to who the teen is becoming. Teenagers may want to dye her hair purple and pierce most parts of her body, but these expressions may be independent of their sense of who they are and who they will become. At the same time that many teens' behaviors are ultimately harmless, some of them may be not only harmful but also deadly.

Parents need to talk to their children and make it clear that many of the significant threats to their future health and happiness are not a matter of chance, but are a matter of choice—choices like drinking and driving, smoking, drugs, sexual activity, and dropping out of school. Research tells us that adolescents who engage in one risky behavior are more likely to participate in others. Hence, parents need to be front and center, talking to their children about the potentially deadly consequences of opening that Pandora's box.

# Regulation

Effective parents regulate their child's behavior through supervision, appropriate limits, and discipline. Regulation teaches children self-control and respect for the rules. Regulation presents differently depending on parenting style.

We will explore two models of parenting styles. Keep in mind that most parents do not follow any model completely. Real people tend to fall somewhere in between these styles. Moreover, sometimes, parenting styles change from one child to the next or in times when the parent has more or less time and energy for parenting. Parenting styles can also be affected by concerns the parent has in other areas of their life. For example, parenting styles tend to become more authoritarian when parents are tired and perhaps more authoritative when they are more energetic. Sometimes parents seem to change their parenting approach when others are around, maybe because they become more self-conscious as parents or are concerned with giving others the impression that they are a "tough" parent or an "easy-going" parent. Of course, parenting styles may reflect the type of parenting someone saw modeled while growing up.

## Baumrind's Parenting Styles

Baumrind (1971) offers a model of parenting that includes three styles. In 1983, Maccoby and Martin modified this model, and it has become one of the most commonly referenced models for describing patterns of parenting. The current model is comprised of two components of parenting: the parent's responsiveness and the parent's demandingness. **Responsiveness** is the connection that the parent facilitates through love, affection, warmth, and support. Unresponsive parents may ignore a child's need for connection or even reject the child. **Demandingness** is the parent's control and management of the child's behavior; this includes setting expectations, limits, and enforcing consequences. The combination of these two parenting behaviors defines the parenting style.

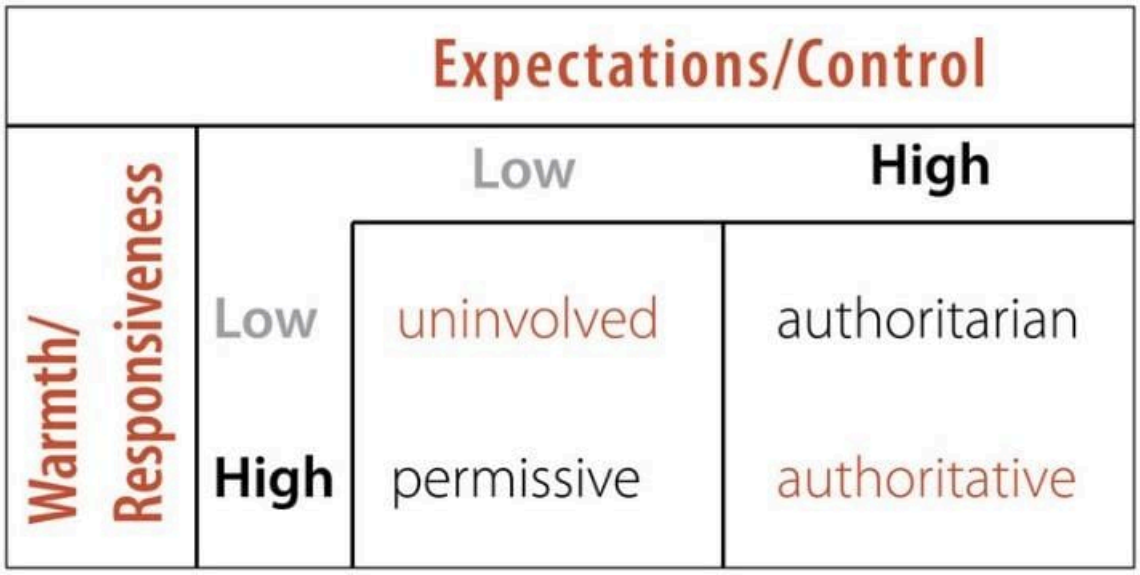



**Figure 10.2.1**. Baumrind's parenting styles.

The first, the **uninvolved (or neglectful) parenting** style. These parents are low on responsiveness and often disengaged from their children. They are also low on demandingness, with little control over their children's behavior. As a result, their children can be withdrawn, non-compliant, aggressive, and have insecure attachments to others. They suffer in school and in their relationships with their peers (Gecas & Self, 1991).

The **permissive parent** is highly responsive but lacks control. These parents are warm and communicative but provide little structure for their children**.** They may act as a friend to their child rather than an authority figure. Children are allowed to make their own rules and determine their activities. Children may fail to learn self-discipline and be relatively immature. They have low social competence and may feel somewhat insecure because they do not know the limits. These children may also be demanding, rebellious, and aggressive.

The **authoritarian parent** is low on responsiveness and high on demandingness. This parent makes the rules, and the children are expected to be obedient. Baumrind suggests that authoritarian parents tend to place maturity demands on their children that are unreasonably high and tend to be aloof and distant. Consequently, children reared in this way may fear rather than respect their parents and, because their parents do not allow discussion, may take out their frustrations on safer targets – perhaps as bullies toward peers. These children tend to have lower self-control and are less independent. They also may be more aggressive, resistant to correction, or anxious.

Finally, the **authoritative parent** is responsive and reasonably in control. Parents allow negotiation where appropriate and discipline matches the severity of the offense. As a result, their children are friendly, socially competent, confident, self-reliant, cooperative, successful, and happy (Chao, 2001; Stewart and Bond, 2002).

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 10.2.1.** *Baumrind's Parenting Styles* explains the differences between parenting styles and the potential consequences on child behavior.

## Lemasters and Defrain's Parenting Model

Lemasters and Defrain (1989) offered yet another model of parenting. This model is interesting because it looks more closely at the motivations of the parent and suggests that parenting styles are often designed to meet the psychological needs of the parent rather than the developmental needs of the child.

The **martyr** is a parent who will do anything for the child, even tasks that the child should do for himself or herself. All of the good deeds performed for the child, in the name of being a "good parent," may be used later should the parent want to gain compliance from the child. If a child goes against the parent's wishes, the parent can remind the child of all of the times the parent helped the child and evoke a feeling of guilt so that the child will do what the parent wants. The child learns to be dependent and manipulative as a result.

The **pal** is like the permissive parent described in Baumrind's model above. The pal wants to be the child's friend. Perhaps the parent is lonely, or perhaps the parent is trying to win a popularity contest against an ex-spouse. Pals let children do what they want and focus most on being entertaining and fun. They set few limitations. Consequently, the child may have little self-discipline and may try to test limits with others.

The **police officer/drill sergeant** style of parenting is similar to the authoritarian parent described above. The parent focuses primarily on making sure that the child is obedient and that the parent has full control of the child. Sometimes this can be taken to extremes by giving the child tasks that are really designed to check on their level of obedience. For example, the parent may require that the child fold the clothes and place items back in the drawer in a particular way. If not, the child might be scolded or punished for not doing things "right." This type of parent has a very difficult time allowing the child to grow and learn to make decisions independently. Furthermore, the child may have much resentment toward the parent that is displaced on others.

The **teacher-counselor** parent is one who pays much attention to expert advice on parenting and who believes that as long as all of the steps are followed, the parent can rear a perfect child. "What is wrong with that?" you might ask. There are two major problems with this approach. First, the parent is taking all of the responsibility for the child's behavior, at least indirectly. If the child has difficulty, the parent feels responsible and thinks that the solution lies in reading more advice and trying more diligently to follow that advice. Parents can certainly influence children, but thinking that the parent is fully responsible for the child's outcome is faulty. A parent can only do so much and can never have full control over the child. Another problem with this approach is that the child may get an unrealistic sense of the world and what can be expected from others. For example, if a teacher-counselor parent decides to help the child build self-esteem and has read that telling the child how special he or she is or how important it is to compliment the child on a job well done, the parent may convey the message that everything the child does is exceptional or extraordinary. A child may come to expect that all of his efforts warrant praise, and in the real world, this is not something one can expect. Perhaps children get more of a sense of pride from assessing their performance than from having others praise their efforts.

So what is left? Lemasters and Defrain (1989) suggest that the **athletic coach style of parenting** is best. The principles of coaching are what are important to Lemasters and Defrain. A coach helps players form strategies, supports their efforts, gives feedback on what went right and what went wrong, and stands at the sideline while the players perform. Coaches and referees make sure that the rules of the game are followed and that all players adhere to those rules.

Similarly, the athletic coach as a parent helps the child understand what needs to happen in certain situations, whether in friendships, school, or home life, and encourages and advises the child about how to manage these situations. The parent does not intervene or do things for the child. Instead, the parent's role is to guide while the child learns first hand how to handle these situations. The rules for behavior are consistent and objective and presented in that way. So, a child who is late for dinner might hear the parent respond in this way, "Dinner was at six o'clock." Rather than, "You know good and well that we always eat at six. If you expect me to get up and make something for you now, you have got another thing coming! Just who do you think you are showing up late and looking for food? You're grounded until further notice!"

The most important thing to remember about parenting is that parents can always improve. They can practice being more objective. They can learn about what is reasonable to expect of a child and their stage of development. They can recognize their own needs and limitations. Parenting is more difficult when parents have physical or psychological needs that interfere with decision making. Some of the best advice for parents is to try not to take the child's actions personally, and be as objective as possible.

# Influences on Parenting

Parenting is a complex process in which parents and children influence on another. There are many reasons that parents behave the way they do. The multiple influences on parenting are still being explored. Proposed influences on parenting include parent characteristics, child characteristics, and contextual and sociocultural characteristics (Belsky, 1984; Demick, 1999).

## Parent Characteristics

Parents bring unique traits and qualities to the parenting relationship that affect their decisions as parents. These characteristics include the age of the parent, gender, beliefs, personality, developmental history, knowledge about parenting and child development, and mental and physical health. Parents' personalities affect parenting behaviors. Mothers and fathers who are more agreeable, conscientious, and outgoing are warmer and provide more structure to their children. Parents who are more agreeable, less anxious, and less negative also support their children's autonomy more than parents who are anxious and less agreeable (Prinzie, Stams, Dekovic, Reijntes, & Belsky, 2009). Parents who have these personality traits appear to be better able to respond to their children positively and provide a more consistent, structured environment for their children. Figure 7.33 Source 294 Parents' developmental histories, or their experiences as children, also affect their parenting strategies. Parents may learn parenting practices from their parents. Fathers whose own parents provided monitoring, consistent and age-appropriate discipline, and warmth were more likely to provide this constructive parenting to their children (Kerr, Capaldi, Pears, & Owen, 2009). Patterns of negative parenting and ineffective discipline also appear from one generation to the next. However, parents who are dissatisfied with their own parents' approach may be more likely to change their parenting methods with their children.

## Child Characteristics

Parenting is bidirectional. Not only do parents affect their children, but children also influence their parents. Child characteristics, such as gender, birth order, temperament, and health status, affect parenting behaviors and roles. For example, an infant with an easy temperament may enable parents to feel more effective, as they are easily able to soothe the child and elicit smiling and cooing. On the other hand, a cranky or fussy infant elicits fewer positive reactions from his or her parents and may result in parents feeling less effective in the parenting role (Eisenberg et al., 2008). Over time, parents of more difficult children may become more punitive and less patient with their children (Clark, Kochanska, & Ready, 2000; Eisenberg et al., 1999; Kiff, Lengua, & Zalewski, 2011). Parents who have a fussy, difficult child are less satisfied with their marriages and have greater challenges in balancing work and family roles (Hyde, Else-Quest, & Goldsmith, 2004). Thus, child temperament, as previously discussed in chapter 3, is one of the child characteristics that influence how parents behave with their children. Another child characteristic is the gender of the child. Parents respond differently to boys and girls. Parents often assign different household chores to their sons and daughters. Girls are more often responsible for caring for younger siblings and household chores, whereas boys are more likely to be asked to perform chores outside the home, such as mowing the lawn (Grusec, Goodnow, & Cohen, 1996). Parents also talk differently with their sons and daughters, providing more scientific explanations to their sons and using more emotional words with their daughters (Crowley, Callanan, Tenenbaum, & Allen, 2001).

## Contextual Factors and Sociocultural Characteristics

The parent-child relationship does not occur in isolation. Sociocultural characteristics, including economic hardship, religion, politics, neighborhoods, schools, and social support, also influence parenting. Parents who experience economic hardship are more easily frustrated, depressed, and sad, and these emotional characteristics affect their parenting skills (Conger & Conger, 2002).

The impact of class and culture cannot be ignored when examining parenting styles as they influence parenting behaviors in fundamental ways. While promoting the development of skills necessary to function effectively in one's community is a universal goal of parenting, the specific skills necessary vary widely from culture to culture. Thus, parents have different goals for their children that partially depend on their culture (Tamis-LeMonda et al., 2008). Parents vary in how much they emphasize goals for independence and individual achievements, maintaining harmonious relationships, and being embedded in a strong network of social relationships.

For example, the two models of parenting described above assume that authoritative and athletic coaching styles are best because they are designed to help the parent raise a child who is independent, self-reliant, and responsible. These are qualities favored in "individualistic" cultures such as the United States, particularly by the middle class.

Authoritarian parenting has been used historically and reflects the cultural need for children to do as they are told. African-American, Hispanic, and Asian parents tend to be more authoritarian than non-Hispanic whites. In collectivistic cultures such as China or Korea, being obedient and compliant are favored behaviors. In societies where family members' cooperation is necessary for survival, as in the case of raising crops, rearing children who are independent and who strive to be on their own makes no sense. However, in an economy based on being mobile in order to find jobs and where one's earnings are based on education, raising a child to be independent is very important.

Working-class parents are more likely than middle-class parents to focus on obedience and honesty when raising their children. In a classic study on social class and parenting styles called *Class and Conformity*, Kohn (1977) explained that parents tend to emphasize qualities that are needed for their own survival when parenting their children. Working-class parents are rewarded for being obedient, reliable, and honest in their jobs. They are not paid to be independent or to question the management; rather, they move up and are considered good employees if they show up on time, do their work as they are told, and can be counted on by their employers. Consequently, these parents reward honesty and obedience in their children. Middle-class parents who work as professionals are rewarded for taking the initiative, being self-directed, and assertive in their jobs. They are required to get the job done without being told precisely what to do. They are asked to be innovative and to work independently. These parents encourage their children to have those qualities as well by rewarding independence and self-reliance. Parenting styles can reflect many elements of culture.

Other important contextual characteristics, such as the neighborhood, school, and social networks, also affect parenting, even though these settings do not always include both the child and the parent (Brofenbrenner, 1989). Culture is also a contributing contextual factor, as discussed previously in chapter four. For example, Latina mothers who perceived their neighborhood as more dangerous showed less warmth with their children, perhaps because of the greater stress associated with living a threatening environment (Gonzales et al., 2011).

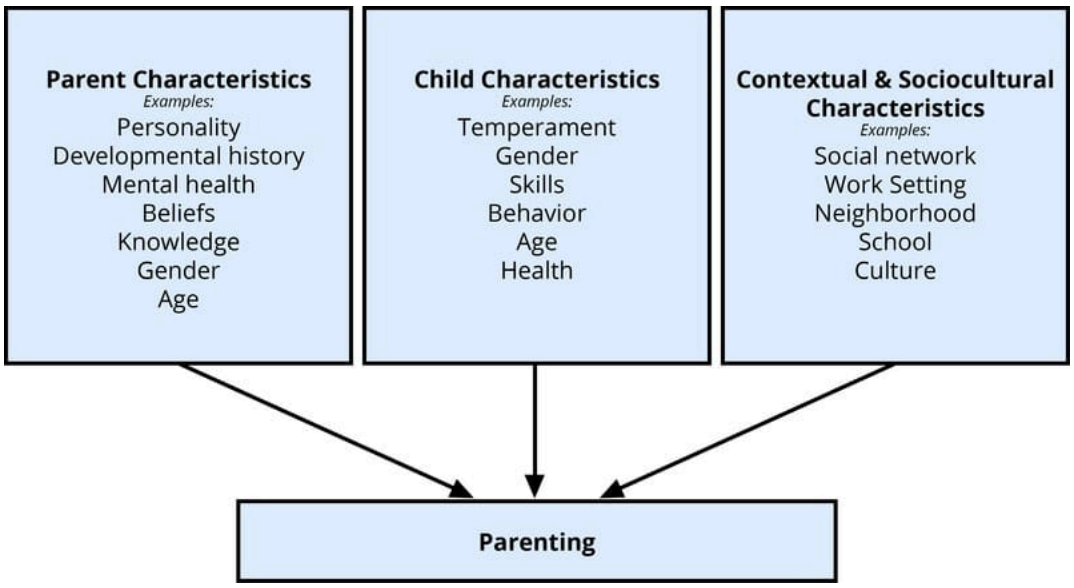



**Figure 10.2.2.** Influences on parenting.

## The Changing Parent-Child Relationship

Despite common perception, it appears that most teens do not experience adolescent "storm and stress" to the degree once famously suggested by G. Stanley Hall, a pioneer in the study of adolescent development. Only small numbers of teens have major conflicts with their parents (Steinberg & Morris, 2001), and most disagreements are minor. For example, in a study of over 1,800 parents of adolescents from various cultural and ethnic groups, Barber (1994) found that conflicts occurred over day-to-day issues such as homework, money, curfews, clothing, chores, and friends. These disputes occur because an adolescent's drive for independence and autonomy conflicts with the parent's supervision and control. These types of arguments tend to decrease as teens develop (Galambos & Almeida, 1992).

# Candela Citations

CC licensed content, Original

- Key Components of Good Parenting . **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...ood-parenting/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike
- Communication. **Provided by**: U.S. Department of Education. **Retrieved from**: https://www2.ed.gov/parents/academic...nce/part6.html. **License**: CC0: No Rights Reserved

CC licensed content, Shared previously

- Social Development During Adolescence. **Provided by**: Lumen Learning. **Retrieved from**: https://courses.lumenlearning.com/wm...g-adolescence/. **License**: CC BY: Attribution
- Family Life and Parenting Styles. **Authored by**: Stephanie Loalada. **Provided by**: Lumen Learning . **Retrieved from**: https://courses.lumenlearning.com/wm...enting-styles/. **License**: CC BY: Attribution

All rights reserved content

- Baumrind's Parenting Styles. **Provided by**: Psych Exam Review. **Retrieved from**: https://youtu.be/Hljt9xSlYsc. **License**: All Rights Reserved

Public domain content

- Setting Limits. **Provided by**: U.S. Department of Health and Human Services . **Retrieved from**: https://www.hhs.gov/ash/oah/adolesce...its/index.html. **License**: CC0: No Rights Reserved
- Independence . **Provided by**: U.S. Department of Education. **Retrieved from**: https://www2.ed.gov/parents/academic...nce/part7.html. **License**: CC0: No Rights Reserved

This page titled 10.1: Key Components of Good Parenting is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 10.1: Key Components of Good Parenting by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 10.2: Family Life

A good home environment is one in which the child's physical, cognitive, emotional, and social needs are adequately met. Sometimes families emphasize physical needs but ignore cognitive or emotional needs. Other times, families pay close attention to physical needs and academic requirements but may fail to nurture the child's friendships with peers or guide the child toward developing healthy relationships. Parents might want to consider how it feels to live in the household. Is it stressful and conflict-ridden? Is it a place where family members enjoy being?

## Family Change: Divorce

Much attention has been given to the impact of divorce on the life of children. The assumption has been that divorce has a strong, negative impact on the child and that single-parent families are deficient in some way. However, the research suggests that 75 to 80 percent of children and adults who experience divorce suffer no long term effects (Hetherington & Kelly, 2002). Children of divorce and children who have not experienced divorce are more similar than different (Hetherington & Kelly, 2002).

Mintz (2004) suggests that the alarmist view of divorce was due in part to the newness of divorce when rates in the United States began to climb in the late 1970s. Adults reacting to the change grew up in the 1950s when rates were low. As divorce has become more common, and there is less stigma associated with divorce, this view has changed somewhat. Social scientists have operated from divorce as a deficit model emphasizing the problems of being from a "broken home" (Seccombe &Warner, 2004). More recently, a more objective view of divorce, re-partnering, and remarriage indicate that divorce, remarriage, and life in stepfamilies can have a variety of effects. The exaggeration of the negative consequences of divorce has left the majority of those who do well hidden and subjected them to unnecessary stigma and social disapproval (Hetherington & Kelly, 2002).

The tasks of families listed above are functions that can be fulfilled in a variety of family types-not just intact, two-parent households. Harmony and stability can be achieved in many family forms and when it is disrupted, either through divorce, or efforts to blend families, or any other circumstances, the child suffers (Hetherington & Kelly, 2002).

## Factors Affecting the Impact of Divorce

As we look at the consequences (both pro and con) of divorce and remarriage on children, keep these family functions in mind. Some negative consequences are a result of financial hardship rather than divorce per se (Drexler, 2005). Some positive consequences reflect improvements in meeting these functions. For instance, we have learned that positive self-esteem comes in part from a belief in the self and one's abilities rather than merely being complimented by others. In single-parent homes, children may be given more opportunity to discover their abilities and gain the independence that fosters self-esteem. If divorce leads to fighting between the parents and the child is included in these arguments, the self-esteem may suffer.

The impact of divorce on children depends on several factors. The degree of conflict before divorce plays a role. If the divorce means a reduction in tensions, the child may feel relief. If the parents have kept their conflicts hidden, the announcement of a divorce can come as a shock and be met with enormous resentment. Another factor that has a significant impact on the child concerns financial hardships they may suffer, especially if financial support is inadequate. Another difficult situation for children of divorce is the position they are put into if the parents continue to argue and fight-especially if they bring the children into those arguments.

**Short-term consequences**: In roughly the first year following divorce, children may exhibit some of these short-term effects:

- **Grief over losses suffered**. The child will grieve the loss of the parent they no longer see as frequently. The child may also grieve about other family members that are no longer available. Grief sometimes comes in the form of sadness, but it can also be experienced as anger or withdrawal. Preschool-aged boys may act out aggressively while the same-aged girls may become more quiet and withdrawn. Older children may feel depressed.
- **Reduced Standard of Living**. Very often, divorce means a change in the amount of money coming into the household. Children experience in new constraints on spending or entertainment. School-aged children, especially, may notice that they can no longer have toys, clothing, or other items to which they have grown accustomed, or it may mean that there is less eating out or canceling satellite television, and so on. The custodial parent may experience stress at not being able to rely on child support payments or having the same level of income as before. This uncertainty can affect decisions regarding healthcare, vacations, rents, mortgages, and other expenditures. The stress can result in less happiness and relaxation in the

home. The parent who has to take on more work may also be less available to the children.
- **Adjusting to Transitions**. Children may also have to adjust to other changes accompanying a divorce. The divorce might mean moving to a new home and changing schools or friends. It might mean leaving a neighborhood that has meant a lot to them as well.

**Long-Term consequences**: The following are some effects found after the first year of a divorce:

- **Economic/Occupational Status**. One of the most commonly cited long-term effects of divorce is that children of divorce may have lower levels of education or occupational status. This finding may be a consequence of lower-income and resources for funding education rather than to divorce per se. In those households where economic hardship does not occur, there may be no impact on education or occupational status (Drexler, 2005).
- **Improved Relationships with the Custodial Parent**(usually the mother): The majority of custodial parents are mothers (approximately 80.4 percent) and
  19.6 percent of custodial parents are fathers. Shared custody is on the rise, however, and shows promising social, academic, and psychological results for the children. Children from single-parent families talk to their mothers more often than children of two-parent families (McLanahan and Sandefur, 1994). Most children of divorce lead happy, well-adjusted lives and develop stronger, positive relationships with their custodial parent (Seccombe and Warner, 2004). In a study of college-age respondents, Arditti (1999) found that increasing closeness and a movement toward more democratic parenting styles was experienced. Others have also found that relationships between mothers and children become closer and stronger (Guttman, 1993) and suggest that greater equality and less rigid parenting is beneficial after divorce (Steward, Copeland, Chester, Malley, and Barenbaum, 1997).
- **Greater emotional independence in sons**. Drexler (2005) notes that sons who are raised by mothers only develop an emotional sensitivity to others that is beneficial in relationships.
- **Feeling more anxious in their own love relationships.** Children of divorce may feel more anxious about their relationships as adults. This anxiety may reflect a fear of divorce if things go wrong, or it may be a result of setting higher expectations for their relationships.
- **Adjustment of the custodial parent**. Furstenberg and Cherlin (1991) believe that the primary factor influencing the way that children adjust to divorce is the way the custodial parent adjusts to the divorce. If that parent is adjusting well, the children will benefit. This factor may explain a good deal of the variation we find in children of divorce. Adults going through a divorce should consider good self-care as beneficial to the children-not as self-indulgent.
- **Mental health issues**: Some studies suggest that anxiety and depression that are common in children and adults within the first year of divorce may not resolve. A 15-year study by Bohman, Låftman, Päären, Jonsson (2017) suggests that parental separation significantly increases the risk for depression 15 years later when depression rates were compared to matched controls. In fact, the risk of depression was related more strongly with parental conflict and parental separation than it was with parental depression!

## Changing Family Structure

According to the 2010 census data, only 66 percent of children under seventeen years old live in a household with two married parents. This is a decrease from 77 percent in 1980 (U.S. Census, 2011). This two-parent family structure is known as a **nuclear family,** referring to married parents and children as the nucleus, or core, of the group. Recent years have seen a rise in variations of the nuclear family with the parents not being married. Three percent of children live with two cohabiting parents (U.S. Census 2011).

Some two-parent households consist of same-sex parents. Over 30% of same-sex couples are raising children, not far from the 43 percent of opposite-sex couples (U.S. Census 2009). Of the children in same-sex couple households, 73 percent are biological children (of only one of the parents), 21 percent are adopted only, and 6 percent are a combination of biological and adopted (U.S. Census 2009). While there have been some questions regarding the well-being of children who grow up in same-sex households, research reports that same-sex parents are as effective as opposite-sex parents. In an analysis of 81 parenting studies, sociologists found no quantifiable data to support the notion that opposite-sex parenting is any better than same-sex parenting. Children of lesbian couples, however, were shown to have slightly lower rates of behavioral problems and higher rates of self-esteem (Biblarz and Stacey 2010).

Single-parent households are on the rise. In 2010, 27 percent of children lived with a single parent only, up from 25 percent in 2008. Of that 27 percent, 23 percent live with their mother, and three percent live with their father. Ten percent of children living with their single mother and 20 percent of children living with their single father also live with the cohabitating partner of their parent (for example, boyfriends or girlfriends).

Stepparents are an additional family element in two-parent homes. Among children living in two-parent households, 9 percent live with a biological or adoptive parent and a stepparent. The majority (70 percent) of those children live with their biological mother and a stepfather. Family structure has been shown to vary with the age of the child. Older children (fifteen to seventeen years old) are less likely to live with two parents than adolescent children (six to fourteen years old) or young children (zero to five years old). Older children who do live with two parents are also more likely to live with stepparents (U.S. Census 2011).

In some family structures, a parent is not present at all. In 2010, three million children (4 percent of all children) lived with a guardian who was neither their biological nor adoptive parent. Of these children, 54 percent live with grandparents, 21 percent live with other relatives, and 24 percent live with nonrelatives. This family structure is referred to as the **extended family** and may include aunts, uncles, and cousins living in the same home. Foster parents account for about a quarter of nonrelatives. The practice of grandparents acting as parents, whether alone or in combination with the child's parent, is becoming widespread among today's families (De Toledo and Brown 1995). Nine percent of all children live with a grandparent, and in nearly half those cases, the grandparent maintains primary responsibility for the child (U.S. Census 2011). A grandparent functioning as the primary care provider often results from parental drug abuse, incarceration, or abandonment. Events like these can render the parent incapable of caring for his or her child.

Changes in the traditional family structure raise questions about how such societal shifts affect children. U.S. Census statistics have long shown that children living in homes with both parents grow up with more financial and educational advantages than children who are raised in single-parent homes (U.S. Census 1997). Parental marital status seems to be a significant indicator of advancement in a child's life. Children living with a divorced parent typically have more advantages than children living with a parent who never married; this is particularly true of children who live with divorced fathers. This finding correlates with the statistic that never-married parents are typically younger, have fewer years of schooling, and have lower incomes (U.S. Census 1997). Six in ten children living with only their mother live near or below the poverty level. Of those being raised by single mothers, 69 percent live in or near poverty compared to 45 percent for divorced mothers (U.S. Census 1997). Though other factors such as age and education play a role in these differences, it can be inferred that marriage between parents is generally beneficial for children.

## Sibling Relationships

Siblings spend a considerable amount of time with each other and offer a unique relationship that is not found with same-age peers or with adults. Siblings play an important role in the development of social skills. Cooperative and pretend play interactions between younger and older siblings can teach empathy, sharing, and cooperation (Pike, Coldwell, & Dunn, 2005), as well as negotiation and conflict resolution (Abuhatoum & Howe, 2013). However, the quality of sibling relationships is often mediated by the quality of the parent-child relationship and the psychological adjustment of the child (Pike et al., 2005). For instance, more negative interactions between siblings have been reported in families where parents had poor patterns of communication with their children (Brody, Stoneman, & McCoy, 1994). Children who have emotional and behavioral problems are also more likely to have negative interactions with their siblings. However, the psychological adjustment of the child can sometimes be a reflection of the parent-child relationship. Thus, when examining the quality of sibling interactions, it is often difficult to tease out the separate effect of adjustment from the effect of the parent-child relationship.

While parents want positive interactions between their children, conflicts are going to arise, and some confrontations can be the impetus for growth in children's social and cognitive skills. The sources of conflict between siblings often depend on their respective ages. Dunn and Munn (1987) revealed that over half of all sibling conflicts in early childhood were disputes about property rights. By middle childhood, this starts shifting toward control over social situations, such as what games to play, disagreements about facts or opinions, or rude behavior (Howe, Rinaldi, Jennings, & Petrakos, 2002). Researchers have also found that the strategies children use to deal with conflict change with age, but that this is also tempered by the nature of the conflict. Abuhatoum and Howe (2013) found that coercive strategies (e.g., threats) were preferred when the dispute centered on property rights, while reasoning was more likely to be used by older siblings and in disputes regarding control over the social situation. However, younger siblings also use reasoning, frequently bringing up the concern of legitimacy (e.g., "You're not the boss") when in conflict with an older sibling. This strategy is commonly used by younger siblings and is possibly an adaptive strategy in order for younger siblings to assert their autonomy (Abuhatoum & Howe, 2013). A number of researchers have found that children who can use non-coercive strategies are more likely to have a successful resolution, whereby a compromise is reached, and neither child feels slighted (Ram & Ross, 2008; Abuhatoum & Howe, 2013).

Not surprisingly, friendly relationships with siblings often lead to more positive interactions with peers. The reverse is also true. A child can also learn to get along with a sibling, with, as the song says, "a little help from my friends" (Kramer & Gottman, 1992).

In late adolescence, as teens become more independent, research has shown a decline in the frequency of interactions between

siblings, as presumably peers and romantic relationships become more central to the lives of young people. Aquilino (2006) suggests that during this transition, the task may be to maintain enough of a sibling bond so that there will be a foundation for this relationship in later life. Those who are successful can often move away from the “older-younger” sibling conflicts of childhood, toward an equal relationship between two adults. Siblings that were close to each other in childhood are typically close in adulthood (Dunn, 1984, 2007), and in fact, it is unusual for siblings to develop closeness for the first time in adulthood. Overall, the majority of adult sibling relationships are close (Cicirelli, 2009).

## Candela Citations

CC licensed content, Original

- Family Life. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...r/family-life/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Variations in Family Life. **Provided by**: Lumen Learning. **Retrieved from**: https://courses.lumenlearning.com/sa...-needs-update/. **License**: CC BY: Attribution

This page titled 10.2: Family Life is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 10.2: Family Life by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 10.3: Child Maltreatment




The Child Abuse Prevention and Treatment Act (United States Department of Health and Human Services, 2013) defines **child maltreatment** as any recent act or failure to act on the part of a parent or caretaker which results in death, serious physical or emotional harm, sexual abuse or exploitation; or an act or failure to act, which presents an imminent risk of serious harm (p. viii). **Child abuse** occurs when a parent or caretaker inflicts, or allows someone to inflict, serious physical injury other than by accidental means. **Child neglect** is the failure of a parent or caretaker to provide for a child's needs to the degree that the child's health, safety, and well-being are threatened with harm. Each state has its own definition of child abuse based on federal law, and most states recognize four major types of maltreatment: neglect, physical abuse, sexual abuse, and psychological maltreatment. Each of the forms of child maltreatment may be identified alone, but they can occur in combination.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 10.4.1.** *What are Child Abuse and Neglect* discusses the different types of abuse and interventions to prevent maltreatment.

Child Protective Services (CPS) agencies received an estimated 3.5 million referrals involving approximately 6.4 million children, and 2.1 million referrals (60%) were investigated. This is a rate of 28.3 per 1,000 children in the national population. Three-fifths of child abuse reports are made by professionals, including teachers, law enforcement personnel, and social services staff. The rest are made by anonymous sources, other relatives, parents, friends, and neighbors.

Child maltreatment may come in several forms, the most common being neglect (78.3%), followed by physical abuse (10.%), sexual abuse (7.6%), psychological maltreatment (7.6%), and medical neglect (2.4%) (Child Help, 2011). Some children suffer from a combination of these forms of abuse. The majority (81.2%) of perpetrators are parents; 6.2 percent are other relatives.

Nationally, an estimated 1,520 children die from abuse and neglect, and nearly three-quarters (73.9%) of all child fatalities were younger than three years old. Boys had a higher child fatality rate (2.36 per 100,000 boys) than girls (1.77 per 100,000 girls). More than 85 percent (86.8%) of child fatalities were comprised of White (39.3%), African-American (33.0%), and Hispanic (14.5%) victims, and 78.9% of child fatalities were caused by one or both parents (United States Department of Health and Human Services, 2013).

As most reports of abuse and neglect come from professionals working with children, they need to be aware of the potential signs of abuse and neglect. The following signs exhibited by children and their parents may signal the presence of child abuse or

neglect.

The Child:

- Shows sudden changes in behavior or school performance
- Has not received help for physical or medical problems brought to the parents' attention
- Has learning problems (or difficulty concentrating) that cannot be attributed to specific physical or psychological causes
- Is always watchful, as though preparing for something bad to happen
- Lacks adult supervision What Is Child Abuse and Neglect?
- Is overly compliant, passive, or withdrawn
- Comes to school or other activities early, stays late, and does not want to go home
- Is reluctant to be around a particular person
- Discloses maltreatment

The Parent:

- Denies the existence of—or blames the child for—the child's problems in school or at home
- Asks teachers or other caregivers to use harsh physical discipline if the child misbehaves
- Sees the child as entirely bad, worthless, or burdensome
- Demands a level of physical or academic performance the child cannot achieve
- Looks primarily to the child for care, attention, and satisfaction of the parent's emotional needs
- Shows little concern for the child The Parent and Child:
- Rarely touch or look at each other
- Consider their relationship entirely negative
- States that they do not like each other

The above list may not be *all* the signs of abuse or neglect. It is essential to pay attention to other behaviors that may seem unusual or concerning. In addition to these signs and symptoms, Child Welfare Information Gateway provides information on the risk factors and perpetrators of child abuse and neglect fatalities.

## Neglect

**Neglec**t is the failure of a parent, guardian, or other caregivers to provide for a child's basic needs. There are many forms of neglect: physical, medical, educational, emotional, and abandonment.

Physical is a failure to provide for the child's physical needs. Parents must provide their children with food and water. They also need safe, appropriate shelter. Shelter may be more than just a roof of their head. Is the home structurally safe? Is there a means for keeping the house a safe temperature? Is there water for hygiene? Are there any health and safety issues with the home? Parents are also required to provide appropriate supervision for the child to keep them safe. Appropriate may be challenging to define. Many states do not provide strict rules as to when children may be unsupervised or for how long, or when children can be responsible for caring for younger siblings. That is due to variations in maturity. Some 10-year-olds can be trusted to stay home alone for short periods, and some 15-year-olds cannot be left unsupervised for any amount of time.

Medical neglect is the failure to provide the necessary medical or mental health treatment that a child needs. If a child is injured or sick and requires medical intervention, it is the parents' responsibility to be sure that the child gets help. The same is true if the child were having a mental health crisis or needed psychological intervention for their health and safety. Finally, dental issues that cause the child pain or infection would also be a medical requirement. Medical neglect can be another challenge to define. For example, would never take a child to a doctor for a physical be neglect? What about the failure to get the child vaccinated? In many states, failure to provide preventative medical care would not be considered neglect.

Educational neglect is a failure to educate a child. All children have the right to free public education, but it is the parents' responsibility to make sure that the child gets to school—at least for the time in which school is compulsory. In most states, kindergarten is not mandatory. Similarly, after a certain age, teens are no longer required to attend school. Educational neglect would not apply in these situations. If a parent chooses not to send their child to a public school, it is then their responsibility to ensure that the child receives an appropriate education. This education could be through a private school or homeschooling. Each state has its own regulations around what is considered acceptable for private or homeschooling education. Some states have strict rules that require regular submission of lessons, updates regarding student progress, and mandates for all children to take standardized exams. Other states require no more than a letter from the parent stating that the child will be homeschooled,

no follow-up on the child's learning. Educational neglect may also be a failure for the parent to attend to special education needs, even if the child is in public school. Parents that do not comply with requests to get their child tested, meet for planning meetings, or sign off on educational plans may impede their child from receiving the special education services that they require.

Emotional neglect is the failure to meet a child's emotional needs. This behavior could range from being inattentive or emotionally unavailable to the child to being outright rejecting. Children need affection, love, support, and social interaction. For younger children, this primarily comes from their caregivers, but even older children need to feel love from their parents.

Abandonment includes situations where the parent's identity or whereabouts are unknown, the child has been left alone in circumstances where the child suffers serious harm, or the parent has failed to maintain contact with the child or provide reasonable support for a specified period. If a parent cannot be present to care for their child, it is their responsibility to arrange for safe, appropriate care.

Consider the possibility of neglect when the child:

- Is frequently absent from school
- Begs or steals food or money Lacks needed medical or dental care, immunizations, or glasses
- Is consistently dirty and has severe body odor
- Lacks sufficient clothing for the weather
- Abuses alcohol or other drugs
- States that there is no one at home to provide care

Consider the possibility of neglect when the parent or other adult caregiver:

- Appears to be indifferent to the child
- Seems apathetic or depressed
- Behaves irrationally or in a bizarre manner
- Is abusing alcohol or other drugs

Many parents do not purposely neglect their children; factors such as cultural values, the standard of care in a community, and poverty can lead to a hazardous level of neglect. If information or assistance from public or private services are available, and a parent fails to use those services, child welfare services may intervene (U.S. Department of Health and Human Services).

## Physical Abuse

**Physical Abuse** is nonaccidental physical injury (ranging from minor bruises to severe fractures or death) as a result of punching, beating, kicking, biting, shaking, throwing, stabbing, choking, hitting (with a hand, stick, strap, or other objects), burning, or otherwise harming a child, that is inflicted by a parent, caregiver, or other people who have responsibility for the child. Such injury is considered abuse regardless of whether the caregiver intended to hurt the child. Physical abuse in children may come in the form of beating, kicking, throwing, choking, hitting with objects, burning, or other methods. Physical discipline, such as spanking or paddling, is not considered abuse as long as it is reasonable and causes no bodily injury to the child (Child Welfare Information Gateway, 2008).

This issue is somewhat controversial among modern-day people in the United States. While some parents feel that physical discipline, or corporal punishment, is an effective way to respond to bad behavior, others feel that it is a form of abuse. According to a poll conducted by ABC News, 65 percent of respondents approve of spanking, and 50 percent said that they sometimes spank their child.

Consider the possibility of physical abuse when the child:

- Has unexplained burns, bites, bruises, broken bones, or black eyes
- Has fading bruises or other marks noticeable after an absence from school
- Seems frightened of the parents and protests or cries when it is time to go home
- Shrinks at the approach of adults
- Reports injury by a parent or another adult caregiver
- Abuses animals or pets

Consider the possibility of physical abuse when the parent or other adult caregiver:

- Offers conflicting, unconvincing, or no explanation for the child's injury, or provides an explanation that is not consistent with the injury
- Describes the child as "evil" or in some other very negative way
- Uses harsh physical discipline with the child
- Has a history of abuse as a child
- Has a history of abusing animals or pets

The tendency toward physical punishment may be affected by culture and education. Those who live in the South are more likely than those who live in other regions of the United States to spank their child. Those who do not have a college education are also more likely to spank their child (Crandall, 2011). Studies have shown that spanking is not an effective form of punishment and may lead to aggression by the victim, particularly in those who are spanked at a young age (Berlin 2009).

## Sexual Abuse

**Sexual abuse** includes activities by a parent or caregiver such as fondling a child's genitals, penetration, incest, rape, sodomy, indecent exposure, and exploitation through prostitution or the production of pornographic materials. Sexual abuse is defined as "the employment, use, persuasion, inducement, enticement, or coercion of any child to engage in, or assist any other person to engage in, any sexually explicit conduct or simulation of such conduct for the purpose of producing a visual depiction of such conduct; or the rape, and in cases of caretaker or inter-familial relationships, statutory rape, molestation, prostitution, or other forms of sexual exploitation of children, or incest with children" (Child Welfare Information Gateway, 2008).

Researchers estimate that 1 out of 4 girls and 1 out of 10 boys have been sexually abused (Valente, 2005). The median age for sexual abuse is 8 or 9 years for both boys and girls (Finkelhor et al. 1990). Most boys and girls are sexually abused by a male. Childhood sexual abuse is defined as any sexual contact between a child and an adult or a much older child. Incest refers to sexual contact between a child and family members. In each of these cases, the child is exploited by an older person without regard for the child's developmental immaturity and inability to understand the sexual behavior (Steele, 1986).

Although rates of sexual abuse are higher for girls than for boys, boys may be less likely to report abuse because of the cultural expectation that boys should be able to take care of themselves and because of the stigma attached to homosexual encounters (Finkelhor et al. 1990). Girls are more likely to be victims of incest, and boys are more likely to be abused by someone outside the family. Sexual abuse can create feelings of self-blame, betrayal, and feelings of shame and guilt (Valente, 2005). Sexual abuse is particularly damaging when the perpetrator is someone the child trusts. Victims of sexual abuse may suffer from depression, anxiety, problems with intimacy, and suicide (Valente, 2005). Sexual abuse has additional impacts, as well. Studies suggest that children who have been sexually abused have an increased risk of eating disorders and sleep disturbances. Further, sexual abuse can lead to Post Traumatic Stress Disorder.

Consider the possibility of sexual abuse when the child:

- Has difficulty walking or sitting
- Suddenly refuses to change for gym or to participate in physical activities
- Reports nightmares or bedwetting
- Experiences a sudden change in appetite
- Demonstrates bizarre, sophisticated, or unusual sexual knowledge or behavior
- Becomes pregnant or contracts a venereal disease, particularly if under age 14
- Runs away • Reports sexual abuse by a parent or another adult caregiver
- Attaches very quickly to strangers or new adults in their environment

Consider the possibility of sexual abuse when the parent or other adult caregiver:

- Is unduly protective of the child or severely limits the child's contact with other children, especially of the opposite sex
- Is secretive and isolated
- Is jealous or controlling with family members

Being sexually abused as a child can have a powerful impact on self-concept. The concept of **false self-training** (Davis, 1999) refers to holding a child to adult standards while denying the child's developmental needs. Sexual abuse is just one example of false self-training. These abused children are held to adult standards of desirableness and sexuality while their level of cognitive, psychological, and emotional immaturity are ignored. Consider how confusing it might be for a 9-year-old girl who has physically matured early to be thought of as a potential sex partner. Her cognitive, psychological, and emotional state does not equip her to

make decisions about sexuality or, perhaps, to know that she can say no to sexual advances. She may feel like a 9-year-old in all ways and be embarrassed and ashamed of her physical development. Girls who mature early have problems with low self-esteem because of the failure of others (family members, teachers, ministers, peers, advertisers, and others) to recognize and respect their developmental needs. Overall, youth are more likely to be victimized because they do not have control over their contact with offenders (parents, babysitters, etc.) and have no means of escape (Finkelhor and Dzuiba-Leatherman, in Davis, 1999).

## Psychological Maltreatment

**Psychological maltreatment** is a pattern of behavior that impairs a child's emotional development or sense of self-worth. This behavior may include constant criticism, threats, or rejection, as well as withholding love, support, or guidance. Emotional abuse is often difficult to prove, and therefore, child protective services may not be able to intervene without evidence of harm or mental injury to the child. Emotional abuse is almost always present when other types of maltreatment are identified.

Consider the possibility of emotional maltreatment when the child:

- Shows extremes in behavior, such as overly compliant or demanding behavior, extreme passivity, or aggression
- Is either inappropriately adult (parenting other children, for example) or inappropriately infantile (frequently rocking or head-banging, for example)
- Is delayed in physical or emotional development
- Has attempted suicide
- Reports a lack of attachment to the parent

Consider the possibility of emotional maltreatment when the parent or other adult caregiver:

- Constantly blames, belittles, or berates the child
- Is unconcerned about the child and refuses to consider offers of help for the child's problems
- Overtly rejects the child

## Risk Factors for Maltreatment

Child abuse occurs at all socioeconomic and education levels and crosses ethnic and cultural lines. Just as child abuse is often associated with stresses felt by parents, including financial stress, parents who demonstrate resilience to these stresses are less likely to abuse (Samuels 2011). Young parents are typically less capable of coping with stresses, particularly the stress of becoming a new parent. Teenage mothers are more likely to abuse their children than their older counterparts. As a parent's age increases, the risk of abuse decreases. Children born to mothers who are fifteen years old or younger are twice as likely to be abused or neglected by age five than are children born to mothers ages twenty to twenty-one (George and Lee 1997).

Drug and alcohol use is also a known contributor to child abuse. Children raised by substance abusers have a risk of physical abuse three times greater than other kids, and neglect is four times as prevalent in these families (Child Welfare Information Gateway 2011). Other risk factors include social isolation, depression, low parental education, and a history of being mistreated as a child. Approximately 30 percent of abused children will later abuse their own children (Child Welfare Information Gateway 2006).

## Outcomes Associated with Maltreatment

Child abuse and neglect can have lifelong implications for victims, including the impact on physical, mental, and emotional wellbeing. While the physical wounds heal, there are several long-term consequences of experiencing the trauma of abuse or neglect. Children who are maltreated are at risk of experiencing cognitive delays and emotional difficulties, among other issues. Childhood trauma also negatively affects nervous system and immune system development, putting children who have been maltreated at a higher risk for health problems as adults

Injury, poor health, and mental instability occur at a high rate in this group, with 80 percent meeting the criteria of one or more psychiatric disorders, such as depression, anxiety, or suicidal behavior, by age twenty-one. Abused children may also suffer from cognitive and social difficulties. Behavioral consequences will affect most, but not all, of child abuse victims. Children of abuse are 25 percent more likely, as adolescents, to suffer from difficulties like poor academic performance and teen pregnancy, or to engage in behaviors like drug abuse and general delinquency. They are also more likely to participate in risky sexual acts

that increase their chances of contracting a sexually transmitted disease (Child Welfare Information Gateway, 2006). Other risky behaviors include drug and alcohol abuse. As these consequences can affect healthcare, education, and criminal systems, the problems resulting from child abuse do not just belong to the child and family, but to society as a whole.

# Reporting Maltreatment

Mandated reporters are required to report suspected child abuse or maltreatment when they are presented with a reasonable cause to suspect child abuse or maltreatment in a situation where a child, parent, or other person legally responsible for the child is before the mandated reporter
when the mandated reporter is acting in their official or professional capacity. “Other person legally responsible” refers to a guardian, caretaker, or other person 18 years of age or older who is responsible for the care of the child (NYSOCFS, 2024).

Mandated reporters typically include any individual who works in the medical field, education, childcare, youth residential programs, psychological or social services, or legal and judicial services.

It is important to remember that even if you are not legally mandated to report a family, you can still help support them by referring them to community-based resources and services.

## Professional Role

The individuals listed above are operating in their professional role and are therefore legally mandated to report suspected child abuse or maltreatment whenever they are practicing their
profession. For example, a doctor who is examining a child in their practice and has a reasonable suspicion that the child is experiencing abuse MUST report their concern. In contrast, a doctor who witnesses child abuse when riding their bike while off-duty is not legally mandated to report that abuse, but may choose to report. The mandated reporter’s legal responsibility to report suspected child abuse or maltreatment ceases when the mandated reporter stops practicing their profession (NYSOCFS, 2024).

## Reasonable Cause to Suspect

Reasonable cause to suspect child abuse or maltreatment means that, based on your factual observations, professional training, and experience, you have a suspicion that a parent or other person legally responsible for a child is responsible for harming that child or placing that child in imminent danger of harm. Your suspicion can be as simple as distrusting an explanation for an injury (NYSOCFS, 2024).

## Making a Report

As soon as you have reasonable cause to suspect abuse or maltreatment, you must report your concerns by telephone to your state’s central register of child maltreatment. The timeliness of your call is vital to the timeliness of intervention by the local department of social services’ child protective services (CPS) unit. Typically, CPS must make contact with the child and family within 24 hours after a report is made. In situations where the child is at immediate risk of harm, contacting the police may also be necessary to protect the child, as it could be several hours before a CPS investigator can initiate contact.

You are not required to notify the parents or other persons legally responsible either before or after making a report. In fact, in some cases, alerting the parent may hinder the CPS investigation and adversely affect its ability to assess the children’s safety.

There may be times when you have very little information on which to base your suspicion of abuse or maltreatment, but this should not prevent you from making a report if you believe you have reasonable cause. When calling, a trained specialist will help to determine if the information you are providing can be registered as a report.

If you call to report suspected maltreatment but the call-center staff does not register the child maltreatment report, the reason for their decision should be clearly explained to you. You may also request to speak to a supervisor, who can help make determinations in difficult or unusual cases. As long as you provide all the information to the call center, even if the call center staff decides not to register a report, you have fulfilled your responsibility as a mandated reporter (NYSOCFS, 2024).

## Legal Protection or Liability for Mandated Reporters

**Source Confidentiality:** Social services law provides confidentiality for mandated reporters and all sources of child abuse and maltreatment reports. CPS units are not permitted to release any data that would identify the source of a report to the subject of the report unless the source has given written permission for them to do so. Information regarding the source of the report may be shared with court officials, police, and district attorneys, but only in certain circumstances.

**Immunity From Liability:** If a mandated reporter makes a report with earnest concern for the welfare of a child, they are immune from any criminal or civil liability that might result. This is referred to as making a report in "good faith."

**Protection From Retaliatory Personnel Action:** No medical or other public or private institution, school, facility, or agency shall take any retaliatory personnel action against an employee who made a report. Furthermore, no school, school official, child care provider, foster care provider, or mental health facility provider shall impose any conditions, including prior approval or prior notification, upon a member of their staff mandated to report suspected child abuse or maltreatment.

**Penalties for Failure to Report:** Anyone who is mandated to report suspected child abuse or maltreatment — and fails to do so — could be charged with a Class A misdemeanor and subject to criminal penalties. Further, mandated reporters can be sued in a civil court for monetary damages for any harm caused by the mandated reporter's failure to report (NYSOCFS, 2024).

> New York State Office of Children and Family Services offers a free self-directed online Mandated Reporter Training in Child Abuse and Neglect/Maltreatment Identification at https://www.nysmandatedreporter.org

## Candela Citations

CC licensed content, Original

- Child Maltreatment. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...-maltreatment/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Violence and Abuse. **Authored by**: Cathy Matresse. **Provided by**: Lumen Learning. **Retrieved from**: https://courses.lumenlearning.com/sa...nce-and-abuse/. **License**: CC BY: Attribution
- Sexual Abuse in Middle Childhood. **Authored by**: Stephanie Loalada. **Provided by**: Lumen Learning. **License**: CC BY: Attribution
- Lifespan Development. **Authored by**: Martha Lally and Suzanne Valentine-French. **Provided by**: College of Lake County Foundation. **Retrieved from**: http://dept.clcillinois.edu/psy/Life...evelopment.pdf. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

Public domain content

- What is Child Abuse and Neglect? . **Provided by**: Child Welfare Information Gateway. **Retrieved from**: https://www.childwelfare.gov/pubs/fa.../whatiscan.cfm. **License**: CC0: No Rights Reserved
- What are Child Abuse and Neglect? . **Provided by**: Centers for Disease Control and Prevention. **Retrieved from**: https://youtu.be/6kcKX2In0B0. **License**: CC0: No Rights Reserved
- Summary Guide for Mandated Reporters in New York State . **Provided by**: New York State Office of Children and Family Services [NYSOCFS]. **Retrieved from**: https://ocfs.ny.gov/publications/Pub...FS-Pub1159.pdf. **License**: Public Domain: No Known Copyright

---

This page titled 10.3: Child Maltreatment is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 10.3: Child Maltreatment by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 10.4: Stress and Development

What is the impact of stress on development? The answer to that question is complex and depends on several factors, including the number of stressors, the duration of stress, and the individual's ability to cope with stress.

Children experience different types of stressors that could be manifest in various ways. Everyday stress can provide an opportunity for individuals to build coping skills and poses little risk to development. Even long-lasting stressful events, such as changing schools or losing a loved one, can be managed reasonably well.

Some experts have theorized that there is a point where prolonged or excessive stress becomes harmful and can lead to serious health effects. When stress builds up in childhood, neurobiological factors are affected; in turn, levels of the stress hormone cortisol exceed normal ranges. Due in part to the biological consequences of excessive cortisol, children can develop physical, emotional, and social symptoms. Physical conditions include cardiovascular problems, skin conditions, susceptibility to viruses, headaches, or stomach aches in young children. Emotionally, children may become anxious or depressed, violent, or feel overwhelmed. Socially, they may become withdrawn and act out towards others, or develop new behavioral ticks such as biting nails or picking at skin.

## Types of Stress



Researchers have proposed three distinct types of responses to stress in young children: positive, tolerable, and toxic. Positive stress (also called eustress) is necessary and promotes resilience, or the ability to function competently under threat. Such stress arises from brief, mild to moderate stressful experiences, buffered by the presence of a caring adult who can help the child cope with the stressor. This type of stress causes minor, temporary physiological and hormonal changes in the young child, such as an increase in heart rate and a change in hormone cortisol levels. The first day of school, a family wedding, or making new friends are all examples of positive stressors. Tolerable stress comes from adverse experiences that are more intense but short-lived and can usually be overcome. Some examples of tolerable stressors are family disruptions, accidents, or the death of a loved one. The body's stress response is more intensely activated due to severe stressors; however, the response is still adaptive and temporary.

**Toxic stress** is a term coined by pediatrician Jack P. Shonkoff of the Center on the Developing Child at Harvard University to refer to chronic, excessive stress that exceeds a child's ability to cope, especially in the absence of supportive caregiving from adults. Extreme, long-lasting stress in the absence of supportive relationships to buffer the effects of a heightened stress response can produce damage and weakening of bodily and brain systems, which can lead to diminished physical and mental health throughout a person's lifetime. Exposure to such toxic stress can result in the stress response system becoming more highly sensitized to stressful events, producing increased wear and tear on physical systems through over-activation of the body's stress response. This wear and tear increases the later risk of various physical and mental illnesses.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 10.5.1.** Toxic Stress Derails Healthy Development explains some of the biological changes that accompany toxic stress.

## Adverse Childhood Experiences

The toxic stress that children endure can have a significant impact on their later lives. According to Merrick, Ford, Ports, and Guinn (2018), the foundation for lifelong health and well-being is created in childhood, as positive experiences strengthen biological systems while adverse experiences can increase mortality and morbidity **Adverse Childhood Experiences**, or ACEs, are potentially traumatic events that occur in childhood (0-17 years) such as experiencing violence, abuse, or neglect; witnessing violence in the home; and having a family member attempt or die by suicide. Also included are aspects of the child's environment that can undermine their sense of safety, stability, and bonding such as growing up in a household with substance misuse, mental health problems, or instability due to parental separation or incarceration of a parent, sibling, or another member of the household. Traumatic events in childhood can be emotionally painful or distressing and can have effects that persist for years.2 Factors such as the nature, frequency, and seriousness of the traumatic event, prior history of trauma, and available family and community supports can shape a child's response to trauma.

Some groups have been found to be at a greater risk for experiencing ACEs. Merrick et al. (2018) reviewed the results from the 2011-2014 Behavioral Risk Factor Surveillance System, which included an ACE module consisting of questions adapted from the Centers for Disease Control and Prevention. Each question was collapsed into one of the eight ACE categories: physical abuse, emotional abuse, sexual abuse, household mental illness, household substance use, household domestic violence, incarcerated household member, and parental separation or divorce. The results indicated that 25% of the sample had been exposed to three or more ACEs, and although ACEs were found across all demographic groups, those who identified as Black, multiracial, lesbian/gay/bisexual, having less than a high school education, being low income, and unemployed experienced significantly higher ACE exposure. Assisting families and providing children with supportive and responsive adults can help prevent the negative effects of ACEs.

## Consequences of ACEs and Toxic Stress

An estimated 62% of adults surveyed across 23 states reported that they had experienced one ACE during childhood and nearly one-quarter reported that they had experienced three or more ACEs. ACEs can have negative, lasting effects on health, wellbeing, and opportunity. These exposures can disrupt healthy brain development, affect social development, compromise immune systems, and can lead to substance misuse and other unhealthy coping behaviors. The evidence confirms that these exposures increase the risks of injury, sexually transmitted infections, including HIV, mental health problems, maternal and child health problems, teen pregnancy, involvement in sex trafficking, a wide range of chronic diseases and the leading causes of death such as cancer, diabetes, heart disease, and suicide. ACEs can also negatively impact education, employment, and earnings potential. The total economic and social costs to families, communities, and society is in the hundreds of billions of dollars each year.

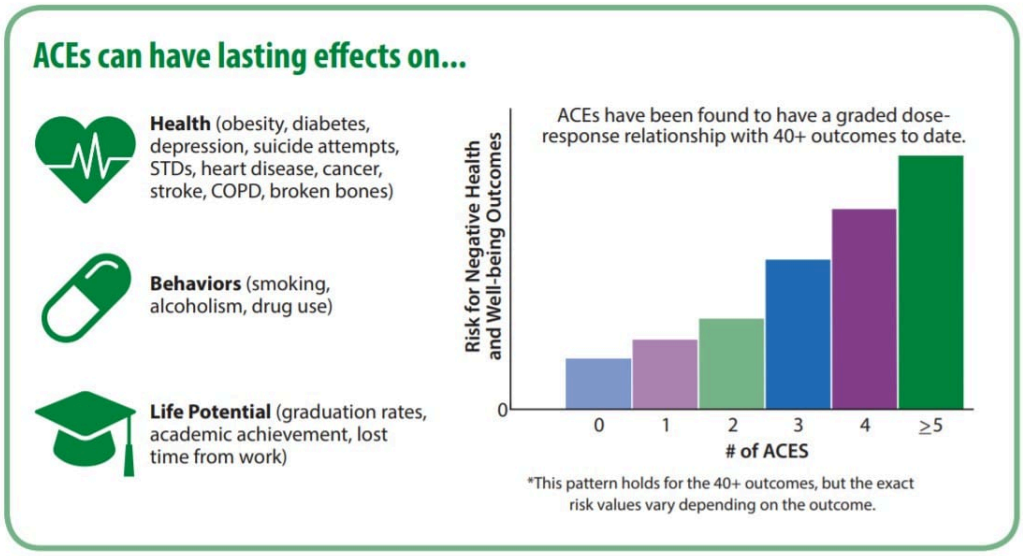



**Figure 10.5.1.** Risk of outcomes due to adverse childhood experiences.

Children who experience toxic stress or who live in extremely stressful situations of abuse over long periods can suffer long-lasting effects. The structures in the midbrain or limbic system, such as the hippocampus and amygdala, can be vulnerable to prolonged stress (Middlebrooks and Audage, 2008). High levels of the stress hormone cortisol can reduce the size of the hippocampus and affect a child's memory abilities. Stress hormones can also reduce immunity to disease. If the brain is exposed to long periods of severe stress, it can develop a low threshold, making a child hypersensitive to stress in the future.

With chronic toxic stress, children undergo long-term hyper-arousal of brain stem activity. This activity includes an increase in heart rate, blood pressure, and arousal states. These children may experience a change in brain chemistry, which leads to hyperactivity and anxiety. Therefore, it is evident that chronic stress in a young child's life can create significant physical, emotional, psychological, social, and behavioral changes; however, the effects of stress can be minimized if the child has the support of caring adults.

### YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 10.5.2.** How Childhood Trauma Affects Health Across a Lifetime discusses the development of an ACE assessment and the research results on outcomes.

### Separating Families At the U.S. Border

Thousands of children were separated from their parents beginning in April 2018 as they approached the United States border by Immigration and Customs Enforcement (ICE). Children were placed in separate facilities from their parents when they were being processed, and they were not told when they would be reunited. When enduring stressful situations, separation from one's parents can be extremely detrimental to a child (Society for Research in Child Development (SRCD), 2018). Parental separations affect children's stress management systems by changing how the body responds to stress. Long-term stress can disrupt brain functioning, cognitive skills, emotional processing, and physiological health. When exposed to stress, children typically look to their parents for support and care, and parents can reduce children's stress. These

separated children were already under extreme stress escaping their previous homes and then were separated from the individuals who could support them through this process. Stress from parent separation places children at a higher risk for anxiety, depression, PTSD, lower IQ, obesity, impaired immune system functioning, and medical conditions (SRCD, 2018). Even after being reunited, children can experience attachment issues, poorer self-esteem, and physical and psychological health difficulties. As they age, they continue to exhibit an increased risk for mental health problems, problems in social interactions, difficulty with adult attachments, poorer stress management, and an increased risk for death. The American Psychological Association (2019) opposes policies that separate families, given the negative outcomes suffered by children.

## Preventing ACEs

The Centers for Disease Control and Prevention (2019) suggests several strategies that can prevent ACEs from happening in the first place, as well as strategies to mitigate the harms of ACEs. The evidence tells us that ACEs can be prevented by strengthening economic supports for families, promoting social norms that protect against violence and adversity, ensuring a strong start for children and paving the way for them to reach their full potential, teaching skills to help parents and youth handle stress, manage emotions, and tackle everyday challenges. Connecting youth to caring adults and activities, and intervening to lessen immediate and long-term harm.

**Preventing ACEs**

| Strategy | Approach |
|---|---|
| **Strengthen economic supports to families** | • Strengthening household financial security<br>• Family-friendly work policies |
| **Promote social norms that protect against violence and adversity** | • Public education campaigns<br>• Legislative approaches to reduce corporal punishment<br>• Bystander approaches<br>• Men and boys as allies in prevention |
| **Ensure a strong start for children** | • Early childhood home visitation<br>• High-quality child care<br>• Preschool enrichment with family engagement |
| **Teach skills** | • Social-emotional learning<br>• Safe dating and healthy relationship skill programs<br>• Parenting skills and family relationship approaches |
| **Connect youth to caring adults and activities** | • Mentoring programs<br>• After-school programs |
| **Intervene to lessen immediate and long-term harms** | • Enhanced primary care<br>• Victim-centered services<br>• Treatment to lessen the harms of ACEs<br>• Treatment to prevent problem behavior and future involvement in violence<br>• Family-centered treatment for substance use disorders |

**Figure 10.5.2.** Strategies for preventing adverse childhood experiences.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 10.5.3.** Preventing ACEs discusses how communities can reduce the risk for adverse childhood experiences.

## Coping with Stress

Stress is encountered in four different stages. In the first stage, stress usually causes alarm. Next, in the second or appraisal stage, the person attempts to find meaning from the event. Stage three consists of the individual seeking out coping strategies.

Lastly, in stage four, people execute one or more of the coping strategies. However, individuals with a lower tolerance for stressors are more susceptible to alarm and find a broader array of events to be stressful. These children often experience chronic or toxic stress.

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 10.5.4.** The Science of Resilience describes a variety of factors involved in the development of resilience.

Some recommendations to help children manage stressful situations include:

- Preparing children for everyday stressful situations, such as traveling to new places or going to the doctor. For example, talk to children about the experience to help them understand that it is okay to be stressed and scared.
- Keeping communication open. This includes making sure that the child feels comfortable talking to a person. This may include being in a comfortable space, such as their bedroom, where they feel safe. The child's comfort level is important because if a child is uncomfortable or feels forced to speak, they may not open up at all.
- Spending time together as a family ensures that no one's feelings go unseen and that children know that their feelings are valued and should be expressed in healthy ways.
- Modeling healthy and successful coping mechanisms (such as going for a walk).
- Encourage children to express themselves creatively (as an outlet or to help others understand what is stressing the child). Some healthy stress relief outlets include sports or running, writing, reading, art, and playing musical instruments.
- Teaching children to act and think positively when they are faced with a situation, to manage the stress before it becomes overwhelming.
- Providing a safe and healthy home and environment for children.
- Providing children with proper nutrition and attention.
- Ensuring children are not exposed to substance abuse or violence. When a healthy environment is provided, children are more likely to be emotionally and physically healthy.

## Watch It

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 10.5.5.** Trauma-Informed Practices to Support Learning explains how one school placed a strong focus on relationships, social and emotional learning, and understanding students' mental health informs how Fall-Hamilton's staff interacts with students.

## Candela Citations

CC licensed content, Original

- Stress and Development. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College.

**Retrieved from**: https://courses.lumenlearning.com/ad...d-development/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Childhood Stress and Development. **Authored by**: Stephanie Loalada. **Provided by**: Lumen Learning. **Retrieved from**: https://courses.lumenlearning.com/wm...d-development/. **License**: CC BY-SA: Attribution-ShareAlike
- Lifespan Development. **Authored by**: Martha Lally and Suzanne Valentine-French. **Provided by**: College of Lake County Foundation . **Retrieved from**: http://dept.clcillinois.edu/psy/Life...evelopment.pdf. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

All rights reserved content

- How Childhood Trauma Affects Health Across a Lifetime. **Authored by**: Nadine Burke Harris. **Provided by**: TED. **Retrieved from**: https://youtu.be/95ovIJ3dsNk. **License**: All Rights Reserved
- Fall-Hamilton Elementary: Transitioning to Trauma-Informed Practices to Support Learning. **Provided by**: Edutopia. **Retrieved from**: https://youtu.be/iydalwamBtg. **License**: All Rights Reserved

Public domain content

- We Can Prevent ACEs. **Provided by**: Center for Disease Control and Prevention. **Retrieved from**: https://youtu.be/8gm-lNpzU4g. **License**: Public Domain: No Known Copyright

This page titled 10.4: Stress and Development is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 10.4: Stress and Development by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

**adverse childhood experiences:** abuse, neglect, and violent experiences that contribute to childhood trauma

**athletic coach style of parenting:** the rules for behavior are consistent and objective and presented in that way. The parent's role is to provide guidance while the child learns first hand how to handle these situations

**authoritarian parenting:** the traditional model of parenting in which parents make the rules and children are expected to be obedient

**authoritative parenting:** appropriately strict, reasonable, and affectionate. They are willing to negotiate when appropriate

**false self-training:** holding a child to adult standards while denying the child's developmental needs

**martyr parent: a** parent who will do anything for the child, even tasks that the child should do independently, may later use what they have done for the child to invoke guilt and compliance

**pal parent:** wants to be the child's friend and focuses on being entertaining and fun

**permissive parenting:** involves being a friend to a child rather than an authority figure. Children are allowed to make their own rules and determine their own activities

**police officer/drill sergeant parent:** focuses primarily on making sure that the child is obedient and that the parent has full control of the child

**teacher-counselor parent:** pays much attention to expert advice on parenting and believes that as long as all of the steps are followed, the parent can rear a perfect child

**toxic stress:** excessive stress that exceeds a child's ability to cope, especially in the absence of supportive caregiving from adults

**uninvolved parenting:** parents who are disengaged from their children, do not make demands on their children, and are non-responsive

This page titled 10.5: Glossary is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 10.5: Glossary by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 11: CHANGING PEER RELATIONSHIPS

## Learning Objectives

- Describe changes in peer relationships during adolescence
- Identify the sociometric peer statuses and characteristics of each
- Explain the types of bullying and factors that contribute to bullying behavior
- Describe the developmental benefits of dating
- Explain teen dating violence and factors that contribute to this behavior

Parent-child relationships are not the only significant relationships in a child's life. Peer relationships are also important. Social interaction with another child who is similar in age, skills, and knowledge provokes the development of many social skills that are valuable for the rest of life (Bukowski, Buhrmester, & Underwood, 2011). In peer relationships, children learn how to initiate and maintain social interactions with other children. They learn skills for managing conflicts, such as turn-taking, compromise, and bargaining. Through these experiences, children develop friendships that provide additional sources of security and support to those provided by their parents. These relationships become even more prominent during adolescence.


11.1: Peer Relationships

11.2: Sociometric Peer Status

11.3: Bullying

11.4: Teen Dating

11.5: Glossary



This page titled 11: Changing Peer Relationships is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 11: Changing Peer Relationships by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 11.1: Peer Relationships

As children become adolescents, they usually begin spending more time with their peers and less time with their families, and these peer interactions are increasingly unsupervised by adults. Children's notions of friendship often focus on shared activities, whereas adolescents' notions of friendship increasingly focus on intimate exchanges of thoughts and feelings.

During adolescence, peer groups evolve from primarily single-sex to mixed-sex. Adolescents within a peer group tend to be similar to one another in behavior and attitudes, which has been explained as being a function of **homophily** (adolescents who are similar to one another choose to spend time together in a "birds of a feather flock together" way) and influence (adolescents who spend time together shape each other's behavior and attitudes).

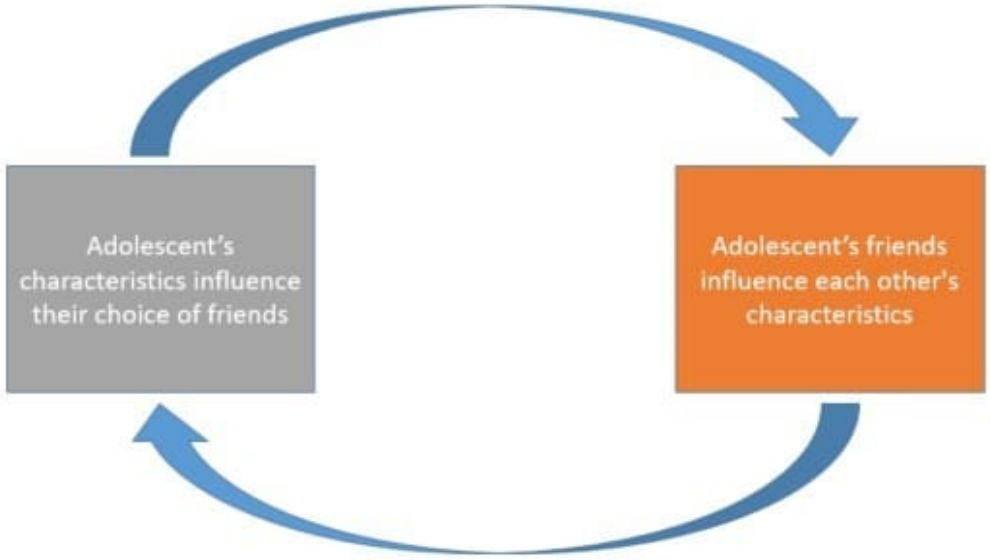



**Figure 11.2.1.**Reciprocal influences on friend selection and personal characteristics.

**Peer pressure** is usually depicted as peers pushing a teenager to do something that adults disapprove of, such as breaking laws or using drugs. One of the most widely studied aspects of adolescent peer influence is known as **deviant peer contagion** (Dishion & Tipsord, 2011). This influence is the process by which peers reinforce problem behavior by laughing or showing other signs of approval that then increase the likelihood of future problem behavior. Although deviant peer contagion is more extreme, regular peer pressure is not always harmful. Peers can serve both positive and negative functions during adolescence. Negative peer pressure can lead adolescents to make riskier decisions or engage in more problematic behavior than they would alone or in the presence of their family. For example, adolescents are much more likely to drink alcohol, use drugs, and commit crimes when they are with their friends than when they are alone or with their family. However, peers also serve as an essential source of social support and companionship during adolescence, and adolescents with positive peer relationships are happier and better adjusted than those who are socially isolated or who have conflictual peer relationships.

**Crowds** are an emerging level of peer relationships in adolescence. In contrast to friendships (which are reciprocal dyadic relationships) and **cliques** (which refer to groups of individuals who interact frequently), crowds are characterized more by shared reputations or images than actual interactions (Brown & Larson, 2009)These crowds reflect different prototypic identities (such as jocks or brains) and are often linked with adolescents' social status and peers' perceptions of their values or behaviors. Eventually, these crowds and cliques become less critical to teens as they place more value on close friendships and romantic relationships.

## Crowds

Crowds are large groups of adolescents socially connected by a shared image and reputation (Brown, 2004), especially within the setting of a single school. A single person can belong to more than one crowd if their image matches the crowds' criteria (Brown, 2004; Mory, 1994). Because membership in a crowd depends on peers' perceptions, crowds in any given peer group

will correspond to the local preconceived “types” of adolescents. Specific stereotypes vary from place to place, but many remain consistent. They are based on peer status, socioeconomic status, residential area, activities, social characteristics, or a combination of attributes (jocks, nerds, populars, and druggies are among the most commonly observed) (Brown, 2004; Mory, 1994; Arnett, 2002). Crowds are very different from cliques: while cliques are relatively small, close-knit groups based on frequent interaction and collectively determined membership, members of a crowd may not even know each other. Crowd membership reflects external assessments and expectations, providing a social context for identity exploration and self-definition as adolescents internalize or reject their crowd identities.

Because crowd membership is initially outwardly imposed, an adolescent’s peers can classify them as belonging to a crowd that they do not consider themselves a member. Members of some crowds are more aware of and comfortable with their crowd designation than others; members of stigmatized or low-status groups, in particular, may resist or deny their undesirable categorization (Brown et al., 1992). Usually, however, adolescents embrace their crowd affiliation, using it to define themselves and advertise where they fit in their peer group’s social structure (Newman & Newman, 2001; Brown et al., 1990).

## Crowds and Identity Development

Crowds serve an essential purpose in adolescent identity development, shaping individual values, behavior, and personal and peer expectations. “[One’s group] is often tantamount to one’s own provisional identity” (Brown et al., 1994); the individual defines themself by the crowd to which they see themself belonging. Different crowds expose the individual to different norms. These norms encourage adolescents to interact with some people while avoiding others and reward certain behaviors while discouraging others, a process of normative social influence (Brown et al., 1990; Brown et al., 1994; Brown et al., 1995; Brown & Larson, 2009). For example, a member of a “preppy” crowd might be rewarded for dressing in a fashion for which a member of an “emo” crowd would be teased, and vice versa.

Crowd effects on norms of interaction:

- Norms affect how the individual interacts with others. Members of high-status (preppie, popular) groups often interact with many people, but most of these relationships are superficial and instrumental; interpersonal connections are used to establish and maintain social status (Eder, 1985; Lesko, 1988). By contrast, members of lower-caste groups (e.g., dorks, druggies) generally have fewer friends, mostly from within the crowd; however, these relationships are typically marked by greater loyalty, stability, and honesty (Lesko, 1988).
- Norms affect with whom the individual interacts. Crowds steer the individual toward certain people, attitudes, and behaviors. There are also effects of peer perception and expectations when individuals attempt to interact across crowds. In essence, one may be interested in a cross-crowd friendship, but whether or not the target reciprocates depends on their crowd’s norms as well. The adolescent’s social options for friendship and romance are limited by their crowd and by other crowds (Brown et al., 1994).

Often crowds reinforce the behaviors that initially caused an individual to be labeled part of that crowd, which can positively or negatively influence the individual (toward academic achievement or drug use, for example). These pressures are often linked to the stereotypes members of crowds hold about themselves and members of other crowds: unity by the denigration of the outgroup (Brown et al., 1994).

## Racial Crowds and Sub-Crowds

Adolescents’ perception of crowd differences may depend on how closely related the adolescent observer is to a particular crowd. The primary, recurring crowd divisions (jocks, geeks, partiers) have been most often studied in predominantly white high schools, but they also exist for minority students. In multiracial schools, students seem to divide along ethnic lines first, then into these archetypical crowds within their ethnicity. However, one ethnic group may not notice the further divisions in other ethnic groups after the first, race-based split (Brown & Mounts, 1989). For instance, black students see themselves as divided into jocks, geeks, emos, stoners, popular kids, and so on, but white students may see them as just one crowd defined solely by ethnicity, “the black kids.” Sometimes crowd membership transcends race, however, and adolescents are classified as “jocks” or “geeks” regardless of race (Horvat & Lewis, 2003; Tyson et al., 2005). This classification seems to vary and depend heavily on the context of the individual school.

## Stereotypes, Stigma, and Cross-Crowd Friendships

While crowds are structured around prototypical caricatures of their members, real adolescents rarely match these extremes.

Furthermore, not all adolescents agree on the characteristics typical of a stereotype (Brown et al., 1994). In other words, a regular manifestation of just a few central characteristics of a crowd is a sufficient basis for classification as a member of that crowd. Thus, not all "jocks" neglect their schoolwork, though that is part of the typical jock stereotype, and a person interested in fashion could still be considered a "geek."

Often a crowd is stigmatized by one or more other crowds. This stigmatization can affect adolescents' willingness to associate with members of that crowd, or even other crowds similar to it. For example, people may avoid being seen as a "brain," a middle-status crowd, because of the similarity between brains and "nerds," a lower-status crowd (Brown et al., 1990).

Shared interests form the basis of many friendships, so often adolescents are drawn to members of their own crowds, especially if their crowd is defined by activities rather than more superficial characteristics such as race or socioeconomic status. However, interests can be shared across crowd divisions. Accordingly, while an adolescent's closest friends are almost always part of the same clique (i.e., they interact frequently within the same small friend group), they are not always part of the same crowd, especially if multiple crowds have similar lifestyles (Brown et al., 1994).

## Crowd-Hopping

Further emphasizing the flexible nature of crowd membership, some adolescents are not stably linked to one specific crowd—some individuals are associated with multiple crowds, while others are not stably linked to any crowds and "float" among several. These appear more closely attached to individuals outside the peer group (family, dropout friends, friends from a non-school organization, etc.). Others may consciously work to change crowd affiliations to express different interests or achieve a change in social status. The crowd with which an adolescent desires to be identified is far less stable than the personal attributes by which the adolescent is likely to be categorized by peers. Accordingly, adolescents who change crowd membership (a process known as "crowd-hopping") tend to have lower self-esteem, perhaps because they have not yet found an environment and peer group that supports them. They likely continue changing crowd membership until they find a fulfilling niche (Brown et al., 1992).

## The Rise of Crowds

Crowds first emerge in middle or junior high school, when children transition from stable, self-contained classroom peer groups into larger schools, where they interact with a more diverse body of peers with less adult guidance. Crowds emerge to group students by caricature and structure interactions between students of each type (Brown et al., 1994). Early crowds are often based on social status, especially among girls, with a small group of well-known children being "popular" and the rest "unpopular." To maintain their status, popular girls will avoid the overtures of less-popular children, which actually makes them disliked (Eder, 1985). Many children stop attempting to gain entry into the popular crowd and make friends with other children instead, giving rise to new crowds (Brown et al., 1994).

The stereotypes on which crowd definitions are based change over time as adolescents shift from grouping people by abstract characteristics rather than activities ("geeks" rather than "the kids who read a lot"). With age, adolescents become more conscious of crowd divisions and the social hierarchy (Brown, 2004). Distinctions between crowds also become more nuanced, developing from simple popular/unpopular dichotomies to less hierarchical structures in which there are more than two levels of social acceptability, often with several crowds at each level (Kinney, 1993; Horn, 2003). As seen in cross-crowd friendships, some crowds interact with each other more readily than others. This transition to a more fluid social structure allows adolescents to change their status over time by changing crowds, remaining in a crowd that undergoes a change in status, or gaining the confidence and perspective to reject the assumptions of the social hierarchy (Brown et al., 1994; Kinney, 1993). Willingness to do so reflects a growing sense of personal identity distinct from crowd membership.

## The Decline of Crowds

Adolescents' attitudes toward crowds change over time—while ninth-graders are willing to discriminate against members of other crowds, twelfth-graders are less likely to do so (Horn, 2003). Adolescents also develop more multifaceted self-concepts and reject crowd labels as simplistic attempts to describe an entire personality (Brown et al., 1994). Across the high school years, crowd significance as a basis for affiliation wanes (Horn, 2003), as does the influence of crowds on an individual's behavior (Brown, 2004). In fact, some studies indicate the importance of crowds peaks at age 12 or 13 (Brown et al., 1986). By the end of high school, adolescents often feel constrained by impersonal, crowd-derived identities (Larkin, 1979). This constraint, combined with the splintering off of romantic couples from the rest of the crowd, may account for the decline of crowd significance over time(Kuttler & La Greca, 2004).

# Cliques



A **clique** is a group of individuals who interact with one another and share similar interests. Interacting with cliques is part of normative social development regardless of gender, ethnicity, or popularity. Although cliques are most commonly studied during adolescence and middle childhood development, they exist in all age groups. They are often bound together by shared social characteristics such as ethnicity and socioeconomic status (Labrum, 2016).

Typically, people in a clique will not have a completely open friend group and can, therefore, "ban" members if they do something considered unacceptable, such as talking to someone disliked. Some cliques tend to isolate themselves as a group and view themselves as superior to others, which can be demonstrated through bullying and other antisocial behaviors.

One person may be part of multiple cliques, each forming and functioning independently from one another. Cliques are relevant in society due to the social influence or peer pressure that results from the interactions with individuals who share a common characteristic. The outcomes associated with clique formations may be endless, with varying degrees of influence (Miller, 1958). So, a formal clique, such as a professional organization, would have a different kind of influence as compared to a social clique consisting of close friends.

A clique can also involve a high degree of social commitment to a specific group. A stronger level of commitment results in an individual having a reduced amount of interaction with other social groups. Cliquish behavior often involves repetition with regard to activities, vernacular, preferences, and manner, which can result in conflict with other cliques, creating "outsiders." Individuals can also experience social isolation within their clique if their values and/or behavior begin to differ from the rest of the group.

Every clique has some form of organization that makes up the network of social interaction (Peay, 1974). Informal clique networks are groups that do not have a legitimate organizational structure in which they can be established and dissolved in a shorter period. An informal clique may consist of a person's friend group or co-workers, while it may also identify other, more informal groups, such as criminal gangs (Krackhardt, 1988). On the other hand, a formal clique is a group with a socially accepted organization that is hierarchical in structure. A formal clique is composed of members who have identifiable roles and interactions with one another and is found in the structure of numerous professional organizations, businesses, and even family structure. Culture is a very influential factor in the organization of clique structures because the boundaries established through differences in cultural aspects are persistent, even when the membership varies from time to time. For example, the differences in language, beliefs, traditions, etc. have always created a distinct separation or boundary between groups of people even though the members of that particular group are continually changing (Barth, 1998).

## Development of Cliques

The formation and deformation of clique structures do not end with adolescence, even though the number of interactions with clique groups decreases, and the type of groups may change. As individuals become adults, their social interpretations alter, and the formation of their cliques originates from their immediate environment, rather than from common social characteristics (Carstensen, 2016). A clique should not be confused with a crowd because the smaller size and specific boundaries of a group are what causes the group formation to be considered a clique. A clique can develop in several different ways and within environments that consist of individuals who interact regularly. The structural cohesion of the clique is the constant face-to-face interaction between members that can either create or dissolve the group, depending upon the level of interaction. If face-to-face interaction is regularly established, then cohesion between individuals will form. However, if the face-to-face interaction depreciates, then the cohesive social bond between said individuals will eventually dissolve (Friedkin, 1984).

## Social impact of Cliques

A clique may inhibit external social influence by impacting the emotions, opinions, or behaviors of group members (Hochschild, 1979). There are many ways in which the perception of information between members in a clique can influence other members on a greater level than if they had received the same information from a different source. For example, receiving information from a close friend or family member is interpreted and responded to differently compared to receiving the same information from someone who is not within the clique structure. The satisfaction, interaction, and closeness between the clique groups that we involve ourselves in develops and changes throughout the years. Nevertheless, there is always a constant morphing of both the individual and the group as time goes on.

# Homosociality to Heterosociality

**Homosociality** is the relationship between people of the same-sex, not romantic in nature. In children and young adolescence, more friendships are with peers of the same sex. As adolescents mature, they become open to **heterosociality**, having relationships with people of the opposite sex, and **bisociality**, having relationships with same- and opposite-sex peers.

This process tends to occur in stages, as children transition from almost exclusive homosociality to heterosociality and eventually to romantic relationships. In stage one of this progression, cliques are same-sex and segregated from the opposite sex. In the second stage, opposite-sex cliques with similar interests start to associate. During the third stage, sex-segregated cliques break down, often with clique leaders pairing off into close friendships and romantic relationships. The fourth stage is when other clique members also leave the homosocial clique for hetero- and bisocial or romantic relationships. By stage five, cliques are less important to teens, and close or romantic relationships are the priority.

## Cliques, Crowds, and Conformity

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 11.2.1.** Adolescence, Cliques, Crowds, Conformity discusses the different peer groups and the influence on youth culture.

## Close Friendships

Peer relationships are particularly important for children. They can be supportive but also challenging. Peer rejection may lead to behavioral problems later in life. However, peer relationships can be challenging, as well as supportive (Rubin, Coplan, Chen, Bowker, & McDonald, 2011). Being accepted by other children is an essential source of affirmation and self-esteem. At the same time, peer rejection can foreshadow later behavior problems (especially when children are rejected due to aggressive behavior). With increasing age, children confront the challenges of bullying, peer victimization, and managing conformity pressures. Social comparison with peers is an important means by which children evaluate their skills, knowledge, and personal qualities, but it may cause them to feel that they do not measure up well against others. For example, a boy who is not athletic may feel unworthy of his football-playing peers and revert to shy behavior, isolating himself, and avoiding conversation. Conversely, an athlete who does not “get” Shakespeare may feel embarrassed and avoid reading altogether. Also, with the approach of adolescence, peer relationships become focused on psychological intimacy, involving personal disclosure, vulnerability, and loyalty (or its betrayal)—which significantly influences a child’s outlook on the world. Each of these aspects of peer relationships requires developing very different social and emotional skills than those that emerge in parent-child relationships. They also illustrate the many ways that peer relationships influence the growth of personality and self-concept.

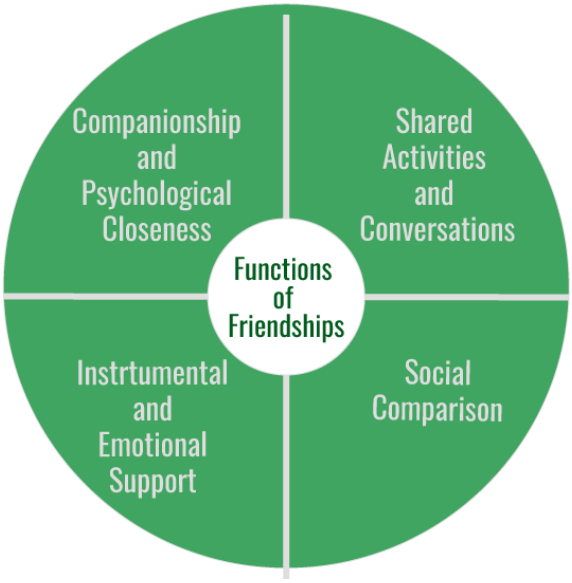



**Figure 11.2.2.** Functions of friendship. By Florida State College at Jacksonville, licensed under CC-BY 4.0 .

## Romantic Relationships

Adolescence is the developmental period during which romantic relationships typically first emerge. Initially, same-sex peer groups that were common during childhood expand into mixed-sex peer groups that are more characteristic of adolescence. Romantic relationships often form in the context of these mixed-sex peer groups (Connolly, Furman, & Konarski, 2000).

Although romantic relationships during adolescence are often short-lived rather than long-term committed partnerships, their importance should not be minimized. Adolescents spend a great deal of time focused on romantic relationships, and their positive and negative emotions are more tied to romantic relationships (or lack thereof) than to friendships, family relationships, or school (Furman & Shaffer, 2003). Romantic relationships contribute to adolescents' identity formation, changes in family and peer relationships, and adolescents' emotional and behavioral adjustment.

Furthermore, romantic relationships are centrally connected to adolescents' emerging sexuality. Parents, policymakers, and researchers have devoted a great deal of attention to adolescents' sexuality, in large part because of concerns related to sexual intercourse, contraception, and preventing teen pregnancies. However, sexuality involves more than this narrow focus. Romantic relationships are a domain in which adolescents experiment with new behaviors and identities.

## Try It

https://assessments.lumenlearning.co...essments/16621

## Candela Citations

CC licensed content, Original

- Peer Relationships. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...relationships/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Social Development During Adolescence . **Authored by**: Tera Jones. **Provided by**: Lumen Learning. **Retrieved from**: https://courses.lumenlearning.com/wm...g-adolescence/. **License**: CC BY-SA: Attribution-ShareAlike
- Play, Leisure, and Peer Relationships. **Provided by**: Lumen Learning. **Retrieved from**: https://courses.lumenlearning.com/at...relationships/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike
- Cliques. **Provided by**: Wikipedia. **Retrieved from**: https://en.wikipedia.org/wiki/Clique. **License**: CC BY: Attribution

All rights reserved content

- Adolescence, Cliques, Crowds, Conformity. **Retrieved from**: https://youtu.be/tFt8IBwcNTg. **License**: All Rights Reserved

This page titled 11.1: Peer Relationships is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 11.1: Peer Relationships by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 11.2: Sociometric Peer Status

A teen's status among their peers will influence their membership in peer groups and their ability to make friends. **Sociometric status** is a measurement that reflects the degree to which someone is liked or disliked by their peers as a group. In developmental psychology, this system has been used to examine children's status in peer groups, its stability over time, the characteristics that determine it, and the long-term implications of one's popularity or rejection by peers.

The most commonly used sociometric system, developed by Coie & Dodge (1988), asks children to rate how much they like or dislike each of their classmates and uses these responses to classify them into five groups.

| | | Number of "least liked" nominations | | |
|---|---|---|---|---|
| | | Many | | Few |
| Number of "most liked" nominations | Many | Controversial | | Popular |
| | | | Average | |
| | Few | Rejected | | Neglected |

**Figure 11.3.1.** Sociometric peer statuses.

**Popular** adolescents are those liked by many of their peers and disliked by few. These individuals are skilled at social interactions and maintain positive peer relationships. They tend to be cooperative, friendly, sociable, and sensitive to others. They are capable of being assertive without being aggressive, thus can get what they want without harming others. Among this group, there may be distinct levels of popularity:

- **Accepted** teens are the most common sub-group among the popular. While they are generally well-liked, they are not as magnetic as the very popular kids.
- **Very popular** teens are highly charismatic and draw peers to them.

**Rejected** teens are designated as rejected if they receive many negative nominations and few positive nominations. These individuals often have poor academic performance and more behavior problems in school. They are also at higher risk for delinquent behaviors and legal problems. These kids are more likely to be diagnosed with ADHD, conduct disorder, and substance abuse. They tend to be isolated, lonely and are at risk for depression. Rejected youth can be categorized into two types:

- **Aggressive-rejected** teens display hostile and threatening behavior, are physically aggressive, and disruptive. They may bully others, withhold friendship, ignore and exclude others. While they are lacking, they tend to overestimate their social competence.
- **Withdrawn-rejected** teens are socially withdrawn, wary, timid, anxious in social situations, and lack confidence. They are at risk of being bullied.

Individuals that are liked by many peers, but also dislike by many are designated as **controversial**. This group may possess characteristics of both the popular and the rejected group. These individuals tend to be aggressive, disruptive, and prone to anger. However, they may also be cooperative and social. They are often socially active and a good group leader. Their peers often view them as arrogant and snobbish.

The **neglected** teens are designated as neglected if they receive few positive or negative nominations. These children are not especially liked or disliked by peers and tend to go unnoticed. As a result, they may be isolated and especially avoid confrontation or aggressive interactions. This group does tend to do well academically.

Finally, the **average** teens are designated as such because they receive an average number of both positive and negative nominations. They are liked by a small group of peers, but not disliked by very many.

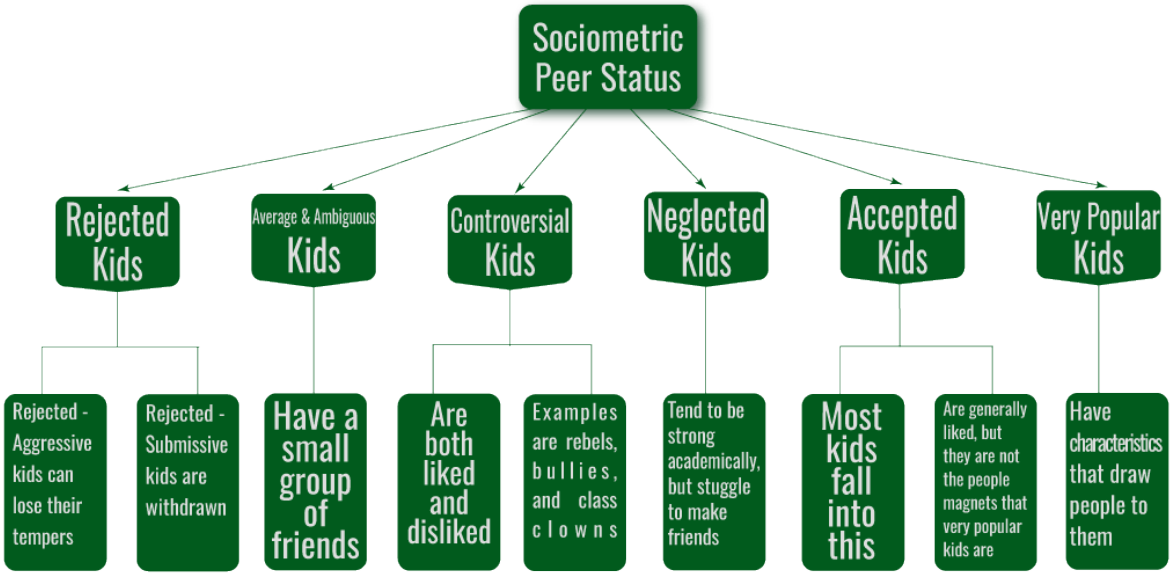



**Figure 11.3.2.** Sociometric peer statuses and characteristics.

## Popularity

What makes an adolescent popular? Several physical, cognitive, and behavioral factors impact popularity. First, adolescents that are perceived to be physically attractive tend to be more popular among their peers. Cognitive traits matter too. Individuals that demonstrate higher intelligence and do well academically tend to be more liked. Also, those that can take another's perspective and demonstrate social problem-solving skills are favored. Teens that can manage their emotions and behave appropriately gain higher status. Finally, teens like peers that are confident without being conceited.

## Interventions

What can be done to help those adolescents that are not well-liked? For neglected teens, social skills training and encouraging them to join activities can help them become noticed by their peers and make friends. For rejected teens, they may need support to help with anger management, to overcome anxiety, and cope with depression. This group can also benefit from social skills training to learn social competence and gain confidence.

## Candela Citations

CC licensed content, Original

- Sociometric Peer Status. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...c-peer-status/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Play, Leisure, and Peer Relationships. **Provided by**: Lumen Learning. **Retrieved from**: https://courses.lumenlearning.com/at...relationships/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

This page titled 11.2: Sociometric Peer Status is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 11.2: Sociometric Peer Status by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 11.3: Bullying

Bullying is unwanted, aggressive behavior among school-aged children that involves a real or perceived power imbalance. The behavior is repeated, or has the potential to be repeated, over time. Both kids who are bullied and who bully others may have serious, lasting problems.

In order to be considered bullying, the behavior must be aggressive and include:

- An Imbalance of Power: Kids who bully use their power—such as physical strength, access to embarrassing information, or popularity—to control or harm others. Power imbalances can change over time and in different situations, even if they involve the same people.
- Repetition: Bullying behaviors happen more than once or have the potential to happen more than once.

Bullying includes actions, such as making threats, spreading rumors, attacking someone physically or verbally, and excluding someone from a group on purpose. Bullying is not peer conflict, dating violence, hazing, gang violence, harassment (legal definition), or stalking. While these issues may also be problematic, they do not meet the criteria for bullying behavior.

## Types of Bullying

There are several types of bullying, and it is not unusual for a bully to utilize more than one type. **Verbal bullying is** saying, or writing mean things and may include behaviors like teasing or name-calling, inappropriate sexual comments, taunting, and threatening to cause harm. **Social bullying is** sometimes referred to as relational bullying. It involves behaviors such as hurting someone's reputation or relationships by purposely excluding them or getting others to exclude them, spreading rumors about someone, or embarrassing someone in public. **Physical bullying is** hurting a person's body or possessions by hitting, kicking, or pinching, spitting, tripping or pushing, taking or breaking someone's things, or making mean or rude hand gestures.

## The Roles in Bullying

There are many roles that individuals may take in bullying situations. Kids can bully others, they can be bullied, or they may witness bullying. Some may play more than one role, sometimes being both bullied and the bully. It is important to understand the multiple roles involved in these situations in order to prevent and respond to bullying effectively.

### Importance of Not Labeling Kids

When referring to a bullying situation, it is easy to call the kids who bully others "bullies" and those who are targeted "victims," but this may have unintended consequences. When children are labeled as "bullies" or "victims," it may send the message that the individual's behavior cannot change. It also fails to recognize the multiple roles one might play in different bullying situations. Labeling also disregards other factors contributing to the behavior such as peer influence or school climate.

Instead of labeling the teens involved, focus on the behavior. For instance, instead of calling someone a "bully," refer to them as "the person who bullied." Instead of calling a person a "victim," refer to them as "the person who was bullied."

### The Role of Bully

The roles individuals play in bullying are not limited to those who bully others and those who are bullied. Some researchers talk about the "circle of bullying" to define both those directly involved in bullying and those who actively or passively assist the behavior or defend against it. Direct roles include:

- **Those who Bully**: These teens engage in bullying behavior towards their peers. There are many risk factors that may contribute to their involvement in the behavior. Often, these kids require support to change their behavior and address any other challenges that may be influencing their behavior.
- **Those who are Bullied**: These teens are the targets of bullying behavior. Some factors put them at more risk of being bullied, but not all kids with these characteristics will be bullied. Sometimes, these individuals may need help learning how

to respond to bullying.

## Witnesses to Bullying

Even if a person is not directly involved in bullying, they may be contributing to the behavior. Witnessing the behavior may also affect the situation, so they need to learn what they should do when they see bullying happen. Roles kids play when they witness bullying include:

- **Those who Assist**: These individuals may not start the bullying or lead in the bullying behavior, but serve as an "assistant" to those who are bullying. These kids may encourage bullying behavior and occasionally join in.
- **Those who Reinforce**: These kids are not directly involved in the bullying behavior, but they give the bullying an audience. They will often laugh or provide support for those who are engaging in bullying. This may encourage the bullying to continue.
- **Outsiders**: These individuals remain separate from the bullying situation. They neither reinforce the bullying behavior nor defend the person being bullied. Some may watch what is going on but do not provide feedback about the situation to show they are on anyone's side. Even so, providing an audience may encourage bullying behavior. These witnesses may want to help but do not know-how.
- **Those who Defend**: These witnesses actively comfort the person being bullied and may come to their defense when bullying occurs.

Most participants play more than one role in bullying over time. In some cases, they may be directly involved in bullying as the one bullying others or being bullied. In others, they may witness bullying and play an assisting or defending role. Every situation is different. Some kids are both bullied and bully others. It is important to note the multiple roles kids play, because those who are both bullied and bully others may be at more risk for adverse outcomes, such as depression or suicidal ideation. Also, it highlights the need to engage all kids in prevention efforts, not just those who are known to be directly involved.

## Bystanders: Become an Upstander to Bullying

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 11.4.1.** Bystander discusses the roles of a bullying incident and how bystanders may be key to preventing and stopping bullying.

# Who Is at Risk?

No single factor puts a child at risk of being bullied or bullying others. Bullying can happen anywhere—cities, suburbs, or rural towns. Depending on the environment, some groups—such as lesbian, gay, bisexual, transgender, or questioning (LGBTQ) youth, youth with disabilities, and socially isolated youth—may be at an increased risk of being bullied.

## Those at Risk of Being Bullied

Generally, those who are bullied have one or more risk factors. Adolescents that are perceived as different from their peers, such as being overweight or underweight, wearing glasses or different clothing, being new to a school, or being unable to afford what kids consider "cool" are at risk for bullying. As are those perceived as weak or unable to defend themselves or are less popular than others and have few friends. Also, at risk for bullying are those that are depressed, anxious, or have low self-esteem. Finally, those that do not get along well with others, are seen as annoying or provoking, or antagonize others for attention are more likely to be bullied. However, even if a child has these risk factors, it does not mean that they will be bullied.

## Those More Likely to Bully Others

There are two types of kids who are more likely to bully others. The first is well-connected to their peers, have social power, are overly concerned about their popularity, and like to dominate or be in charge of others. The others are more isolated from their peers and may be depressed or anxious, have low self-esteem, be less involved in school, be easily pressured by peers, or not identify with the emotions or feelings of others.

There are specific risk factors that make someone more likely to bully others. Those that are aggressive or easily frustrated, have difficulty following rules, and view violence in a positive way are more likely to bully. Also, those that think badly of others and have friends who bully are at higher risk for the same behavior. Finally, kids that have less parental involvement or are having issues at home may display more bullying behaviors.

Remember, those who bully others do not need to be stronger or bigger than those they bully. The power imbalance can come from several sources—popularity, strength, cognitive ability—and children who bully may have more than one of these characteristics.

# Warning Signs of Bullying

There are many warning signs that may indicate that someone is affected by bullying—either being bullied or bullying others. Recognizing the warning signs is an essential first step in taking action against bullying. Not all children who are bullied or are bullying others ask for help.

It is important to talk with children who show signs of being bullied or bullying others. These warning signs can also point to other issues or problems, such as depression or substance abuse. Talking to the child can help identify the root of the problem.

## Signs of Being Bullied

Look for changes in the child. However, be aware that not all children who are bullied exhibit warning signs. Some signs that may point to a bullying problem are unexplainable injuries or lost and destroyed clothing, books, electronics, or jewelry. Those being bullied may report frequent headaches or stomach aches, feeling sick or faking illness. They may have changes in eating habits, like suddenly skipping meals or binge eating. Kids may come home from school hungry because they did not eat lunch. They may also have difficulty sleeping or frequent nightmares.

## Signs of Bullying Others

Kids may be bullying others if they get into physical or verbal fights or have friends who bully others. They may demonstrate increasing levels of aggressive behavior and get sent to the principal's office or detention frequently. They may also have unexplained extra money or new belongings.

## Why Don't Kids Ask for Help?

Statistics from the 2012 Indicators of School Crime and Safety show that an adult was notified in less than half (40%) of bullying incidents. Kids do not tell adults for many reasons. Fo one, bullying can make a child feel helpless. Kids may want to handle it on their own to feel in control again. They may fear being seen as weak or a tattletale. Kids may fear backlash from the kid who bullied them. Bullying can be a humiliating experience. Kids may not want adults to know what is being said about them, whether true or false. They may also fear that adults will judge them or punish them for being weak. Kids who are bullied may already feel socially isolated. They may feel like no one cares or could understand. Finally, kids may fear being rejected by their peers. Friends can help protect kids from bullying, and kids can fear of losing this support.

# Effects of Bullying

Bullying can affect everyone—those who are bullied, those who bully, and those who witness bullying. Bullying is linked to many negative outcomes, including impacts on mental health, substance use, and suicide. It is important to talk to kids to determine whether bullying—or something else—is a concern.

### Kids Who Are Bullied

Kids who are bullied can experience negative physical, school, and mental health issues. Kids who are bullied are more likely to experience depression and anxiety, increased feelings of sadness and loneliness, changes in sleep and eating patterns, and loss of interest in activities they used to enjoy. These issues may persist into adulthood. They may have more health complaints. Decreased academic achievement and school participation is a common effect of being bullied. They are also more likely to miss, skip, or drop out of school. A very small number of bullied kids might retaliate through extremely violent measures. In 12 of 15 school shooting cases in the 1990s, the shooters had a history of being bullied.

### Kids Who Bully Others

Kids who bully others can also engage in violent and other risky behaviors into adulthood. Kids who bully are more likely to abuse alcohol and other drugs in adolescence and as adults. They are also more likely to get into fights, vandalize property, and drop out of school. They have criminal convictions and traffic citations as adults. They may engage in early sexual activity. They are also more likely to be abusive toward their romantic partners, spouses, or children as adults.

### Bystanders

Kids who witness bullying are more likely to miss or skip school. They are also more like to use tobacco, alcohol, or other drugs. Bystanders are at increased risk of developing mental health problems, including depression and anxiety.

## The Relationship Between Bullying and Suicide

Media reports often link bullying with suicide. However, most youth who are bullied do not have thoughts of suicide or engage in suicidal behaviors. Although kids who are bullied are at risk of suicide, bullying alone is not the cause. Many issues contribute to suicide risk, including depression, problems at home, and trauma history. Additionally, specific groups have an increased risk of suicide, including American Indian and Alaskan Native, Asian American, lesbian, gay, bisexual, and transgender youth. This risk can be increased further when these kids are not supported by parents, peers, and schools. Bullying can make an unsupportive situation worse.

## Special Concern: Cyberbullying

Cyberbullying is bullying that takes place over digital devices like cell phones, computers, and tablets. Cyberbullying can occur through SMS, Text, and apps, or online in social media, forums, or gaming where people can view, participate in, or share content. Cyberbullying includes sending, posting, or sharing negative, harmful, false, or mean content about someone else. It can include sharing personal or private information about someone else, causing embarrassment or humiliation. Some cyberbullying crosses the line into unlawful or criminal behavior.

With the prevalence of social media and digital forums, comments, photos, posts, and content shared by individuals can often be viewed by strangers, as well as acquaintances. The content an individual shares online — both their personal content as well as any negative, mean, or hurtful content — creates a kind of permanent public record of their views, activities, and behavior. This public record can be thought of as an online reputation, which may be accessible to schools, employers, colleges, clubs, and others who may be researching an individual now or in the future. Cyberbullying can harm the online reputations of everyone involved – not just the person being bullied, but those doing the bullying or participating in it. Cyberbullying has unique concerns in that it can be:

- **Persistent**: Digital devices offer the ability to immediately and continuously communicate 24 hours a day, so it can be difficult for children experiencing cyberbullying to find relief.
- **Permanent**: Most information communicated electronically is permanent and public, if not reported and removed. A negative online reputation, including for those who bully, can impact college admissions, employment, and other areas of life.
- **Hard to Notice**: Because teachers and parents may not overhear or see cyberbullying taking place, it is harder to recognize.

### Cyberbullying and Online Gaming

Playing videogames is a popular activity, with 72 percent of teens gaming online. Many video games — whether they are console,

web, or computer-based — allow users to play with friends they know in person and others they have met only online. While gaming can have positive benefits like making new friends, socializing, and learning how to strategize and problem solve, it is also another place where cyberbullying occurs.

The anonymity of players and the use of avatars allow users to create alter-egos or fictional versions of themselves, which is part of the fun of gaming. However, it also allows users to harass, bully, and sometimes gang up on other players, sending or posting negative or hurtful messages and using the game as a tool of harassment. If someone is not performing well, other children may curse or make negative remarks that turn into bullying, or they might exclude the person from playing together.

Because players are anonymous, they cannot necessarily be held accountable for their behavior, and their harassment can cause some players to leave games. Some anonymous users use the game as a means to harass strangers or to get their personal information, like user names and passwords.

There are things adults can do to prevent cyberbullying of children who are gaming. Parents should play the game or observe when the gaming happens to understand how it works and what a child is exposed to in the game. Check-in periodically with children about who is online, playing the game with them. Teach children about safe online behavior, including not clicking on links from strangers, not sharing personal information, not participating in bullying behavior of other players, and what to do if they observe or experience bullying. Establish rules about how much time a child can spend playing video games.

## Warning Signs of Cyberbullying

Many of the warning signs that cyberbullying is occurring happen around a child's use of their device. Some of the warning signs that a kid may be involved in cyberbullying include noticeable increases or decreases in device use. Kids may exhibit unusual emotional responses (laughter, anger, upset) to what is happening on their device. A teen hides their screen or device when others are near, and avoids discussion about what they are doing on their device. There may be sudden changes to social media accounts, with accounts being shut down or new ones appear. If a teen starts to avoid social situations, even those that were enjoyed in the past. Alternatively, if they become withdrawn or depressed, or loses interest in people and activities.

## What to Do When Cyberbullying Happens

When warning signs that a child may be involved in cyberbullying, adults should take steps to investigate that kid's digital behavior. Cyberbullying is a form of bullying, and adults should take the same approach to address it: support the person being bullied, address the bullying behavior of a participant, and show all involved that cyberbullying is taken seriously. Because cyberbullying happens online, responding to it requires different approaches. If an adult thinks that cyberbullying is occurring, several things can be done. First, *recognize* if there has been a change in mood or behavior and explore what the cause might be. Try to determine if these changes happen around a child's use of their digital devices. *Ask* questions to learn what is happening, how it started, and who is involved. *Document* what is happening and where. Take screenshots of harmful posts or content, if possible. Most laws and policies note that bullying is a repeated behavior, so records help to document it. *Report* issues to social media platforms and refer to the school's reporting policies. If a child has received physical threats, or if a potential crime or illegal behavior is occurring, report it to the police. *Provide support***.** Peers, mentors, and trusted adults can sometimes intervene publicly to positively influence a situation where negative or hurtful content posts about a child. Public Intervention can include posting positive comments about the person targeted with bullying to try to shift the conversation in a positive direction. It can also help to reach out to the child who is bullying and the target of the bullying to express concern. If possible, try to determine if more professional support is needed for those involved, such as speaking with a guidance counselor or mental health professional.

## Watch it

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**Video 11.4.2.** Ways to Stop Bullying.

## Candela Citations

CC licensed content, Original

- Bullying. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...pter/bullying/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Bullying. **Provided by**: Lumen Learning. **Retrieved from**: https://courses.lumenlearning.com/at...pter/bullying/. **License**: CC BY: Attribution
- Cyberbullying. **Provided by**: Lumen Learning. **Retrieved from**: https://courses.lumenlearning.com/at...cyberbullying/. **License**: CC BY: Attribution

All rights reserved content

- Ways to Stop Bullying . **Provided by**: watchwellcast. **Retrieved from**: https://youtu.be/ynTuA_tlZDE. **License**: All Rights Reserved

Public domain content

- Bystander Video. **Provided by**: U.S. Department of Health and Human Services. **Retrieved from**: https://youtu.be/StPGbbBBrI0. **Project**: StopBullying.gov. **License**: CC0: No Rights Reserved

This page titled 11.3: Bullying is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 11.3: Bullying by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 11.4: Teen Dating

Healthy relationships in adolescence can help shape a young person's identity and prepare teens for more positive relationships during adulthood. Providing adolescents with tools to start and maintain healthy relationships (with romantic partners as well as peers, employers, teachers, and parents) may have a positive influence on young people's overall development.

## The Role of Healthy Romantic and Dating Relationships

Adolescents tend to become more interested in dating around their mid-teens and become more involved in dating relationships during high school. Although dating does increase during this time, it is also normal for adolescents not to be in a relationship. Nearly two-thirds of teens (ages 13-17) have not been in a dating or romantic relationship. Thirty-five percent of teens (ages 13-17) have some experience with romantic relationships, and 19 percent are currently in a relationship. Older teens (ages 15-17) are more likely than younger teens to have experience with romantic relationships (Lenhart et al., 2015).

Adolescents date less now than they did in the past. This change is most striking for 12th-grade students, where the percentage of youth who did not date increased from 14 percent in 1991 to 38 percent in 2013. Adolescent sexual activity also has decreased from previous decades (Child Trends Databank, 2015). The percentage of U.S. high school students who had ever had sex decreased from 54 percent in 1992 to 40 percent in 2017 (Centers for Disease Control and Prevention, 2018).

Experiencing healthy dating relationships does have benefits to adolescent development. Knowing how to establish and maintain healthy romantic relationships can help adolescents grow. Healthy dating during the teenage years can be an essential way to develop social skills, learn about other people, and grow emotionally. These relationships also can play a role in supporting youth's ability to develop positive relationships in other areas, including: in school, with employers, and with partners during adulthood.

Both male and female youth value intimacy, closeness, and emotional investment in romantic relationships. These relationships can be accompanied by extreme excitement and happiness, but also by disappointment and sadness. However, some youth might go beyond the normal range of emotions and may experience depression.

While meeting partners online has been growing in popularity and is becoming more common among adults, few teens meet their romantic partners online. In 2015, only 8 percent of all teenagers had met a romantic partner online. Of course, many teens have never dated anyone, but among those with dating experience, 24 percent dated or hooked up with someone they first met online. Among this 24 percent, half of the teens had met just one romantic partner online, while the other half had met more than one partner online (Lenhart et al., 2015).

## Teen Dating Violence

Healthy relationships consist of trust, honesty, respect, equality, and compromise. Unfortunately, teen dating violence—the type of intimate partner violence that occurs between two young people who are, or who were once in, an intimate relationship—is a serious problem in the United States. Teen dating violence can take place in person or electronically, such as repeated texting or posting sexual pictures of a partner online without consent. Unhealthy relationships can start early and last a lifetime. Teens often think some behaviors, like teasing and name-calling, are a "normal" part of a relationship—but these behaviors can become abusive and develop into serious forms of violence. However, many teens do not report unhealthy behaviors because they are afraid to tell family and friends.

A national survey found that ten percent of teens, 1 in 11 females and 1 in 15 males, had been the victims of physical dating violence within the past year. Approximately 29 percent of adolescents reported being verbally or psychologically abused within the previous year. About 1 in 9 female and 1 in 36 male high school students report having experienced sexual dating violence in the last year. The burden of teen dating violence is not shared equally across all groups—sexual minority groups are disproportionately affected by all forms of violence, and some racial/ethnic minority groups are disproportionately affected by many types of violence.

As for perpetration rates, there are currently no nationwide estimates for who does the abusing, and state estimates vary significantly. In South Carolina, for example, nearly 8 percent of adolescents reported being physically violent to a romantic partner. Interestingly, the rates of reported victimization versus perpetration in the state were similar for boys and girls. However,

when it comes to severe teen dating violence — including sexual and physical assault — girls were disproportionately the victims

Research on teen dating violence has found that girls and boys perpetrate the same frequency of physical aggression in romantic relationships. This finding was at odds with common perceptions and the experience of practitioners that work with these youth. Practitioners overwhelmingly report encountering female victims and hear that males are the primary perpetrators.

## Teen Dating Violence Requires a Different Framework

Because teen dating violence has only recently been recognized as a significant public health problem, the complex nature of this phenomenon is not fully understood. Although research on rates of perpetration and victimization exists, research that examines the problem from a longitudinal perspective and considers the dynamics of teen romantic relationships is lacking. Consequently, those in the field have to rely on an adult framework to examine the problem of teen dating violence.

However, we find that this adult framework does not take into account key differences between adolescent and adult romantic relationships. Thus, to help further the discussion, we offer in this article a gender-based analysis of teen dating violence with a developmental perspective. We look at what we know — and what we do not know — about who is the perpetrator and who is the victim in teen dating violence. We also discuss how adult and adolescent romantic relationships differ in the hope that an examination of existing research will help us better understand the problem and move the field toward the creation of developmentally appropriate prevention programs and effective interventions for teenagers.

### Victims and Perpetrators: What the Research Says

In 2001-2005, Peggy Giordano and her colleagues at Bowling Green State University interviewed more than 1,300 seventh, ninth and 11th graders in Toledo, Ohio. More than half of the girls in physically aggressive relationships said both they and their dating partner committed aggressive acts during the relationship. About a third of the girls said they were the sole perpetrators, and 13 percent reported that they were the sole victims. Almost half of the boys in physically aggressive relationships reported mutual aggression, nearly half reported they were the sole victim, and 6 percent reported that they were the sole perpetrator.

These findings are generally consistent with another study that looked at more than 1,200 Long Island, N.Y., high school students who were currently dating. In that 2007 survey, 66 percent of boys and 65 percent of girls who were involved in physically aggressive relationships reported mutual aggression (O'Leary et al., 2008). Twenty-eight percent of the girls said that they were the sole perpetrator; 5 percent said they were the sole victim. These numbers were reversed for the boys: 5 percent said they were the sole perpetrator, 27 percent the sole victim.

In a third study, teen couples were videotaped while performing a problem-solving task. Researchers later reviewed the tapes and identified acts of physical aggression that occurred between the boys and girls during the exercise. They found that 30 percent of all the participating couples demonstrated physical aggression by both partners. In 17 percent of the participating couples, only the girls perpetrated physical aggression, and in 4 percent, only the boys were perpetrators (Capaldi et al., 2007). The findings suggest that boys are less likely to be physically aggressive with a girl when someone else can observe their behavior.

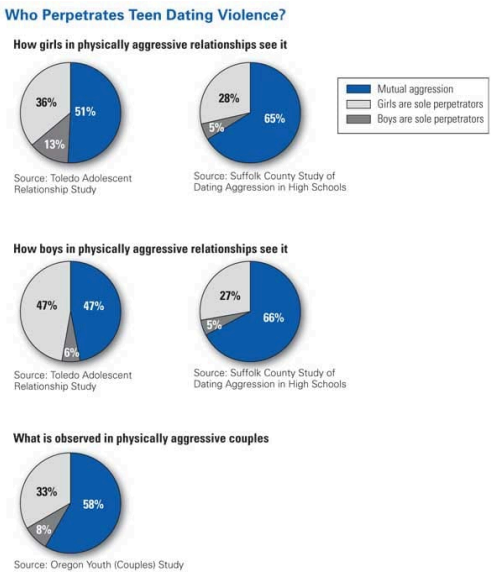



**Figure 11.5.1.** Statistics on the perpetration of physical teen violence by gender.

Considered together, the findings from these three studies reveal that frequently there is mutual physical aggression by girls and boys in romantic relationships. However, when it comes to *motivations* for using violence, and the consequences of being a victim of teen dating violence, the differences between the sexes are pronounced. Although both boys and girls report that anger is the primary motivating factor for using violence, girls also commonly report self-defense as a motivating factor, and boys also commonly cite the need to exert control. Boys are also more likely to react with laughter when their partner is physically aggressive. Girls experiencing teen dating violence are more likely than boys to suffer long-term negative behavioral and health consequences, including suicide attempts, depression, cigarette smoking, and marijuana use.

## Applying Adult Perspectives to Teen Dating Violence

Why do teenagers commit violence against each other in romantic relationships? We have already touched on the existing body of research on perpetration and victimization rates. Nevertheless, there is not a great deal of research that uses a longitudinal perspective or that considers the dynamics of teen romantic relationships. As a result, practitioners and researchers in the field tend to apply an adult intimate partner violence framework when examining the problem of teen dating violence.

A split currently exists, however, among experts in the adult intimate partner violence arena. Some experts hold that men and women are mutually combative and that this behavior should be seen as part of a larger pattern of family conflict. Supporters of this view generally cite studies that use “act” scales, which measure the number of times a person perpetrates or experiences certain acts, such as pushing, slapping, or hitting. These studies tend to show that women report perpetrating slightly more physical violence than men. It is interesting to note that most studies on teen dating violence that have been conducted to date have relied primarily on “act” scales.

Another group of experts holds that men generally perpetrate serious intimate partner violence against women. They contend that men in patriarchal societies use violence to exert and maintain power and control over women. These experts also maintain that “act” scales do not accurately reflect the nature of violence in intimate relationships because they do not consider the degree of injury inflicted, coercive and controlling behaviors, the fear induced, or the context in which the acts occurred. Studies using “act” scales, they contend, lack information on power and control and emphasize the more common and relatively minor forms of aggression rather than more severe, relatively rare forms of violence in dating and intimate partner relationships. Instead, supporters of this perspective use data on injuries and in-depth interviews with victims and perpetrators.

We believe, however, that applying either of these adult perspectives to adolescents is problematic. Although both views of adult intimate partner violence can help inform our understanding of teen dating violence, it is important to consider how adolescent romantic relationships differ from adult romantic relationships in several key areas.

## How Teen Dating Violence Differs: Equal Power

One difference between adolescent and adult relationships is the absence of elements traditionally associated with greater male power in adult relationships. Adolescent girls are not typically dependent on romantic partners for financial stability, and they are less likely to have children to provide for and protect.

The study of seventh, ninth and 11th graders in Toledo (Giordano, 2007), for example, found that a majority of the boys and girls who were interviewed said they had a relatively "equal say" in their romantic relationships. In cases in which there was a power imbalance, they were more likely to say that the female had more power in the relationship. Overall, the study found that the boys perceived that they had less power in the relationship than the girls did. Interestingly, males involved in relationships in which one or both partners reported physical aggression had a perception of less power than males in relationships without physical aggression. Meanwhile, the girls reported no perceived difference in power regardless of whether their relationships included physical aggression.

It is interesting to note that adults who perpetrate violence against family members often see themselves as powerless in their relationships. This dynamic has yet to be adequately explored among teen dating partners.

## Lack of Relationship Experience

A second key factor that distinguishes violence in adult relationships from violence in adolescent relationships is the lack of experience teens have in negotiating romantic relationships. Inexperience in communicating and relating to a romantic partner may lead to the use of poor coping strategies, including verbal and physical aggression. A teen who has difficulty expressing himself or herself may turn to aggressive behaviors (sometimes in play) to show affection, frustration, or jealousy. A recent study in which boys and girls participated in focus groups on dating found that physical aggression sometimes stemmed from an inability to communicate feelings and a lack of constructive ways to deal with frustration.

As adolescents develop into young adults, they become more realistic and less idealistic about romantic relationships. They have a greater capacity for closeness and intimacy. Holding idealistic beliefs about romantic relationships can lead to disillusionment and ineffective coping mechanisms when conflict emerges. It also seems reasonable to expect that physical aggression may be more common when adolescents have not fully developed their capacity for intimacy, including their ability to communicate.

## The Influence of Peers

We would be remiss to try to understand teen behavior and not consider the profound influence of friends. Peers exert more influence on each other during their adolescent years than at any other time. Research has confirmed that peer attitudes and behaviors are critical influences on teens' attitudes and behaviors related to dating violence.

Not only are friends more influential in adolescence than in adulthood, but they are also more likely to be "on the scene" and a key element in a couple's social life. In fact, roughly half of adolescent dating violence occurs when a third party is present. Relationship dynamics often play out in a very public way because teens spend a large portion of their time in school and in groups. For various reasons, a boyfriend or girlfriend may act very differently when in the presence of peers, a behavior viewed by adolescents as characteristic of an unhealthy relationship. For example, boys in one focus group study said that if a girl hit them in front of their friends, they would need to hit her back to "save face."

Conflict over how much time is spent with each other versus with friends, jealousies stemming from too much time spent with a friend of the opposite sex, and new romantic possibilities are all part of the social fabric of adolescence. Although "normal" from a developmental perspective, navigating such issues can cause conflict and, for some adolescents, lead to aggressive responses and problematic coping strategies, such as stalking, psychological or verbal abuse, and efforts to gain control.

# Risk Factors for Teen Dating Violence Victimization

Findings suggest that the frequency and severity of teen dating violence increase with age. In addition, the likelihood of being subjected to violence in a relationship increases for teens who:

- Experience stressful life events or show symptoms of trauma (including a history of sexual abuse or prior sexual victimization).
- Live in poverty, come from disadvantaged homes, or receive child protective services.

- Are exposed to community or neighborhood violence.
- Participate in risky behaviors (e.g., substance abuse, alcohol use, violence).
- Begin dating at an early age.
- Participate in sexual activity before age 16.
- Have problem behaviors in other areas.
- Have a friend involved in dating violence.
- Participate in peer violence or have violent friends.
- Believe that dating violence is acceptable or is more accepting of rape myths and violence against women.
- Begin menstruating at an early age (for women).
- Have been exposed to harsh parenting, inconsistent discipline, or lack supervision, monitoring, and warmth.
- Have low self-esteem, anger, or depressed mood.
- Use emotional disengagement and confrontational blaming as coping mechanisms.
- Exhibit maladaptive or antisocial behaviors.
- Have aggressive conflict-management styles.
- Have low help-seeking proclivities.

## Risk Factors for Teen Dating Violence Perpetration

In addition to the issues discussed above, there are additional factors that are associated with teen dating violence perpetration include:

- Believing that it is acceptable to use threats or violence to get one's way or to express frustration or anger.
- Problems managing anger or frustration.
- Association with violent peers.
- Low self-esteem and depression.
- Not having parental supervision and support.
- Witnessing violence at home or in the community.

## Impacts of Teen Dating Violence

Unhealthy, abusive, or violent relationships can have severe consequences and short-and long-term adverse effects on a developing teen. For example, youth who are victims of teen dating violence are more likely to experience symptoms of depression and anxiety, engage in unhealthy behaviors, like using tobacco, drugs, and alcohol, exhibit antisocial behaviors, like lying, theft, bullying, or hitting, and think about suicide.

Violence in an adolescent relationship sets the stage for problems in future relationships, including intimate partner violence and sexual violence perpetration and/or victimization throughout life. For example, youth who are victims of dating violence in high school are at higher risk for victimization during college.

In the case of sexual teen dating violence, it can negatively influence the development of healthy sexuality, intimacy, and identity as youth grow into adulthood. These experiences can increase the risk of physical injury, poor academic performance, binge drinking, suicide attempts, unhealthy sexual behaviors, substance abuse, negative body image and self-esteem, and violence in future relationships.

Teen dating violence can be prevented. Prevention is most successful when there is a focus on reducing risk factors as well as fostering protective factors. Teens should also be empowered through family, friends, and others (including role models such as teachers, coaches, mentors, and youth group leaders) to lead healthy lives and establish healthy relationships. It is crucial to create spaces, such as school communities, where the behavioral norms are not tolerant of abuse in dating relationships. The message must be clear that treating people in abusive ways will not be accepted, and policies must enforce this message to keep students safe.

## Prevention Programs

The ultimate goal of education about youth violence is to stop teen dating violence before it begins. During the preteen and teen years, young people are learning the skills they need to form positive, healthy relationships with others. Therefore, it is an ideal time to promote healthy relationships and prevent patterns of teen dating violence that can last into adulthood.

In addition to teaching relationship skills, prevention programs can focus on promoting protective factors—that is, characteristics of a teen's environment that can support healthy development—and positive youth development. These can also be fostered by a teen's home and community. For example, higher levels of bonding to parents and enhanced social skills can protect girls against victimization. Similarly, for boys, high levels of parental bonding are associated with less externalizing behavior, which in turn is associated with less teen dating violence victimization.

Most of the handful of programs that have been empirically investigated are school-based and use a group format. Program length varies from less than a day to more than 20 sessions. A few programs frame the issue using a feminist perspective, while others use a more skills-based and gender-neutral approach. Teen dating violence prevention programs tend to focus on attitudes about violence, gender stereotyping, conflict management, and problem-solving skills. Activities aimed at increasing awareness and dispelling myths about violence in relationships are often included in the curriculum.

## Candela Citations

CC licensed content, Original

- Dating. **Authored by**: Nicole Arduini-Van Hoose. **Provided by**: Hudson Valley Community College. **Retrieved from**: https://courses.lumenlearning.com/ad...hapter/dating/. **License**: CC BY-NC-SA: Attribution-NonCommercial-ShareAlike

CC licensed content, Shared previously

- Preventing Teen Violence. **Provided by**: Centers for Disease Control and Prevention. **Retrieved from**: https://www.cdc.gov/violencepreventi.../fastfact.html. **License**: CC0: No Rights Reserved
- Healthy Dating Relationships in Adolescence. **Provided by**: U.S. Department of Health and Human Services. **Retrieved from**: https://www.hhs.gov/ash/oah/adolesce...ing/index.html. **License**: CC0: No Rights Reserved
- Other Types of Aggressive Behavior, Dating Violence, and Prevention Programs. **Retrieved from**: https://courses.lumenlearning.com/at...tion-programs/. **License**: CC BY: Attribution
- Teen Dating Violence: A closer Look at Adolescent Romantic Relationships. **Authored by**: Carrie Mulford and Peggy C. Giordano. **Provided by**: National Institute of Justice. **Retrieved from**: https://nij.ojp.gov/topics/articles/...ps#citation--1. **License**: CC0: No Rights Reserved

This page titled 11.4: Teen Dating is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 11.4: Teen Dating by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

**clique:** used to describe a group of persons who interact with each other more regularly and intensely than others in the same setting. Cliques are distinguished from “crowds” in that their members interact with one another

**crowds:** large groups of adolescents defined by their shared image and reputation

**homophily:** a tendency of individuals to form links disproportionately with others like themselves

**deviant peer contagion: the** process by which peers reinforce problem behavior by laughing or showing other signs of approval that then increase the likelihood of future problem behavior

**peer pressure:** encouragement to conform to one’s friends or contemporaries in behavior, dress, and attitude; usually considered a negative force, as when adolescent peers encourage one another to defy adult authority

This page titled 11.5: Glossary is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Nicole Arduini-Van Hoose.

- 11.5: Glossary by Nicole Arduini-Van Hoose is licensed CC BY-NC-SA 4.0.

# 12.1: Sexual Development in Adolescence




"Young Teenagers Playing Guitar" by epSos.de is licensed under CC BY 2.0

## Puberty

**Puberty** *is a period of rapid growth and sexual maturation*. These changes begin sometime between eight and fourteen. People assigned female at birth  begin puberty at around ten years of age and people assigned male at birth begin approximately two years later. Pubertal changes take around three to four years to complete. Adolescents experience an overall physical growth spurt.

Typically, the growth spurt during adolescence is followed by the development of sexual maturity. Sexual changes are divided into two categories: Primary sexual characteristics and secondary sexual characteristics. **Primary sexual characteristics** *are changes in the reproductive organs*. For some, this includes growth of the testes, penis, scrotum, and **spermarche** *or first ejaculation of semen*. This occurs between 11 and 15 years of age. For others, primary characteristics include growth of the uterus and **menarche** *or the first menstrual period*. The female gametes, which are stored in the ovaries, are present at birth, but are immature. Each ovary contains about 400,000 gametes, but only 500 will become mature eggs (Crooks & Baur, 2007). Beginning at puberty, one ovum ripens and is released about every 28 days during the menstrual cycle. Higher percentage of body fat can bring menstruation at younger ages.

**Secondary sexual characteristics** *are visible physical changes not directly linked to reproduction but signal sexual maturity*. For males this includes broader shoulders and a lower voice as the larynx grows. Hair becomes coarser and darker, and hair growth occurs in the pubic area, under the arms and on the face. For females, breast development occurs around age 10, although full development takes several years. Hips broaden, and pubic and underarm hair develops and also becomes darker and coarser.

## Adolescent Sexual Activity

By about age ten or eleven, most children, regardless of sexual orientation, experience increased sexual attraction to others that affects social life, both in school and out (McClintock & Herdt, 1996). By the end of high school, more than half of boys and girls report having experienced sexual intercourse at least once, though it is hard to be certain of the proportion because of the sensitivity and privacy of the information (Center for Disease Control, 2004; Rosenbaum, 2006). Researchers identified many biopsychosocial influences that linked to early timing of **sexual debut** (first sexual intercourse). Among them are early puberty, anxious attachment style, sensation-seeking personality and positive beliefs and attitudes towards sex. In addition, several studies have found that there is a link between delayed sexual activity and receiving more parental support and parental supervision (Buhi and Goodson, 2007).

## Masturbation

Masturbation is the most common sexual behavior among adolescents. Among American 14-17-year-olds, those reporting masturbation in the past year also report higher levels of several forms of partnered sex, including having given or received oral sex, penile-vaginal intercourse, and penile-anal intercourse (Robbins et al., 2011). Gender differences are evident in that women's masturbation prevalence increased from 34% among those reporting penile-vaginal sex occurring less frequently than four times in the last four weeks to 72% among those women reporting at least 16 occasions. In contrast, the prevalence of masturbation was most frequent among men reporting fewer than four occasions of sex in the last four weeks (Gerressu et al., 2008).

Masturbation can provide a means of gaining familiarity and comfort with one's sexual responses and genitals (Hogarth & Ingham, 2009). Masturbation and non-coital orgasm among young women is associated with higher levels of sexual self-awareness, greater efficacy achieving pleasure, and more resistance to gendered double standards (Horne & Zimmer-Gembeck, 2005). Young men—but not young women—who report masturbation in the past year are substantially more likely to report condom use with penile-vaginal intercourse than young men who do not report masturbating (Robbins et al., 2011).

## Sexual Identity

According to Carroll (2016), by age 14 most adolescents become interested in intimate relationships, and they may begin sexual experimentation. Many adolescents feel pressure to express interest in opposite-sex relationships, even if they are not ready to do so. This pressure can be especially stressful for those adolescents who are gay, lesbian, bisexual or questioning their sexual identity. Many non-heterosexual adolescents struggle with negative peer and family reactions during their exploration. A lack of parental acceptance can adversely affect LGBTQ+ adolescents' emerging sexual identity and may result in feelings of depression. In contrast, adolescents whose families support their sexual identity have better health outcomes.




"House of Daze" by Livdrag is licensed under CC BY-SA 4.0

## Adolescent Pregnancy

In 2018 females aged 15-19 years experienced a birth rate (live birth) of 17.4 per 1,000 women. The birth rate for teenagers has declined by 58% since 2007 and 72% since 1991, the most recent peak (Hamilton, Joyce, Martin, & Osterman, 2019). It appears that adolescents seem to be less sexually active than in previous years, and those who are sexually active seem to be using birth control (CDC, 2016).

After the child is born life can be difficult for a teenage mother. Only 40% of teenagers who have children before age 18 graduate from high school. Without a high school degree her job prospects are limited, and economic independence is difficult. Teen mothers are more likely to live in poverty, and more than 75% of all unmarried teen mothers live in poverty within 5 years of the birth of their first child. Approximately, 64% of children born to an unmarried teenage high-school dropout live in poverty.

Further, a child born to a teenage mother is 50% more likely to repeat a grade in school and is more likely to perform poorly on standardized tests and drop out before finishing high school (March of Dimes, 2012).

Research analyzing the age that men father their first child and how far they complete their education have been summarized by the Pew Research Center (2015) and reflect the research for females. Among dads ages 22 to 44, 70% of those with less than a high school diploma say they fathered their first child before the age of 25. In comparison, less than half (45%) of fathers with some college experience became dads by that age. Additionally, becoming a young father occurs much less for those with a bachelor's degree or higher as just 14% had their first child prior to age 25. Like men, women with more education are likely to be older when they become mothers.

## Romantic Relationships

Adolescence is the developmental period during which romantic relationships typically first emerge. By the end of adolescence, most American teens have had at least one romantic relationship (Dolgin, 2011). Dating serves many purposes for teens, including having fun, companionship, status, socialization, sexual experimentation, intimacy, and partner selection for those in late adolescence (Dolgin, 2011).



Image by Courtney Carmody is licensed under CC BY-SA 2.0

There are several stages in the dating process beginning with engaging in mixed-sex group activities in early adolescence for heterosexual teens (Dolgin, 2011). The same-sex peer groups that were common during childhood expand into mixed-sex peer groups that are more characteristic of adolescence. Romantic relationships often form in the context of these mixed-sex peer groups (Connolly, Furman, & Konarski, 2000). Interacting in mixed-sex groups is easier for teens as they are among a supportive group of friends, can observe others interacting, and are kept safe from a too early intimate relationship. By middle adolescence teens are engaging in brief, casual dating or in group dating with established couples (Dolgin, 2011). Then in late adolescence dating involves exclusive, intense relationships. These relationships tend to be long-lasting and continue for a year or longer, however, they may also interfere with friendships.

Although romantic relationships during adolescence are often short-lived rather than long-term committed partnerships, their importance should not be minimized. Adolescents spend a great deal of time focused on romantic relationships, and their positive and negative emotions are more tied to romantic relationships, or lack thereof, than to friendships, family relationships, or school (Furman & Shaffer, 2003). Romantic relationships contribute to adolescents' identity formation, changes in family and peer relationships, and emotional and behavioral adjustment.

Furthermore, romantic relationships are centrally connected to adolescents' emerging sexuality. Parents, policymakers, and researchers have devoted a great deal of attention to adolescents' sexuality, in large part because of concerns related to sexual intercourse, contraception, and preventing teen pregnancies. However, sexuality involves more than this narrow focus. For example, adolescence is often when individuals who are lesbian, gay, bisexual, or transgender come to perceive themselves as such (Russell, Clarke, & Clary, 2009). Thus, romantic relationships are a domain in which adolescents experiment with new

behaviors and identities.

However, a negative dating relationship can adversely affect an adolescent's development. Soller (2014) explored the link between relationship inauthenticity and mental health. **Relationship in authenticity** *refers to an incongruence between thoughts/feelings and actions within a relationship*. Desires to gain partner approval and demands in the relationship may negatively affect an adolescent's sense of authenticity. Soller found that relationship inauthenticity was positively correlated with poor mental health, including depression, suicidal ideation and suicide attempts, especially for females.

## Sex Education

Many adolescents begin their sexual explorations with a lack of knowledge about sex and human anatomy. Many parents would like their kids to know about sex, but seldom talk to their kids about sex and expect the schools to provide sex education. Unfortunately, many school-based sex education is inadequate and, in some cases, provides incorrect information. With comprehensive school and community based sex-ed programs, we can prevent unintended teen pregnancies and to keep back the spread of STI among young people (What do I need to know about STDs?, 2022).

This page titled 12.1: Sexual Development in Adolescence is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Susan Rahman with Nathan Bowman, Dahmitra Jackson, Lushtak, Remi Newman, and Prateek Sunder.

# 12.2: Finding Love, Intimacy, and Romance in Early Adulthood

**Learning Objectives**

By the end of this section, you will be able to:

- Explain the relationship between the development of identity and intimacy
- Describe the characteristics of intimate relationships in early adulthood
- Describe the search for, establishment of, and maintenance of romantic relationships
- List the considerations young adults face in starting a family

Sara stares at her phone as she tries to set up her profile on a new dating app. No wonder she is having so much trouble finding love; she cannot even decide what she is looking for. She knows she wants a partner who will be there for her when she needs support. Someone she can talk to and trust. But also someone funny she can hang with, with whom she has things in common. And at the same time, Sara is looking for a person who appreciates her individuality and independence, who can help her achieve her goals and dreams without being suffocating or controlling. She wants to be connected to her partner but independent. Similar but not the same. Is that too much to ask?

According to Erikson's theory of psychosocial development, adolescents and emerging adults should prioritize self-focused identity development to prepare for the other-focused stages of adulthood, starting with the challenge of intimacy versus isolation. As Erikson put it, "the condition of twoness is that one must first become oneself" (Erikson, 1982, p. 101). In this section we explore how modern young adults navigate Erikson's developmental challenge of "twoness."

## The Search for Intimacy

Recall that Erikson described intimacy as the young adult challenge of establishing close and trusting relationships with others. Researchers like Carol Gilligan, who noted that Erikson did not take into account women's experiences, have argued that Erikson's proposed developmental sequence of identity first, intimacy second is outdated and gender-biased (Gilligan, 1982). Given that emerging adulthood is both longer and more flexible in the 21st century, we may ask whether identity and intimacy can develop together, or even whether women, who exhibit intimate mutual sharing earlier within their adolescent friendships than do men, might develop them in the reverse order (Rudolph & Dodson, 2022). However, research has not consistently substantiated these criticisms. Longitudinal and cross-sectional studies have found that identity development in adolescence and emerging adulthood predicts intimacy and romantic partnership quality in early adulthood for both men and women, though women do report higher levels of intimacy (Bakken & Huber, 2005; Montgomery, 2005; Kerpelman et al., 2008; Beyers & Seiffge-Krenke, 2010; Kroger, 2015; Czyżowska et al., 2019).

According to intimacy researcher Ruth Sharabany (1994), high-quality intimate relationships are characterized by frankness and spontaneity, sensitivity and knowing, exclusivity, giving and helping, imposing and taking, common activity, trust and loyalty, and secure attachment (Figure 12.24). While the security provided by attachment was originally studied as an aspect of infant-caregiver relationships, Hazan & Shafer (1987) proposed that it continues to have value throughout the lifespan and in other close relationships, including adult romantic relationships. Indeed, secure adult attachment style is predictive of improved conflict resolution, mutual caring and trust, emotional closeness, and relationship satisfaction within young adult romantic relationships. (Haydon et al., 2012; Waters et al., 2018).



Figure 12.24 Romantic relationships in early adulthood can provide a context for close intimate sharing.

Given the effort of forming truly intimate romantic relationships and their apparent psychological depth, young adults meeting potential mates may find themselves asking, “Can I be committed to this person? Are we compatible? Can I tolerate [their] shortcomings, values, and lifestyle?” (Korobov & Thorne, 2006, p. 28). These are complex questions with often uncertain answers. It is perhaps not surprising, then, that some young adults may choose to engage in no-strings-attached sexual relationships until they can feel more confident and certain about committing to an intimate romantic relationship with a person.

### Link to Learning

People with disabilities have the same variety of sexual and romantic feelings as everyone else, but face additional challenges and questions related to their differing abilities. Watch this video about the value of an inclusive approach to sexual and romantic relationships to learn more.

The prevalence of casual sex (sex that occurs outside a committed relationship) is about 10-15 percent lower than it was in 2007, with 22 percent of women and 24 percent of men between the ages 18 and 23 reporting they experienced casual sex within the last month (South & Lei, 2021). Casual sex can occur in a number of contexts, including “hook-ups” or “one-night-stands,” but the friends-with-benefits relationship has received increasing attention in both pop culture and research for its potential to evolve into something more (Bisson & Levine, 2009; Mongeau et al., 2013; Jovanovic & Williams, 2018; Machia et al, 2020).

A friends-with-benefits relationship (FWBR) occurs when two people in a nonsexual relationship begin having sex, without committing to becoming a romantic couple. Although the relationship includes a certain level of closeness based on friendship and introduces sexual intimacy, the participants do not expect the same level of attachment or commitment required of a truly intimate romantic relationship (Machia et al., 2020). While a FWBR can provide a safe, familiar, and convenient context to explore sexual or romantic feelings with another person, research indicates women are more likely than men to view it as temporary, with greater expectations that it will eventually evolve into a romantic relationship or revert to a nonsexual friendship. In contrast, most men expected the relationship to remain a FWBR (Machia et al., 2020). The participants in heterosexual FWBR often do not realize or communicate these differing expectations (Bisson & Levine, 2009), which may explain why most result in a complete end to a relationship of any kind --friendship or romantic-- and only 15 percent evolve into romantic relationships (Machia et al., 2020).

### It Depends: Breaking Up Is Hard to Do

Researchers at the University of Tennessee, Knoxville wanted to know why couples in emerging adulthood break up (Norona et al., 2017). They recruited a sample of young adults ages 18-25 who had recently initiated a break-up with their romantic partner and asked them to respond to the following prompt:

> Breaking up with a boyfriend or girlfriend is something that is very common. Have you been the one to initiate a breakup within the last 6 months? In other words, have you been the one to decide to break up with your boyfriend or girlfriend in the last 6 months (this includes breakups that you would consider 'mutual')?
>
> (If yes:) Tell us your story of the breakup. Describe what led you to break up with your last boyfriend or girlfriend. Please include enough detail to help another person understand how you thought and felt.
>
> The responses reflected the convergence of two themes of emerging adulthood: connection and independence. The most common reason young adults gave for ending relationships was that their romantic partner did not meet their desire for connection, such as with intimacy, shared time, or sexual satisfaction. These responses were consistent with Erikson's psychosocial challenge of establishing intimacy in early adulthood.
>
> On the other hand, the second most common reason given was the partner's failure to support the respondent's need for independence, such as maintaining their individual identity, meeting life goals, and preserving personal space and financial independence. These results highlighted the challenge for young adults of reconciling their need to develop the self with their desire to form connections with others.

## Romantic Relationships

While Erikson and many others assert that the willingness and capacity for intimacy and romantic partnership are developmental priorities of early adulthood, we should not take this to mean that being single is developmentally problematic. While most people experience several committed romantic relationships during early adulthood, at any given time about half of young adults are single (Rauer et al., 2013; Cox, 2023). Those in committed romantic relationships do generally report higher life satisfaction than their single peers, but part of this satisfaction may come from recognizing that they are meeting social-clock expectations for romantic involvement. This comparison to the social clock may be complicated by the developmental timing of sexual identity, particularly for those who are LGBTQ+. Adults who identified as LGBTQ+ during adolescence do not differ from heterosexual youth in the average timing of their first romantic relationship; however, those who do not identify as a sexual minority until adulthood do experience a delay in timing compared to their straight peers (Mernitz et al., 2023).

Young adults who for various reasons do not want to be in a serious relationship find that "singlehood is a source of happiness, well-being, and positive adjustment." (Watkins et al., 2024). Many (34 percent of men and 43 percent of women) are not interested in dating (Cox, 2023). And given that our developmental pathways become more varied with age, it is not reasonable to expect all adults of any age to follow the same path. Both single and partnered young adults who are satisfied with their current relationship status have above-average self-esteem, and age of first romantic relationship is unrelated to self-esteem (Gonzalez Avilés et al., 2023).

For those looking for a partner, about one-third say they are having trouble finding someone (Cox, 2023). People generally gravitate towards those who are similar to them in things like values, personality features, interests, and in romantic relationships, the preference for those who are similar is called homogamy. Beyond similar values, young adults also prioritize traits such as faithfulness, intelligence, sense of humor, and physical attractiveness in romantic mates, although men place higher value on physical attractiveness than women (Eastwick et al., 2014; Bleske-Rechek & Ryan, 2015).

Settings where you might regularly see someone and have something in common were identified as the most promising in-person environments for finding long-term love, with classes, organizations such as volunteer groups, religious services, and the workplace rated highest. For short-term hookups, young adults identified more temporary social settings, with bars, clubs, and parties rated the most likely environments (Jonason et al., 2015). Just over half of all young adults say they have also used dating apps, but more than half of women report having negative experiences, including being overwhelmed by the number of messages they get and not feeling safe, though perceived safety is higher for young adults than older adults. Only 20 percent of young adults say they found their current romantic partner online, but those with an LGBTQ+ identity are almost three times more likely than straight young adults to have done so (Vogels & McClain, 2023; Cox, 2023).

Regardless of how they meet, most young adults use technology such as texting and social media to maintain their relationships (Basting et al., 2023). Although these avenues can increase positive relationship behaviors such as communication, connection, and sharing, they can also lead to negative outcomes, such as miscommunication, monitoring, and controlling (Vaterlaus et al., 2018; Basting et al., 2023). Interviews with adults ages 18 and 25 found that romantic partners who engage in "excessive contact" or expect "constant communication" can interfere with and distract from daily tasks. These problems were often accompanied by aggressive responses to perceived lapses in communication, as well as controlling and stalking the partner's social media use

(Basting et al., 2023).

**Link to Learning**

Looking for advice on how to best navigate the role of technology in your close relationships? Read these tips for achieving a healthy balance of technology in your relationships to learn more.

The most fulfilling romantic relationships for young adults, regardless of their sexual orientation, are characterized by intimacy, passion, and commitment (Bauermeister et al., 2011). Such relationships can vary based on the extent of their positive qualities (such as support, disclosure, and affection), negative qualities (such as control and criticism), duration, shared resources, and commitment. Based on these dimensions, Beckmeyer and Jamison (2021) identified five romantic relationship typologies among young adults. Many were "happily consolidated" couples (31 percent), in committed and successful long-term relationships. However, 23 percent were in long-term "stuck relationships." Despite sharing resources such as by cohabitating, these couples reported more negative than positive qualities in their situation and had a pessimistic outlook on their future. Twenty percent of young adults were experiencing "happily independent" relationships characterized by many positive qualities but had not been together long enough to consolidate resources, such as a shared home. They usually had an optimistic outlook on their future (Figure 12.25).



Figure 12.25 Most young adults couples are happy and optimistic about their future.

"Exploratory relationships" described 18 percent of couples, who were usually at the beginning of their relationship and casually dating. The least common relationships consisted of "high intensity" couples. Despite having a lot of consolidated resources and high commitment to each other, high-intensity couples experience both highs and lows as they cycle unpredictably between positive behaviors like warmth and support and negative behaviors like criticism and antagonism. Yet they reported the highest life satisfaction among all five typologies, as well as the highest level of depressive symptoms and heavy drinking. This research highlights the wide variation in romantic experiences and trajectories young adults experience as they navigate their intimate relationships.

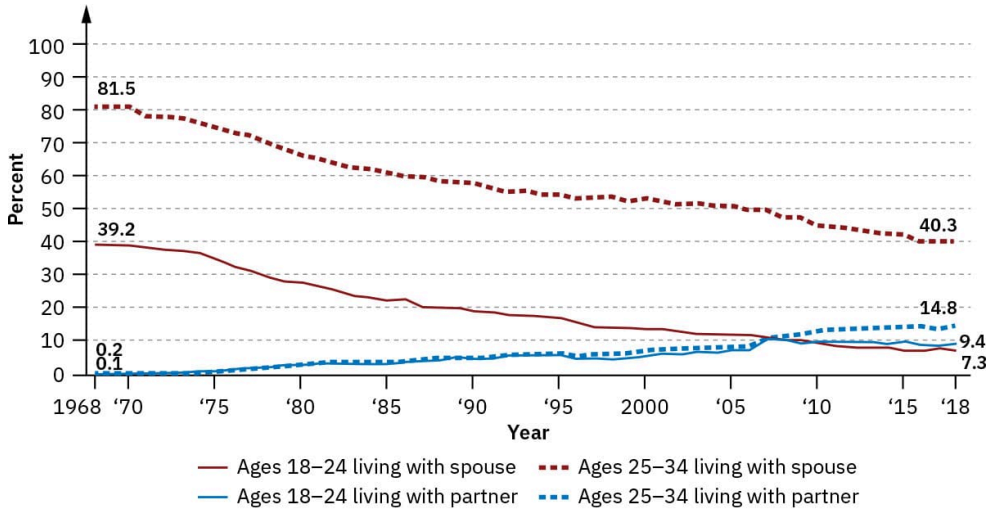
## Forming a Family

Young adults also begin to form or extend their families in different ways, such as by cohabitating, getting married, and becoming parents.

### Cohabitation

By the end of young adulthood in their late twenties, one-quarter of all unmarried U.S.? adults are cohabitating with a romantic partner, and the likelihood of progressing to this arrangement does not differ by sexual orientation (Julian, 2022; Orth &

Rosenfeld, 2018). More young U.S. adults today are cohabiting with a romantic partner than with a spouse (Figure 12.26) (Gurrentz, 2018). Two reasons for this difference are that young adults are entering their first marriage at a later age (28 for women and 30 for men), and that the overall marriage rate is decreasing (Brown & Sheffield, 2020). As a result, most people now are accepting of living with a romantic partner outside marriage, especially young adults.




Source: Gurrentz, B. (2018). Living with an unmarried partner now common for young adults. U.S. Census Bureau.

Figure 12.26 As the median age of first marriage increases, the percentage of unmarried young adults cohabitating with a romantic partner is increasing, while the percent who are living with a spouse is decreasing. Source: Gurrentz, 2018.

Like married couples, most cohabitating couples cite love, companionship, and commitment as the primary reasons for living with one another. However, those who cohabitate are more likely than married couples to also cite financial reasons and convenience as motivators. Cohabitation is also seen by some as a way to "test the relationship" before marriage. And while most unmarried couples who are living together trust one another to be faithful and truthful, most do not trust their partner to handle money responsibly.

## Marriage

Married and unmarried couple report similar levels of satisfaction with their sex lives, but married couples are more satisfied with each other's communication and approach to parenting, and with their mutual work-life balance and division of household chores. Married people are also more likely to say they are closer to their partner than to any other adult (Menasce Horowitz et al., 2019). However, these responses do not reflect the duration of the relationship. The average length of cohabitation for unmarried couples is only 18 months, compared to the average length of first marriages, which is 8 years (VanOrman, 2020; Taibbi, 2023). The stability of cohabitating partners is the same for same-sex and heterosexual couples (Ketcham & Bennett, 2019).

By the end of young adulthood, only 32 percent of women and 23 percent of men are married (Brown & Manning, 2021) (Figure 12.27). Young adult attitudes and expectations regarding marriage vary geographically. Those living in rural areas are more likely to get married earlier and to view marriage as the natural and expected next step in a long-term relationship. Urban young adults are more likely to view marriage as a step that must be planned and delayed until other adult tasks, such as higher education, career development, and independent living can be completed (Swartz et al., 2017).

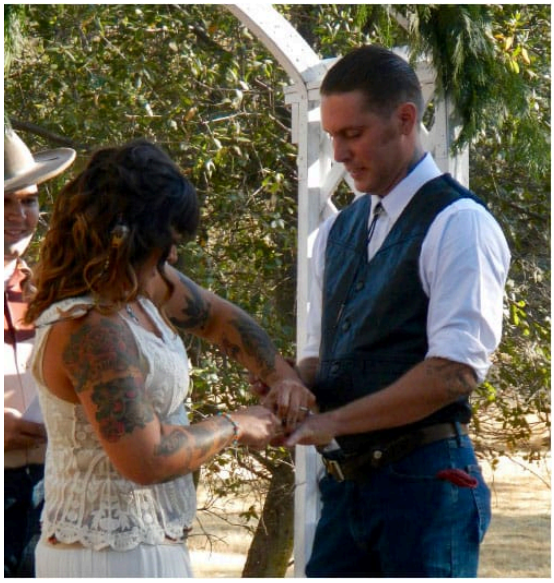


Figure 12.27 By the end of young adulthood, only 32 percent of women and 23 percent of men are married.

## Parenthood

Only 13 percent of U.S. adults are parents by age 24, and 45 percent by age 29 (Martinez & Daniels, 2023). Like other developmental transitions, the experience of becoming a parent in young adulthood depends somewhat on contextual factors that influence a young person's perceived social clock. The median age of first birth for U.S. women is now 30 (Morse, 2022), but it does vary by ethnicity and education level (Shaeffer & Aragão, 2023; Martinez & Daniels, 2023). Black young adults and those with low income are more likely to view the transition to parenthood as a sign of adult maturity and a way to develop a sense of purpose (Edin & Kefalas, 2011; Rackin & Gibson-Davis, 2017).

Adjusting to parenthood can be difficult, however. It can reduce relationship satisfaction as well as young adults' self-control and emotional regulation, which is associated with an increase in instances of hostility and disagreement between new parents (van Scheppingen et al., 2018; Grolleman et al., 2022; Bogdan et al., 2022). About half of young adult parents experience stress over balancing their roles at work and within the family, and women report more stress than men (Allen et al., 2020), likely due to the heightened role expectations of new motherhood. All relationships, including those between parents, have good days and bad days, and the self-esteem of new parents has been shown to vary with changes in their daily interactions (Figure 12.28). On good days when new parents are more satisfied with their relationship and the responsiveness of their partner, their self-esteem rises. On bad days, it drops (Willms et al., 2023).



Figure 12.28 Thirteen percent of U.S. adults are parents by age 24, and 45 percent by age 29 (Martinez & Daniels, 2023). The everyday reality of parenting has ups and downs and can be both challenging and rewarding.

While it can be a mixed experience, most young adults say they do eventually want to become parents. However, 16 percent say they do not want or expect to have children. For some (56 percent) this is a personal preference, while others cite concerns such as medical and financial reasons or the state of the world and the environment (Brown, 2021; Brenan, 2023).

## References


Allen, A. L., Manning, W. D., Longmore, M. A., & Giordano, P. C. (2020). Young adult parents' work–family conflict: The roles of parenting stress and parenting conflict. In S. L. Blair, & R. P. Costa (Eds.), Transitions into parenthood: Examining the complexities of childrearing, Volume 15 (pp. 1–16). Emerald Publishing. http://dx.doi.org/10.1108/S1530-353520190000015001

Bakken, L., & Huber, T. (2005). Ego development at the crossroads: Identity and intimacy among Black men and White women in cross-racial relationships. *Journal of Adult Development, 12*(1), 63–73. http://dx.doi.org/10.1007/s10804-005-1322-1

Basting, E. J., Munshi, I., Harangozo, J., Dongarra, M. S., & Goncy, E. A. (2023). When does technology use within dating relationships cross the line? A thematic analysis of semistructured interviews with young adults. Psychology of Violence, 13(6), 488–496. doi.org/10.1037/vio0000479

Bauermeister, J. A., Johns M. M., Pingel E., Eisenberg A., Santana, M. L., & Zimmerman M. (2011). Measuring love: Sexual minority male youths' ideal romantic characteristics. *Journal of LGBT Issues in Counseling*, 5(2), 102–121. doi.org/10.1080/15538605.2011.574573

Beckmeyer, J. J. & Jamison, T. B. (2021). Identifying a typology of emerging adult romantic relationships: Implications for relationship education. *Family Relations, 70*(1), 305–318. doi.org/10.1111/fare.12464

Beyers, W., & Seiffge-Krenke, I. (2010). Does identity precede intimacy? Testing Erikson's theory on romantic development in emerging adults of the 21st century. *Journal of Adolescent Research, 25*(3), 387–415. doi.org/10.1177/0743558410361370

Bisson, M. A., & Levine, T. R. (2009). Negotiating a friend with benefits relationship. *Archives of Sexual Behavior*, *38*(1), 66–73. https://doi.org/10.1007/s10508-007-9211-2

Bleske-Rechek, A., & Ryan, D. E. (2015). Continuity and change in emerging adults' mate preferences and mating orientations. Personality and Individual Differences, 72, 90–95. https://doi.org/10.1016/j.paid.2014.08.033

Bogdan, I., Turliuc, M. N., & Candel, O. S. (2022). Transition to parenthood and marital satisfaction: A meta-analysis. *Frontiers in Psychology*, *13*, 901362. https://doi.org/10.3389/fpsyg.2022.901362

Brenan, M. (2023, September 25). *Americans' preference for larger families highest since 1971*. Gallup News. https://news.gallup.com/poll/511238/...ant%20children

Brown, A. (2021, November 19). *Growing share of childless adults in U.S. don't expect to ever have children*. Pew Research Center. https://www.pewresearch.org/short-re...have-children/

Brown, A. R. & Manning, W. D. (2021). Relationship status trends according to age and gender, 2019–2021. *Family Profiles, FP-21-25*. Bowling Green State University: National Center for Family & Marriage Research. https://doi.org/10.25035/ncfmr/fp-21-25

Brown, P. T., & Sheffield, R. (2020). U.S. marriage rates hit new recorded low. Joint Economic Committee of the United States Congress. https://www.jec.senate.gov/public/in...rate-blog-test

Cox, D. A. (2023, February 9). *From swiping to sexting: The enduring gender divide in American dating and relationships*. Survey Center on American Life. https://www.americansurveycenter.org...relationships/

Czyżowska, D., Gurba, E., Czyżowska, N., Kalus, A., Sitnik-Warchulska, K., & Izydorczyk, B. (2019). Selected predictors of the sense of intimacy in relationships of young adults. *International Journal of Environmental Research and Public Health*, *16*(22), 4447. https://doi.org/10.3390/ijerph16224447

Eastwick, P. W., Luchies, L. B., Finkel, E. J., & Hunt, L. L. (2014). The predictive validity of ideal partner preferences: A review and meta-analysis. Psychological Bulletin, 140(3), 623–665. doi.org/10.1037/a0032432

Edin, K., & Kefalas, M. (2011). *Promises I can keep: Why poor women put motherhood before marriage*. University of California Press. www.jstor.org/stable/10.1525/j.ctt1pnmxt

Erikson, E. H. (1982). *The life cycle completed: A review*. Norton.

Gilligan, C. (1982). *In a different voice*. Harvard University Press. psycnet.apa.org/record/1993-98550-000

Gonzalez Avilés, T., Borschel, E., Pusch, S., & Neyer, F. J. (2023). Not all flowers bloom in April: Self-esteem development surrounding the first romantic relationship during adolescence and emerging adulthood. European Journal of Personality, 37(6), 633–648. doi.org/10.1177/08902070221124723

Grolleman, J.F., Gravesteijn, C. & Hoffenaar, P.J. (2022). Trajectories of change in parental self-esteem and emotion regulation from pregnancy until 4 years postpartum. *Journal of Child & Family Studies, 32*, 1088–1101. https://doi.org/10.1007/s10826-022-02306-0

Gurrentz, B. (2018, November 15). *Living with an unmarried partner now common for young adults*. U.S. Census Bureau. https://www.census.gov/library/stori...ng-adults.html

Haydon, K. C., Collins, W. A., Salvatore, J. E., Simpson, J. A., & Roisman, G. I. (2012). Shared and distinctive origins and correlates of adult attachment representations: The developmental organization of romantic functioning. Child Development, 83(5), 1689–1702. doi.org/10.1111/j.1467-8624.2012.01801.x

Hazan, C., Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of*

*Personality and Social Psychology, 52*(3), 511–524. doi.org/10.1037/0022-3514.52.3.511

Jonason, P. K., Foster, J. D., McCain, J., & Campbell, W. K. (2015). Where birds flock to get together: The who, what, where, and why of mate searching. *Personality and Individual Differences, 80*, 76–84, https://doi.org/10.1016/j.paid.2015.02.018

Jovanovic, J., & Williams, J. C. (2018). Gender, sexual agency, and friends with benefits relationships. *Sexuality & Culture: An Interdisciplinary Quarterly*, *22*(2), 555–576. https://doi.org/10.1007/s12119-017-9483-1

Julian, C. A. (2022). Cohabitation among young adults. *Family Profile, FP-22-29*. Bowling Green State University: National Center for Family & Marriage Research. https://doi.org/10.25035/ncfmr/fp-22-29

Kerpelman, J. L., Pittman, J. F., & Adler-Baeder, F. (2008). Identity as a moderator of intervention-related change: Identity style and adolescents' response to relationships education. *Identity, 8*(2), 151–171. doi.org/10.1080/15283480801940073

Ketcham, E., & Bennett, N. G. (2019). Comparative couple stability: Same-sex and male-female unions in the United States. *Socius, 5*. doi.org/10.1177/2378023119829312

Korobov, N., & Thorne, A. (2006). Intimacy and distancing: Young men's conversations about romantic relationships. *Journal of Adolescent Research, 21*(1), 27–55. doi.org/10.1177/0743558405284035

Kroger, J. (2015). Identity development through adulthood: The move toward "wholeness." In K. C. McLean & M. Syed (Eds.), *The Oxford handbook of identity development* (pp. 65–80). Oxford University Press. doi.org/10.1093/oxfordhb/978...936564.013.004

Machia, L. V., Proulx, M. L., Ioerger, M., & Lehmiller, J. J. (2020). A longitudinal study of friends with benefits relationships. Personal Relationships, 27(1), 47–60. doi.org/10.1111/pere.12307

Martinez, G. M., & Daniels, K. (2023). Fertility of men and women aged 15–49 in the United States: National survey of family growth 2015–2019 (National Health Statistics Report No. 179). Centers for Disease Control and Prevention, U.S. Department of Health and Human Services. https://www.cdc.gov/nchs//data/nhsr/nhsr179.pdf

Menasce Horowitz, J., Graf, N., & Livingston, G. (2019, November 6). Marriage and cohabitation in the U.S. Pew Research Center. https://www.pewresearch.org/social-t...on-in-the-u-s/

Mernitz, S., Hsu, J., & Bishop, M. D. (2023). Timing to a first relationship among youth: Variability by sexual orientation development. *Journal of Social and Personal Relationships, 40*(11), 3703–3722. doi.org/10.1177/02654075231185763

Mongeau, P. A., Knight, K., Williams, J., Eden, J., & Shaw, C. (2013). Identifying and explicating variation among friends with benefits relationships. *Journal of Sex Research, 50*(1), 37–47. doi.org/10.1080/00224499.2011.623797

Montgomery, M. J. (2005). Psychosocial intimacy and identity: From early adolescence to emerging adulthood. *Journal of Adolescent Research, 20*(3), 346–374. doi.org/10.1177/0743558404273118

Morse, A. (2022, April 6). *Stable fertility rates 1990–2019 mask distinct variations by age*. U.S. Census Bureau. https://www.census.gov/library/stori...ce=govdelivery

Norona, J. C., Olmstead, S. B., & Welsh, D. P. (2017). Breaking up in emerging adulthood: A developmental perspective of relationship dissolution. *Emerging Adulthood, 5*(2), 116–127. doi.org/10.1177/2167696816658585

Orth, T., & Rosenfeld, M. (2018). Commitment timing in same-sex and different-sex relationships. *Population Review, 57*(1). https://doi.org/10.1353/prv.2018.0000

Rackin, H. M., & Gibson-Davis, C. M. (2017). Low-income childless young adults' marriage and fertility frameworks. *Journal of Marriage and the Family*, *79*(4), 1096–1110. doi.org/10.1111/jomf.12405

Rauer, A. J., Pettit, G. S., Lansford, J. E., Bates, J. E., & Dodge, K. A. (2013). Romantic relationship patterns in young adulthood and their developmental antecedents. Developmental Psychology, 49(11), 2159–2171. doi.org/10.1037/a0031845

Rudolph, K. D., & Dodson, J. F. (2022). Gender differences in friendship values: Intensification at adolescence. *The Journal of Early Adolescence, 42*(4), 586–607. doi.org/10.1177/02724316211051948

Shaeffer, K., & Aragão, C. (2023, May 9). *Key facts about moms in the U.S.* Pew Research Center. https://www.pewresearch.org/short-re...d%20Prevention

Sharabany, R. (1994). Intimate Friendship Scale: Conceptual underpinnings, psychometric properties and construct validity. *Journal of Social and Personal Relationships, 11*(3), 449–469. doi.org/10.1177/0265407594113010

South, S. J., & Lei, L. (2021). Why are fewer young adults having casual sex? *Socius*, *7*. doi.org/10.1177/23780231211996854

Swartz et al., 2017

Taibbi, R. (2023, April 8). *Why so many marriages end after eight years*. Psychology Today. https://www.psychologytoday.com/us/b...-after-8-years

VanOrman, A., & Jacobsen, L.A. (2020, February 12). *U.S. household composition shifts as the population grows older; More young*

*adults live with parents*. Population Reference Bureau.

https://www.prb.org/resources/u-s-ho...he-population-

grows-older-more-young-adults-live-with-parents/

van Scheppingen, M. A., Denissen, J. J. A., & Bleidorn, W. (2018). Stability and change in self-control during the transition to parenthood. European Journal of Personality, 32(6), 690–704. doi.org/10.1002/per.2172

Vaterlaus, J. M., Tulane, S., Porter, B. D., & Beckert, T. E. (2018). The perceived influence of media and technology on adolescent romantic relationships. Journal of Adolescent Research, 33(6), 651–671. doi.org/10.1177/0743558417712611

Vogels, E.A., & McClain, C. (2023, February 2). Key findings about online dating in the U.S. Pew Research Center. https://www.pewresearch.org/short-re...ng-in-the-u-s/

Waters, T. E. A., Raby, K. L., Ruiz, S. K., Martin, J., & Roisman, G. I. (2018). Adult attachment representations and the quality of romantic and parent–child relationships: An examination of the contributions of coherence of discourse and secure base script knowledge. Developmental Psychology, 54(12), 2371–2381. doi.org/10.1037/dev0000607

Watkins, N. K., Beckmeyer, J. J., & Jamison, T. B. (2024). Exploring the associations between being single, romantic importance, and positive well-being in young adulthood. *Family Relations*, *73*(1), 484–501. doi.org/10.1111/fare.12981

Willms, J., Weber, E., van Scheppingen, M., & Bleidorn, W. (2023). Daily self-esteem and relationship quality in first-time parents. *Journal of Research in Personality, 105,* https://doi.org/10.1016/j.jrp.2023.104395

This page titled 12.2: Finding Love, Intimacy, and Romance in Early Adulthood is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

- 12.5: Finding Love, Intimacy, and Romance in Early Adulthood by OpenStax is licensed CC BY 4.0. Original source: https://openstax.org/details/books/lifespan-development.

# 13: EMERGING AND EARLY ADULTHOOD


13.1: Emerging Adulthood

13.2: When Does Adulthood Begin?

13.3: Physical Development in Emerging and Established Adulthood

13.4: A Healthy but Risky Time

13.5: Gender

13.6: Sexuality

13.7: Cognitive Development in Emerging and Early Adulthood

13.8: Education and Career

13.9: Psychosocial Development in Emerging and Early Adulthood

13.10: Attachment in Young Adulthood

13.11: Relationships and Intimacy

13.12: Emerging and Established Adult Lifestyles

13.13: Intimate Partner Abuse

13.14: Parenthood

13.C: COVID-19 Impact on Emerging and Established Adulthood

13.R: Emerging and Early Adulthood (References)



This page titled 13: Emerging and Early Adulthood is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Martha Lally & Suzanne Valentine-French via source content that was edited to the style and standards of the LibreTexts platform.

- 7: Emerging and Early Adulthood by Martha Lally & Suzanne Valentine-French is licensed CC BY-NC-SA 4.0. Original source: http://dept.clcillinois.edu/psy/LifespanDevelopment.pdf.

# 13.1: Emerging Adulthood

**Early adulthood** *spans from approximately 18 (the end of adolescence) until 45 (beginning of middle adulthood).* More recently, developmentalists have divided this age period into two separate stages: emerging adulthood (ages 18-29), followed by established adulthood (ages 3045) (Mehta et al., 2020). Although these age periods differ in their physical, cognitive, and social development, overall the age period from 18 to 45 is a time of peak physical capabilities and the emergence of more mature cognitive development, financial independence, and intimate relationships.

**Learning Objectives: Emerging and Established Adulthood**

- Explain emerging and established adulthood
- Explain how emerging adulthood differs from adolescence and established adulthood
- Describe economic and cultural variations of emerging adulthood
- Identify the markers of adulthood
- Identify where emerging and established adults currently live

## Emerging Adulthood Defined

**Emerging adulthood** *is the period between the late teens and late twenties; ages 18 to 29* (Mehta et al., 2020; Society for the Study of Emerging Adulthood, 2016). Arnett (2000) argues that emerging adulthood is neither adolescence, nor is it adulthood. Individuals in this age period have left behind the relative dependency of childhood and adolescence but have not yet taken on the responsibilities of adulthood. "Emerging adulthood is a time of life when many different directions remain possible, when little about the future is decided for certain, when the scope of independent exploration of life's possibilities is greater for most people than it will be at any other period of the life course" (Arnett, 2000, p. 469). Arnett identified five characteristics of emerging adulthood that distinguished it from adolescence and young adulthood (Arnett, 2006).

- It is the age of **identity exploration**. In 1950, Erik Erikson proposed that it was during adolescence that humans wrestled with the question of identity. Yet, even Erikson (1968) commented on a trend during the 20$^{th}$ century of a "prolonged adolescence" in industrialized societies. Today, most identity development occurs during the late teens and early twenties rather than adolescence. It is during emerging adulthood that people are exploring their career choices and ideas about intimate relationships, setting the foundation for adulthood.
- Arnett also described this time period as the **age of instability** (Arnett, 2000; Arnett, 2006). Exploration generates uncertainty and instability. Emerging adults change jobs, relationships, and residences more frequently than other age groups.
- This is also the age of **self-focus**. Being self-focused is not the same as being "self-centered." Adolescents are more self-centered than emerging adults. Arnett reports that in his research, he found emerging adults to be very considerate of the feelings of others, especially their parents. They now begin to see their parents as people not just parents, something most adolescents fail to do (Arnett, 2006). Nonetheless, emerging adults focus more on themselves, as they realize that they have few obligations to others and that this is the time where they can do what they want with their life.
- This is also the **age of feeling in-between**. When asked if they feel like adults, more 18- to 25-year-olds answer "yes and no" than do teens or adults over the age of 25 (Arnett, 2001). Most emerging adults have gone through the changes of puberty, are typically no longer in high school, and many have also moved out of their parents' home. Thus, they no longer feel as dependent as they did as teenagers. Yet, they may still be financially dependent on their parents to some degree, and they have not completely attained some of the indicators of adulthood, such as finishing their education, obtaining a good full-time job, being in a committed relationship, or being responsible for others. It is not surprising that Arnett found that 60% of 18- to 25-year-olds felt that in some ways they were adults, but in some ways, they were not (Arnett, 2001).



Figure 13.1.1. Unknown image source.

- Emerging adulthood is the **age of possibilities**. It is a time period of optimism as more 18- to 25-year-olds feel that they will someday get to where they want to be in life. Arnett (2000, 2006) suggests that this optimism is because these dreams have yet to be tested. For example, it is easier to believe that you will eventually find your soul mate when you have yet to have had a serious relationship. It may also be a chance to change directions, for those whose lives up to this point have been difficult. The experiences of children and teens are influenced by the choices and decisions of their parents. If the parents are dysfunctional, there is little a child can do about it. In emerging adulthood, people can move out and move on. They have the chance to transform their lives and move away from unhealthy environments. Even those whose lives were happier and more fulfilling as children, now have the opportunity in emerging adulthood to become independent and make decisions about the direction they would like their life to take.

## Socioeconomic Class and Emerging Adulthood:

The theory of emerging adulthood was initially criticized as only reflecting upper-middle-class, college-attending young adults in the United States and not those who were working class or poor (Arnett, 2016). Consequently, Arnett reviewed results from the 2012 Clark University Poll of Emerging Adults, whose participants were demographically similar to the United States population. Results primarily indicated consistencies across aspects of the theory, including positive and negative perceptions of the time-period and views on education, work, love, sex, and marriage. Two significant differences were found, the first being that emerging adults from lower socioeconomic classes identified more negativity in their emotional lives, including higher levels of depression. Secondly, those in the lowest socioeconomic group were more likely to agree that they had not been able to find sufficient financial support to obtain the education they believed they needed. Overall, Arnett concluded that emerging adulthood exists wherever there is a period between the end of adolescence and entry into adult roles, but acknowledging social, cultural, and historical contexts was also important.

# Cultural Variations

The five features proposed in the theory of emerging adulthood originally were based on research involving about Americans between ages 18 and 29 from various ethnic groups, social classes, and geographical regions (Arnett, 2004, 2016). To what extent does the theory of emerging adulthood apply internationally?



Figure 13.1.2. Unknown image source.

The answer to this question depends greatly on what part of the world is considered. Demographers make a useful distinction between the developing countries that comprise the majority of the world's population and the economically developed countries that are part of the Organization for Economic Cooperation and Development (OECD), including the United States, Canada, Western Europe, Japan, South Korea, Australia, and New Zealand. The current population of OECD countries (also called developed countries) is 1.2 billion, about 18% of the total world population (United Nations Development Programme, 2011). The rest of the human population resides in developing countries, which have much lower median incomes, much lower median educational attainment, and much higher incidence of illness, disease, and early death. Let us consider emerging adulthood in other OECD countries, as little is known about the experiences of 18- to 29-year-olds in developing countries.

The same demographic changes as described above for the United States have taken place in other OECD countries as well. This is true of participation in postsecondary education, as well as median ages for entering marriage and parenthood (UNdata, 2010). However, there is also substantial variability in how emerging adulthood is experienced across OECD countries. Europe is the region where emerging adulthood is longest and most leisurely. The median ages for entering marriage and parenthood are near 30 in most European countries (Douglass, 2007). Europe today is the location of the most affluent, generous, and egalitarian societies in the world, in fact, in human history (Arnett, 2007). Governments pay for tertiary education, assist young people in finding jobs, and provide generous unemployment benefits for those who cannot find work. In northern Europe, many governments also provide housing support. Emerging adults in European societies make the most of these advantages, gradually making their way to adulthood during their twenties while enjoying travel and leisure with friends.

The lives of Asian emerging adults in developed countries, such as Japan and South Korea, are in some ways similar to the lives of emerging adults in Europe and in some ways strikingly different. Like European emerging adults, Asian emerging adults tend to enter marriage and parenthood around age 30 (Arnett, 2011). Like European emerging adults, Asian emerging adults in Japan and South Korea enjoy the benefits of living in affluent societies with generous social welfare systems that provide support for them in making the transition to adulthood, including free university education and substantial unemployment benefits. However, in other ways, the experience of emerging adulthood in Asian OECD countries is markedly different than in Europe. Europe has a long history of individualism, and today's emerging adults carry that legacy with them in their focus on self-development and leisure during emerging adulthood. In contrast, Asian cultures have a shared cultural history emphasizing collectivism and family obligations.



Figure 13.1.3. Is your culture one that promotes romantic relationships for emerging adults? Or does it encourage you to wait till you're older? What would it be like to live in the opposite culture? Image source.

Although Asian cultures have become more individualistic in recent decades, as a consequence of globalization, the legacy of collectivism persists in the lives of emerging adults. They pursue identity explorations and self-development during emerging adulthood, like their American and European counterparts, but within narrower boundaries set by their sense of obligations to others, especially their parents (Phinney & Baldelomar, 2011). For example, in their views of the most important criteria for becoming an adult, emerging adults in the United States and Europe consistently rank financial independence among the most important markers of adulthood. In contrast, emerging adults with an Asian cultural background especially emphasize becoming capable of supporting parents financially as among the most important criteria (Arnett, 2003; Nelson et al., 2004). This sense of family obligation may curtail their identity explorations in emerging adulthood to some extent, as they pay more heed to their parents' wishes about what they should study, what job they should take, and where they should live than emerging adults do in the West (Rosenberger, 2007).

This page titled 13.1: Emerging Adulthood is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Martha Lally & Suzanne Valentine-French via source content that was edited to the style and standards of the LibreTexts platform.

- 7.1: Emerging Adulthood by Martha Lally & Suzanne Valentine-French is licensed CC BY-NC-SA 4.0. Original source: http://dept.clcillinois.edu/psy/LifespanDevelopment.pdf.

# 13.2: When Does Adulthood Begin?

According to Rankin and Kenyon (2008), historically the process of becoming an adult was more clearly marked by rites of passage. For many, marriage and parenthood were considered entry into adulthood. However, these role transitions are no longer considered the important markers of adulthood (Arnett, 2001). Economic and social changes have resulted in more young adults attending college (Rankin & Kenyon, 2008) and a delay in marriage and having children (Arnett & Taber, 1994; Laursen & Jensen-Campbell, 1999) Consequently, current research has found financial independence and accepting responsibility for oneself to be the most important markers of adulthood in Western culture across age (Arnett, 2001) and ethnic groups (Arnett, 2004).

In looking at college students' perceptions of adulthood, Rankin and Kenyon (2008) found that some students still view rites of passage as important markers. These were college students who had placed more importance on role transition markers, such as parenthood and marriage; belonged to a fraternity/sorority; were traditionally aged (18–25); belonged to an ethnic minority; were of a traditional marital status, i.e., not cohabitating; or belonged to a religious organization, particularly for men. These findings supported the view that people holding collectivist or more traditional values place more importance on role transitions as markers of adulthood. In contrast, older college students and those cohabitating did not value role transitions as markers of adulthood as strongly.

## Established Adulthood Defined

**Established adults**, or *those individuals between ages 30 and 45*, differ from emerging adults in a variety of ways, but especially in the areas of career development, establishment of intimate relationships, and child rearing. In contrast to previous generations, individuals residing in developed countries are obtaining advanced education well into their twenties (Mehta et al., 2020). Following their education, those entering careers typically engage in frequent job changes in their twenties before settling into a stable long-term job in their thirties. In contrast to the career exploration of emerging adults, established adults take on greater career responsibilities, gain expertise, and begin moving up in their organizations. Regarding the establishment of intimate relationships, those in more developed countries are delaying both marriage and having children until their thirties. Consequently, established adults typically have young children at home, and a significant part of their day is spent caring for them.

## Emerging and Established Adults Living Arrangements

In 2014, for the first time in more than 130 years, adults 18 to 34 were more likely to be living in their parents' home than they were to be living with a spouse or partner in their own household (Fry, 2016). The current trend is that young Americans are not choosing to settle down romantically before age 35. Since 1880, living with a romantic partner was the most common living arrangement among young adults. In 1960, 62% of America's 18- to 34-year-olds were living with a spouse or partner in their own household, while only 20% were living with their parents.



Figure 13.2.1. Unknown image source.

By 2014, 31.6% of early adults were living with a spouse or partner in their own household, while 32.1% were living in the home of their parent(s). Another 14% of early adults lived alone, were a single parent, or lived with one or more roommates. The remaining 22% lived in the home of another family member (such as a grandparent, in-law, or sibling), a non-relative, or in group quarters (e.g., college dormitories). Comparing ethnic groups, 36% of Black and Hispanic early adults lived at home, while 30% of white young adults lived at home.

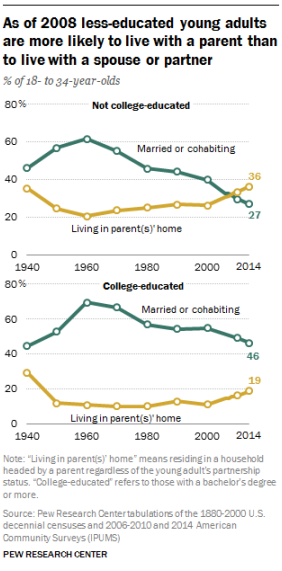



Figure 13.2.2. Image source.

As can be seen in Figure 13.2.2, gender differences in living arrangements are also noted in that young men were living with parents at a higher rate than young women. In 2014, 35% of young men were residing with their parents, while 28% were living with a spouse or partner in their own household. Young women were more likely to be living with a spouse or partner (35%) than living with their parents (29%). Additionally, more young women (16%) than young men (13%) were heading up a household without a spouse or partner, primarily because women are more likely to be single parents living with their children. Lastly, young men (25%) were more likely than young women (19%) to be living in the home of another family member, a non-relative, or in some type of group quarters (Fry, 2016).

## What are some factors that help explain these changes in living arrangements?

First, emerging and established adults are postponing marriage or choosing not to marry or cohabitate. Lack of employment and lower wages have especially contributed to males residing with their parents. Men who are employed are less likely to live at home. Wages for young men (adjusting for inflation) have been falling since 1970 and correlate with the rise in young men living with their parents. The recent recession and recovery (2007-present) has also contributed to the increase in early adults living at home. College enrollments increased during the recession, which further increased early adults living at home. However, once early adults possess a college degree, they are more likely to establish their own households (Fry, 2016).

This page titled 13.2: When Does Adulthood Begin? is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Martha Lally & Suzanne Valentine-French via source content that was edited to the style and standards of the LibreTexts platform.

- 7.2: When Does Adulthood Begin? by Martha Lally & Suzanne Valentine-French is licensed CC BY-NC-SA 4.0. Original source: http://dept.clcillinois.edu/psy/LifespanDevelopment.pdf.

# 13.3: Physical Development in Emerging and Established Adulthood

**Learning Objectives: Physical Development in Emerging and Established Adulthood**

- Summarize the overall physical growth in emerging and established adulthood
- Describe statistics, possible causes, and consequences of obesity
- Explain how early adulthood is a healthy, yet risky time of life
- Identify the risk factors for substance use
- Describe the changes in brain maturation
- Describe gender in adulthood, including gender minorities and stress
- Define sexuality and explain the female and male reproductive systems
- Describe the brain areas and hormones responsible for sexual behavior
- Identify sexually transmitted infections
- Describe cultural views related to sexuality
- Describe research on sexual orientation

## The Physiological Peak

People in their mid-twenties to mid-forties are considered to be in early adulthood. By the time we reach early adulthood, our physical maturation is complete, although our height and weight may increase slightly. Those in their early twenties are probably at the peak of their physiological development, including muscle strength, reaction time, sensory abilities, and cardiac functioning. The reproductive system, motor skills, strength, and lung capacity are all operating at their best. Most professional athletes are at the top of their game during this stage, and many women have children in the early-adulthood years (Boundless, 2016).

The aging process actually begins during early adulthood. Around the age of 30, many changes begin to occur in different parts of the body. For example, the lens of the eye starts to stiffen and thicken, resulting in changes in vision (usually affecting the ability to focus on close objects). Sensitivity to sound decreases; this happens twice as quickly for men as for women. Hair can start to thin and become gray around the age of 35 , although this may happen earlier for some individuals and later for others. The skin becomes drier and wrinkles start to appear by the end of early adulthood. This includes a decline in response time and the ability to recover quickly from physical exertion. The immune system also becomes less adept at fighting off illness, and reproductive capacity starts to decline (Boundless, 2016).

## Obesity

lthough early adulthood forms the peak of physical health, a concern for early adults is the current rate of obesity. Results from the National Center for Health Statistics indicated that an estimated 70.7% of U.S. adults aged 20 and over were overweight in 2012 (CDC, 2015b) and by 2016, 39.8% were considered obese (Hales et al., 2017)). **Body mass index (BMI)**, *expressed as weight in kilograms divided by height in meters squared* $(kg/m^2)$, is commonly used to classify overweight (BMI 25.0 to 29.9), obesity (BMI greater than or equal to 30.0), and extreme obesity (BMI greater than or equal to 40.0). The current statistics are an increase from the 2013–2014 statistics that indicated that an estimated 35.1% were obese, and 6.4% extremely obese (Fryar et al., 2014). The CDC also indicated that one's 20s are the prime time to gain weight as the average person gains one to two pounds per year from early adulthood into middle adulthood. The average man in his 20s weighs around 185 pounds and by his 30s weighs approximately 200 pounds. The average American woman weighs 162 pounds in her 20s and 170 pounds in her 30s.

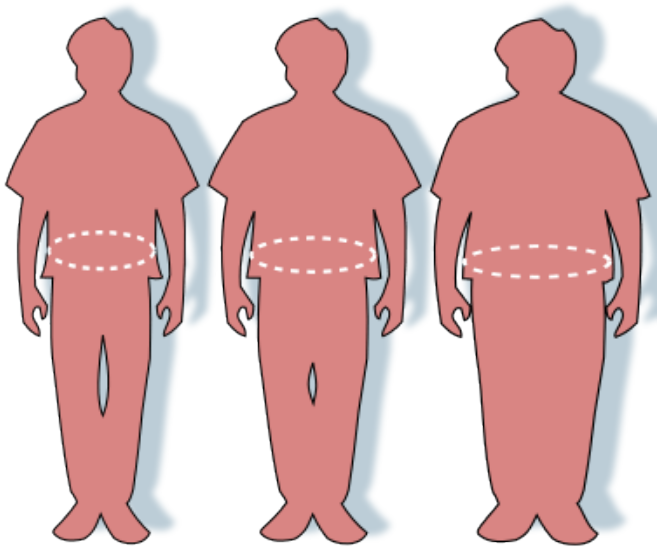
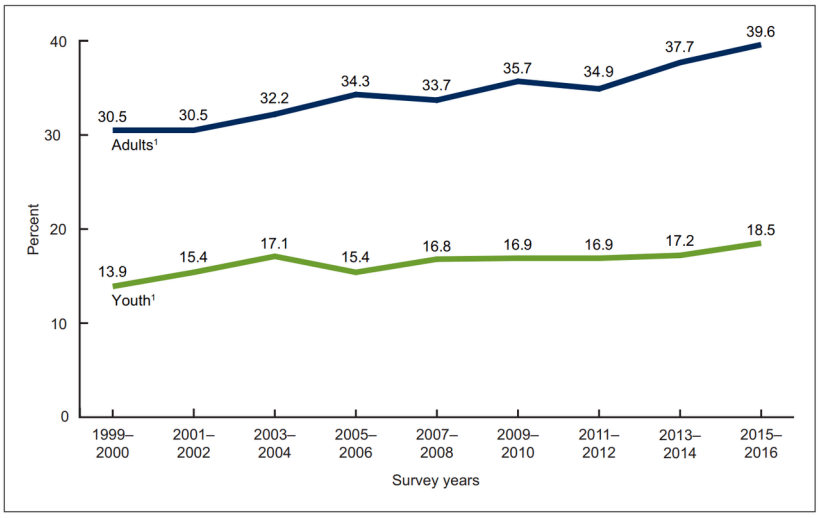


Figure 13.3.1. Image source.

The American obesity crisis is also reflected worldwide (Wighton, 2016). In 2014, global obesity rates for men were measured at 10.8% and among women at 14.9%. This translates to 266 million obese men and 375 million obese women in the world, and more people were identified as obese than underweight. Although obesity is seen throughout the world, more obese men and women live in China and the USA than in any other country. Figure 13.3.1 illustrates how waist circumference is also used as a measure of obesity. Figure 13.3.2 demonstrates the percentage growth for youth (2–19 years) and adults (20–60+ years) identified as obese between 1999 and 2016.




¹Significant increasing linear trend from 1999–2000 through 2015–2016.
NOTES: All estimates for adults are age adjusted by the direct method to the 2000 U.S. census population using the age groups 20–39, 40–59, and 60 and over.
Access data table for Figure 5 at: https://www.cdc.gov/nchs/data/databriefs/db288_table.pdf#5.
SOURCE: NCHS, National Health and Nutrition Examination Survey, 1999–2016.

Figure 13.3.2. Trends in obesity prevalence among adults aged 20 and over (age adjusted) and youth aged 2–19 years: United States, 1999–2000 through 2015–2016. Image source.

## Causes of Obesity:

According to the Centers for Disease Control and Prevention (CDC) (2016), obesity originates from a complex set of contributing factors, including one's environment, behavior, and genetics. Societal factors include culture, education, food marketing and promotion, the quality of food, and the physical activity environment available. Behaviors leading to obesity include diet, the amount of physical activity, and medication use. Lastly, there does not appear to be a single gene responsible for obesity. Rather, research has identified variants in several genes that may contribute to obesity by increasing hunger and food intake. Another

genetic explanation is the mismatch between today's environment and "energy-thrifty genes" that multiplied in the distant past, when food sources were unpredictable. The genes that helped our ancestors survive occasional famines are now being challenged by environments in which food is plentiful all the time. Overall, obesity most likely results from complex interactions among the environment and multiple genes.

## Obesity Health Consequences:

Obesity is considered to be one of the leading causes of death in the United States and worldwide. Additionally, the medical care costs of obesity in the United States were estimated to be $147 billion in 2008. According to the CDC (2016), compared to those with a normal or healthy weight, people who are obese are at increased risk for many serious diseases and health conditions including:

- All-causes of death (mortality)
- High blood pressure (Hypertension)
- High LDL cholesterol, low HDL cholesterol, or high levels of triglycerides (Dyslipidemia)
- Type 2 diabetes
- Coronary heart disease
- Stroke
- Gallbladder disease
- Osteoarthritis (a breakdown of cartilage and bone within a joint)
- Sleep apnea and breathing problems
- Some cancers (endometrial, breast, colon, kidney, gallbladder, and liver)
- Low quality of life
- Mental illness, such as clinical depression, anxiety, and other mental disorders
- Body pain and difficulty with physical functioning

This page titled 13.3: Physical Development in Emerging and Established Adulthood is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Martha Lally & Suzanne Valentine-French via source content that was edited to the style and standards of the LibreTexts platform.

- 7.3: Physical Development in Emerging and Established Adulthood by Martha Lally & Suzanne Valentine-French is licensed CC BY-NC-SA 4.0. Original source: http://dept.clcillinois.edu/psy/LifespanDevelopment.pdf.

# 13.4: A Healthy but Risky Time

Doctors' visits are less frequent in early adulthood than for those in midlife and late adulthood and are necessitated primarily by injury and pregnancy (Berger, 2005). However, the top five causes of death in emerging and early adulthood are non-intentional injury (including motor vehicle accidents), homicide, and suicide with cancer and heart disease completing the list (Heron & Smith, 2007). Rates of violent death (homicide, suicide, and accidents) are highest among young adult males, and vary by race and ethnicity. Rates of violent death are higher in the United States than in Canada, Mexico, Japan, and other selected countries. Males are 3 times more likely to die in auto accidents than are females (Frieden, 2011).

## Alcohol Abuse:

A significant contributing factor to risky behavior is alcohol. According to the 2014 National Survey on Drug Use and Health (National Institute on Alcohol Abuse and Alcoholism (NIAAA), 2016) 88% of people ages 18 or older reported that they drank alcohol at some point in their lifetime; 71% reported that they drank in the past year; and 57% reported drinking in the past month. Additionally, 6.7% reported that they engaged in heavy drinking in the past month. Heavy drinking is defined as drinking five or more drinks on the same occasion on each of five or more days in the past 30 days. Nearly 88,000 people (approximately 62,000 men and 26,000 women) die from alcohol-related causes annually, making it the fourth leading preventable cause of death in the United States. In 2014, alcohol-impaired driving fatalities accounted for 9,967 deaths (31% of overall driving fatalities).

The NIAAA defines binge drinking as when blood alcohol concentration levels reach $0.08\ \mathrm{g/dL}$. This typically occurs after four drinks for women and five drinks for men in approximately two hours. In 2014, 25% of people ages 18 or older reported that they engaged in binge drinking in the past month. According to the NIAAA (2015) "Binge drinking poses serious health and safety risks, including car crashes, drunk-driving arrests, sexual assaults, and injuries. Over the long term, frequent binge drinking can damage the liver and other organs," (p. 1).

## Alcohol and College Students:

Results from the 2014 survey demonstrated a difference between the amount of alcohol consumed by college students and those of the same age who are not in college (NIAAA, 2016). Specifically, 60% of full-time college students aged 18–22 drank alcohol in the past month, compared with 51.5% of other persons of the same age not in college. In addition, 38% of college students aged 18–22 engaged in binge drinking; that is, five or more drinks on one occasion in the past month, compared with 33.5% of other persons of the same age. Lastly, 12% of college students aged 18–22 engaged in heavy drinking; that is, binge drinking on five or more occasions per month, in the past month. This compares with 9.5% of other emerging adults not in college.

The consequences for college drinking are staggering, and the NIAAA (2016) estimates that each year the following occur:

- 1,825 college students between the ages of 18 and 24 die from alcohol-related unintentional injuries, including motor-vehicle crashes.
- 696,000 students between the ages of 18 and 24 are assaulted by another student who has been drinking.
- Roughly 1 in 5 college students meet the criteria for an Alcohol Use Disorder.
- About 1 in 4 college students report academic consequences from drinking, including missing class, falling behind in class, doing poorly on exams or papers, and receiving lower grades overall. (p. 1)
- 97,000 students between the ages of 18 and 24 report experiencing alcohol-related sexual assault or date rape.

The role alcohol plays in predicting acquaintance rape on college campuses is of particular concern. "Alcohol use in one the strongest predictors of rape and sexual assault on college campuses," (Carroll, 2016, p. 454). Krebs et al. (2009) found that over 80% of sexual assaults on college campuses involved alcohol. Being intoxicated increases a female's risk of being the victim of date or acquaintance rape (Carroll, 2007). Females are more likely to blame themselves and to be blamed by others if they were intoxicated when raped. College students view perpetrators who were drinking as less responsible, and victims who were drinking as more responsible for the assaults (Untied et al., 2012).




Figure 13.4.1. Image source.

## Factors Affecting College Students' Drinking:

Several factors associated with college life affect a student's involvement with alcohol (NIAAA, 2015). These include the pervasive availability of alcohol, inconsistent enforcement of underage drinking laws, unstructured time, coping with stressors, and limited interactions with parents and other adults. Due to social pressures to conform and expectations when entering college, the first six weeks of freshman year are an especially susceptible time for students. Additionally, more drinking occurs in colleges with active Greek systems and athletic programs. Alcohol consumption is lowest among students living with their families and commuting, while it is highest among those living in fraternities and sororities.

## College Strategies to Curb Drinking:

Strategies to address college drinking involve the individual-level and campus community as a whole. Identifying at-risk groups, such as first year students, members of fraternities and sororities, and athletes has proven helpful in changing students' knowledge, attitudes, and behavior regarding alcohol (NIAAA, 2015). Interventions include education and awareness programs, as well as intervention by health professionals. At the college-level, reducing the availability of alcohol has proven effective by decreasing both consumption and negative consequences.

# Non-Alcohol Substance Use:

Illicit drug use peaks between the ages of 19 and 22 and then begins to decline. Additionally, 25% of those who smoke cigarettes, 33% of those who smoke marijuana, and 70% of those who abuse cocaine began using after age 17 (Volkow, 2004). Emerging adults (18 to 25) are the largest abusers of prescription opioid pain relievers, anti-anxiety medications, and Attention Deficit Hyperactivity Disorder medication (National Institute on Drug Abuse, 2015). In 2016, opioid misuse within the past 12 months was reported by 3.6% of 12–17 year-olds and was twice as high among those 18–25 (Office of Adolescent Health, 2019). In 2014 more than 1700 emerging adults died from a prescription drug overdose. This is an increase of four times since 1999. Additionally, for every death there were 119 emergency room visits.




Figure 13.4.2. Image source.

Daily marijuana use is at the highest level in three decades (National Institute on Drug Abuse, 2015). For those in college, 2014 data indicate that 6% of college students smoke marijuana daily, while only 2% smoked daily in 1994. For noncollege students of the same age, the daily percentage is twice as high (approximately 12%). Additionally, according to a recent survey by the National Institute of Drug Abuse (2018), daily cigarette smoking is lower for those in college in comparison to non-college groups (see Figure 13.4.3).

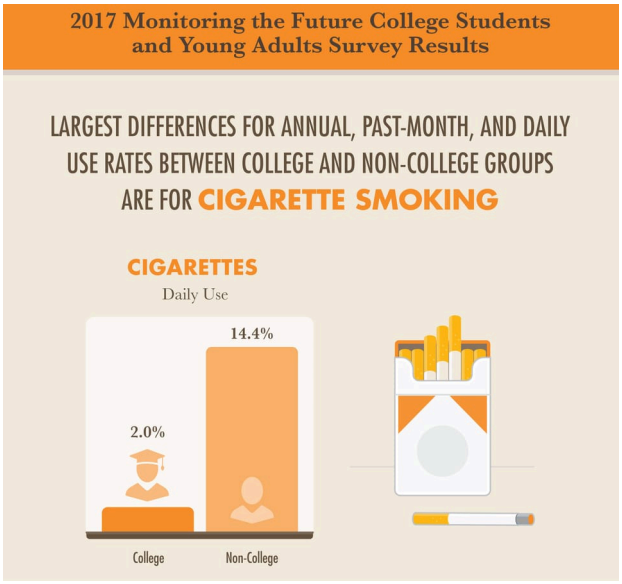



Figure 13.4.3. Image source.

Rates of violent death are influenced by substance use, which peaks during emerging and early adulthood. Drugs impair judgment, reduce inhibitions, and alter mood, all of which can lead to dangerous behavior. Reckless driving, violent altercations, and forced sexual encounters are some examples. Drug and alcohol use increase the risk of sexually transmitted infections because people are more likely to engage in risky sexual behavior when under the influence. This includes having sex with someone who has had multiple partners, having anal sex without the use of a condom, having multiple partners, or having sex with someone whose history is unknown. Lastly, as previously discussed, drugs and alcohol ingested during pregnancy have a teratogenic effect on the developing embryo and fetus.

This page titled 13.4: A Healthy but Risky Time is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Martha Lally & Suzanne Valentine-French via source content that was edited to the style and standards of the LibreTexts platform.

- 7.4: A Healthy but Risky Time by Martha Lally & Suzanne Valentine-French is licensed CC BY-NC-SA 4.0. Original source: http://dept.clcillinois.edu/psy/LifespanDevelopment.pdf.

# 13.5: Gender

As previously discussed in Chapter 4, **gender** *is the cultural, social and psychological meanings associated with masculinity and feminity. A person's sense of self as a member of a particular gender* is known as **gender identity**. Because gender is considered a **social construct**, meaning that *it does not exist naturally, but is instead a concept that is created by cultural and societal norms*, there are cultural variations on how people express their gender identity. For example, in American culture, it is considered feminine to wear a dress or skirt. However, in many Middle Eastern, Asian, and African cultures, dresses or skirts (in the form of sarongs, robes, or gowns) can be considered masculine. Similarly, the kilt worn by a Scottish male does not make him appear feminine in his culture.

For many adults, the drive to adhere to masculine and feminine **gender roles**, or *the societal expectations associated with being male or female*, continues throughout life. In American culture, masculine roles have traditionally been associated with strength, aggression, and dominance, while feminine roles have traditionally been associated with passivity, nurturing, and subordination. Men tend to outnumber women in professions such as law enforcement, the military, and politics, while women tend to outnumber men in care-related occupations such as childcare, healthcare, and social work. These occupational roles are examples of stereotypical American male and female behavior, derived not from biology or genetics, but from our culture's traditions. Adherence to these roles may demonstrate fulfillment of social expectations, however, not necessarily personal preferences (Diamond, 2002).

Consequently, many adults are challenging gender labels and roles, and the long-standing **gender binary**, that is, *categorizing humans as only female and male*, has been undermined by current psychological research (Hyde et al., 2019). The term gender now encompasses a wide range of possible identities, including cisgender, transgender, agender, genderfluid, genderqueer, gender nonconforming, bigender, pangender, ambigender, non-gendered, intergender, and **Two-spirit**, *which is a modern umbrella term used by some indigenous North Americans to describe gender-variant individuals in their communities* (Carroll, 2016). Hyde et al. (2019) advocate for a conception of gender that stresses multiplicity and diversity and uses multiple categories that are not mutually exclusive.

## Gender Minority Discrimination



Figure 13.5.1. The transgender flag. Image source.

Gender nonconforming people are much more likely to experience harassment, bullying, and violence based on their gender identity; they also experience much higher rates of discrimination in housing, employment, healthcare, and education (Borgogna et al., 2019; National Center for Transgender Equality, 2015). Transgender individuals of color face additional financial, social, and interpersonal challenges, in comparison to the transgender community as a whole, as a result of structural racism. Black transgender people reported the highest level of discrimination among all transgender individuals of color. As members of several intersecting minority groups, transgender people of color, and transgender women of color in particular, are especially vulnerable

to employment discrimination, poor health outcomes, harassment, and violence. Consequently, they face even greater obstacles than white transgender individuals and cisgender members of their own race.

## Gender Minority Status and Mental Health:

Using data from over 43,000 college students, Borgona et al. (2019) examined mental health differences among several gender groups, including those identifying as cisgender, transgender and gender nonconforming. Results indicated that participants who identified as transgender and gender nonconforming had significantly higher levels of anxiety and depression than those identifying as cisgender. Bargona et al. explained the higher rates of anxiety and depression using the **minority stress model**, *which states that an unaccepting social environment results in both external and internal stress which contributes to poorer mental health*. External stressors include discrimination, harassment, and prejudice, while internal stressors include negative thoughts, feelings and emotions resulting from one's identity. Borgona et al. recommends that mental health services that are sensitive to both gender minority and sexual minority statuses be available.

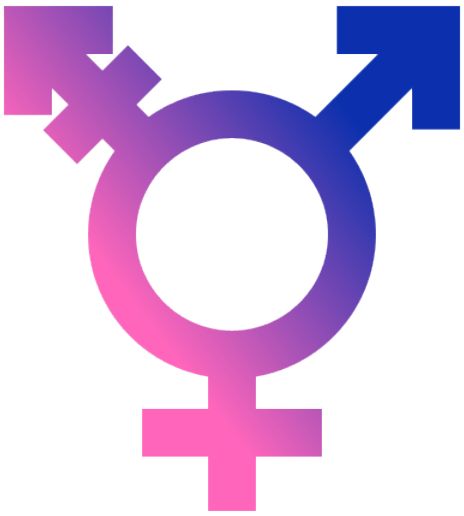


Figure 13.5.2. Transgender symbol. Image source.

The transgender children discussed in Chapter 4 may, when they become an adult, alter their bodies through medical interventions, such as surgery and hormonal therapy, so that their physical being is better aligned with gender identity. However, not all transgender individuals choose to alter their bodies or physically transition. Many will maintain their original anatomy but may present themselves to society as a different gender, often by adopting the dress, hairstyle, mannerisms, or other characteristics typically assigned to a certain gender. It is important to note that people who cross-dress, or wear clothing that is traditionally assigned to the opposite gender, do not necessarily identify as transgender (though some do). Cross-dressing is typically a form of self-expression, entertainment, or personal style, and not necessarily an expression about one's gender identity.

This page titled 13.5: Gender is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Martha Lally & Suzanne Valentine-French via source content that was edited to the style and standards of the LibreTexts platform.

- 7.5: Gender by Martha Lally & Suzanne Valentine-French is licensed CC BY-NC-SA 4.0. Original source: http://dept.clcillinois.edu/psy/LifespanDevelopment.pdf.

# 13.6: Sexuality

**Human sexuality** *refers to people's sexual interest in and attraction to others, as well as their capacity to have erotic experiences and responses*. Sexuality may be experienced and expressed in a variety of ways, including thoughts, fantasies, desires, beliefs, attitudes, values, behaviors, practices, roles, and relationships. These may manifest themselves in biological, physical, emotional, social, or spiritual aspects. The biological and physical aspects of sexuality largely concern the human reproductive functions, including the human sexual-response cycle and the basic biological drive that exists in all species. Emotional aspects of sexuality include bonds between individuals that are expressed through profound feelings or physical manifestations of love, trust, and care. Social aspects deal with the effects of human society on one's sexuality, while spirituality concerns an individual's spiritual connection with others through sexuality. Sexuality also impacts, and is impacted by cultural, political, legal, philosophical, moral, ethical, and religious aspects of life.

## The Sexual Response Cycle

*Sexual motivation, often referred to as* **libido**, *is a person's overall sexual drive or desire for sexual activity*. This motivation is determined by biological, psychological, and social factors. In most mammalian species, sex hormones control the ability to engage in sexual behaviors. However, sex hormones do not directly regulate the ability to copulate in primates (including humans); rather, they are only one influence on the motivation to engage in sexual behaviors. Social factors, such as work and family, also have an impact, as do internal psychological factors like personality and stress. Sex drive may also be affected by hormones, medical conditions, medications, lifestyle stress, pregnancy, and relationship issues.

The **sexual response cycle** *is a model that describes the physiological responses that take place during sexual activity*. According to Kinsey, Pomeroy, and Martin (1948), the cycle consists of four phases: excitement, plateau, orgasm, and resolution. The **excitement phase** *is the phase in which the intrinsic (inner) motivation to pursue sex arises*. The **plateau phase** *is the period of sexual excitement with increased heart rate and circulation that sets the stage for orgasm*. **Orgasm** *is the release of tension*, and the **resolution period** *is the unaroused state before the cycle begins again*.

## The Brain and Sex:

The brain is the structure that translates the nerve impulses from the skin into pleasurable sensations. It controls nerves and muscles used during sexual behavior. The brain regulates the release of hormones, which are believed to be the physiological origin of sexual desire. The cerebral cortex, which is the outer layer of the brain that allows for thinking and reasoning, is believed to be the origin of sexual thoughts and fantasies. Beneath the cortex is the limbic system, which consists of the amygdala, hippocampus, cingulate gyrus, and septal area. These structures are where emotions and feelings are believed to originate, and they are important for sexual behavior.

The **hypothalamus** is the most important part of the brain for sexual functioning. *This is the small area at the base of the brain consisting of several groups of nerve-cell bodies that receives input from the limbic system*. Studies with lab animals have shown that destruction of certain areas of the hypothalamus causes complete elimination of sexual behavior. One of the reasons for the importance of the hypothalamus is that it controls the pituitary gland, which secretes hormones that control the other glands of the body.

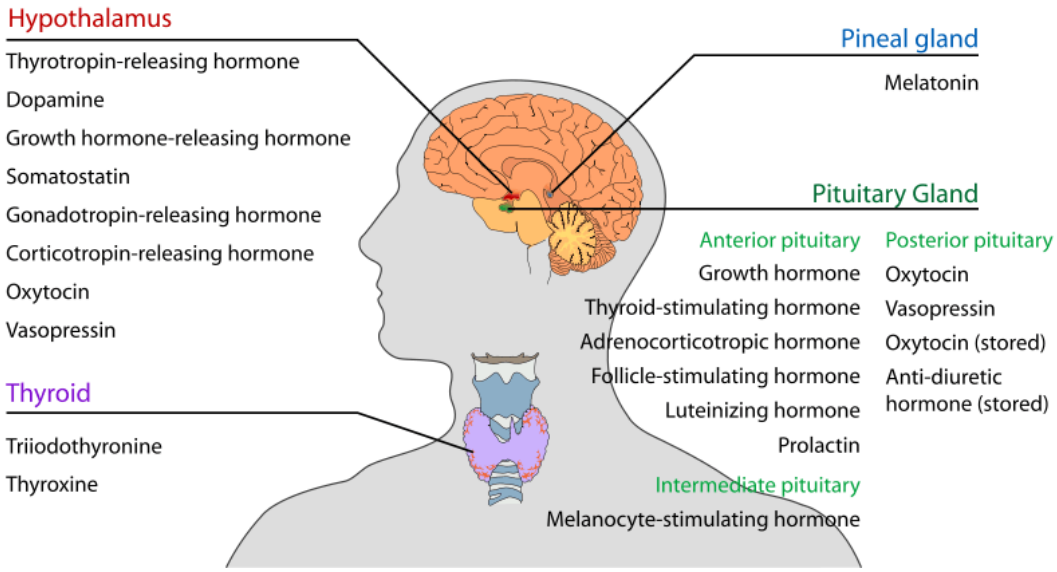



Figure 13.6.1. Hormones secreted by the endocrine glands on the nervous system. Image source.

## Hormones:

Several important sexual hormones are secreted by the pituitary gland. **Oxytocin**, also known as the hormone of love, *is released during sexual intercourse when an orgasm is achieved*. Oxytocin is also released in females when they give birth or are breast feeding; it is believed that oxytocin is involved with maintaining close relationships. Both prolactin and oxytocin stimulate milk production in females. **Follicle-stimulating hormone (FSH)** *is responsible for ovulation in females by triggering egg maturity; it also stimulates sperm production in males*. **Luteinizing hormone (LH)** *triggers the release of a mature egg in females during the process of ovulation*.

In males, testosterone appears to be a major contributing factor to sexual motivation. **Vasopressin** *is involved in the male arousal phase*, and the increase of vasopressin during erectile response may be directly associated with increased motivation to engage in sexual behavior.

The relationship between hormones and female sexual motivation is not as well understood, largely due to the overemphasis on male sexuality in Western research. **Estrogen** and **progesterone** typically *regulate motivation to engage in sexual behavior for females, with estrogen increasing motivation and progesterone decreasing it*. The levels of these hormones rise and fall throughout a woman's menstrual cycle. Research suggests that testosterone, oxytocin, and vasopressin are also implicated in female sexual motivation in similar ways as they are in males, but more research is needed to understand these relationships.

## Sexual Responsiveness Peak:

Men and women tend to reach their peak of sexual responsiveness at different ages. For men, sexual responsiveness tends to peak in the late teens and early twenties. Sexual arousal can easily occur in response to physical stimulation or fantasizing. Sexual responsiveness begins a slow decline in the late twenties and into the thirties, although a man may continue to be sexually active. Through time, a man may require more intense stimulation in order to become aroused. Women often find that they become more sexually responsive throughout their twenties and thirties and may peak in their late thirties or early forties. This is likely due to greater self-confidence and reduced inhibitions about sexuality.

## Sexually Transmitted Infections:

**Sexually transmitted infections (STIs)**, also referred to as sexually transmitted diseases (STDs) or venereal diseases (VDs), are *illnesses that have a significant probability of transmission by means of sexual behavior, including vaginal intercourse, anal sex, and oral sex*. Some STIs can also be contracted by sharing intravenous drug needles with an infected person, as well as through childbirth or breastfeeding. Common STIs include:

- chlamydia;

- herpes (HSV-1 and HSV-2);
- human papillomavirus (HPV);
- gonorrhea;
- syphilis;
- trichomoniasis;
- HIV (human immunodeficiency virus) and AIDS (acquired immunodeficiency syndrome).

According to the Centers for Disease Control and Prevention (CDC) (2014), there was an increase in the three most common types of STDs in 2014. These include 1.4 million cases of chlamydia, 350,000 cases of gonorrhea, and 20,000 cases of syphilis. Those most affected by STDS include those younger, gay/bisexual males, and females. The most effective way to prevent transmission of STIs is to practice safe sex and avoid direct contact of skin or fluids which can lead to transfer with an infected partner. Proper use of safe-sex supplies (such as male condoms, female condoms, gloves, or dental dams) reduces contact and risk and can be effective in limiting exposure; however, some disease transmission may occur even with these barriers.

### Societal Views on Sexuality:

Society's views on sexuality are influenced by everything from religion to philosophy, and they have changed throughout history and are continuously evolving. Historically, religion has been the greatest influence on sexual behavior in the United States; however, in more recent years, peers and the media have emerged as two of the strongest influences, particularly among American teens (Potard et al., 2008).

Mass media in the form of television, magazines, movies, and music continues to shape what is deemed appropriate or normal sexuality, targeting everything from body image to products meant to enhance sex appeal. Media serves to perpetuate a number of social scripts about sexual relationships and the sexual roles of men and women, many of which have been shown to have both empowering and problematic effects on people's (especially women's) developing sexual identities and sexual attitudes.

### Cultural Differences:

In the West, premarital sex is normative by the late teens, more than a decade before most people enter marriage. In the United States and Canada, and in northern and eastern Europe, cohabitation is also normative; most people have at least one cohabiting partnership before marriage. In southern Europe, cohabiting is still taboo, but premarital sex is tolerated in emerging adulthood. In contrast, both premarital sex and cohabitation remain rare and forbidden throughout Asia. Even dating is discouraged until the late twenties, when it would be a prelude to a serious relationship leading to marriage. In cross-cultural comparisons, about three-fourths of emerging adults in the United States and Europe report having had premarital sexual relations by age 20, versus less than one-fifth in Japan and South Korea (Hatfield & Rapson, 2006).

## Sexual Orientation

A person's **sexual orientation** *is their emotional and sexual attraction to a particular gender*. It is a personal quality that inclines people to feel romantic or sexual attraction (or a combination of these) to persons of a given sex or gender. According to the American Psychological Association (APA) (2016), sexual orientation also refers to a person's sense of identity based on those attractions, related behaviors, and membership in a community of others who share those attractions. Sexual orientation is independent of gender; for example, a transgender person may identify as heterosexual, homosexual, bisexual, pansexual, polysexual, asexual, or any other kind of sexuality, just like a cisgender person.

### Sexual Orientation on a Continuum:

Sexuality researcher Alfred Kinsey was among the first to conceptualize sexuality as a continuum rather than a strict dichotomy of gay or straight. To classify this continuum of heterosexuality and homosexuality, Kinsey et al. (1948) created a seven-point rating scale that ranged from exclusively heterosexual to exclusively homosexual. Research done over several decades has supported this idea that sexual orientation ranges along a continuum, from exclusive attraction to the opposite sex/gender to exclusive attraction to the same sex/gender (Carroll, 2016).



Image source

.



Unknown image source.

Figure 13.6.2.

However, sexual orientation now can be defined in many ways. **Heterosexuality**, which is often referred to as being straight, *is attraction to individuals of the opposite sex/gender*, while **homosexuality**, being gay or lesbian, *is attraction to individuals of one's own sex/gender*. **Bisexuality** *was a term traditionally used to refer to attraction to individuals of either male or female sex, but it has recently been used in nonbinary models of sex and gender* (i.e., models that do not assume there are only two sexes or two genders) to refer to attraction to any sex or gender. Alternative terms such as **pansexuality** and **polysexuality** have also been developed, *referring to attraction to all sexes/genders and attraction to multiple sexes/genders, respectively* (Carroll, 2016).

**Asexuality** *refers to having no sexual attraction to any sex/gender*. According to Bogaert (2015) about one percent of the population is asexual. Being asexual is not due to any physical problems, and the lack of interest in sex does not cause the individual any distress. Asexuality is being researched as a distinct sexual orientation.

## Development of Sexual Orientation:

According to current scientific understanding, individuals are usually aware of their sexual orientation between middle childhood and early adolescence. However, this is not always the case, and some do not become aware of their sexual orientation until much later in life. It is not necessary to participate in sexual activity to be aware of these emotional, romantic, and physical attractions; people can be celibate and still recognize their sexual orientation. Some researchers argue that sexual orientation is not static and inborn but is instead fluid and changeable throughout the lifespan.

There is no scientific consensus regarding the exact reasons why an individual holds a particular sexual orientation. Research has examined possible biological, developmental, social, and cultural influences on sexual orientation, but there has been no evidence that links sexual orientation to only one factor (APA, 2016). However, biological explanations, which include genetics, birth order, and hormones, will be explored further as many scientists support biological processes occurring during the embryonic and and early postnatal life as playing the main role in sexual orientation (Balthazart, 2018).

### Genetics:

As shown through both twin and familial studies, heredity provides one biological explanation for same-sex orientation. Bailey and Pillard (1991) studied pairs of male twins and found that the concordance rate for identical twins was 52%, while the rate for fraternal twins was only 22%. Bailey et al. (1993) studied female twins and found a similar difference with a concordance rate of 48% for identical twins and 16% for fraternal twins. Schwartz et al. (2010) found that gay men had more gay male relatives than straight men, and sisters of gay men were more likely to be lesbians than sisters of straight men.



Figure 13.6.3. Twins. Image source.

## Fraternal Birth Order:

The **fraternal birth order effect** *indicates that the probability of a boy identifying as gay increases for each older brother born to the same mother* (Balthazart, 2018; Blanchard, 2001). According to Bogaret et al. "the increased incidence of homosexuality in males with older brothers results from a progressive immunization of the mother against a male specific cell-adhesion protein that plays a key role in cell-cell interactions, specifically in the process of synapse formation," (as cited in Balthazart, 2018, p. 234). A meta-analysis indicated that the fraternal birth order effect explains the sexual orientation of between 15% and 29% of gay men.

## Hormones:

Excess or deficient exposure to hormones during prenatal development has also been theorized as an explanation for sexual orientation. One-third of females exposed to abnormal amounts of prenatal androgens, a condition called congenital adrenal hyperplasia (CAH), identify as bisexual or lesbian (Cohen-Bendahan et al., 2005). In contrast, too little exposure to prenatal androgens may affect male sexual orientation by not masculinizing the male brain (Carlson, 2011).

# Sexual Orientation Discrimination:

The United States is heteronormative, meaning that society supports heterosexuality as the norm. Consider, for example, that homosexuals are often asked, "When did you know you were gay?" but heterosexuals are rarely asked, "When did you know you were straight?" (Ryle, 2011). Living in a culture that privileges heterosexuality has a significant impact on the ways in which non-heterosexual people are able to develop and express their sexuality.



Figure 13.6.4. Image source.

Open identification of one's sexual orientation may be hindered by **homophobia**, *which encompasses a range of negative attitudes and feelings toward homosexuality or people who are identified or perceived as being lesbian, gay, bisexual, or transgender (LGBT)*. It can be expressed as antipathy, contempt, prejudice, aversion, or hatred; it may be based on irrational fear and is sometimes related to religious beliefs (Carroll, 2016). Homophobia is observable in critical and hostile behavior, such as discrimination and violence on the basis of sexual orientations that are nonheterosexual. Recognized types of homophobia include **institutionalized homophobia**, *such as religious and state-sponsored homophobia*, and **internalized homophobia**, *in which people with same-sex attractions internalize, or believe, society's negative views and/or hatred of themselves*.

Sexual minorities regularly experience stigma, harassment, discrimination, and violence based on their sexual orientation (Carroll, 2016). Research has shown that gay, lesbian, and bisexual teenagers are at a higher risk of depression and suicide due to exclusion from social groups, rejection from peers and family, and negative media portrayals of homosexuals (Bauermeister et al., 2010). Discrimination can occur in the workplace, in housing, at schools, and in numerous public settings. Much of this discrimination is based on stereotypes and misinformation. Major policies to prevent discrimination based on sexual orientation have only come into effect in the United States in the last few years.

The majority of empirical and clinical research on LGBT populations are done with largely white, middle-class, well-educated samples. This demographic limits our understanding of more marginalized sub-populations that are also affected by racism, classism, and other forms of oppression. In the United States, non-Caucasian LGBT individuals may find themselves in a double minority, in which they are not fully accepted or understood by Caucasian LGBT communities and are also not accepted by their own ethnic group (Tye, 2006). Many people experience racism in the dominant LGBT community where racial stereotypes merge with gender stereotypes.

This page titled 13.6: Sexuality is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Martha Lally & Suzanne Valentine-French via source content that was edited to the style and standards of the LibreTexts platform.

- 7.6: Sexuality by Martha Lally & Suzanne Valentine-French is licensed CC BY-NC-SA 4.0. Original source: http://dept.clcillinois.edu/psy/LifespanDevelopment.pdf.

# 13.7: Cognitive Development in Emerging and Early Adulthood

**Learning Objectives: Cognitive Development in Emerging and Established Adulthood**

- Distinguish between formal and postformal thought
- Describe dialectical thought
- Describe the changes in educational attainment and the costs of education
- Describe the benefits of education beyond high school
- Describe the stages in career development, millennial employment, and NEETS
- Describe sexism and how it affects pay, hiring, employment, and education

## Beyond Formal Operational Thought: Postformal Thought

As mentioned in Chapter 6, according to Piaget's theory adolescents acquire formal operational thought. The hallmark of this type of thinking is the ability to think abstractly or to consider possibilities and ideas about circumstances never directly experienced. Thinking abstractly is only one characteristic of adult thought, however. If you compare a 15-year-old with someone in their late 30s, you would probably find that the latter considers not only what is possible, but also what is likely. Why the change? The adult has gained experience and understands why possibilities do not always become realities. *They learn to base decisions on what is realistic and practical, not idealistic, and can make adaptive choices. Adults are also not as influenced by what others think. This advanced type of thinking is referred to as* **Postformal Thought** (Sinnott, 1998).

## Dialectical Thought:

In addition to moving toward more practical considerations, thinking in early adulthood may also become more flexible and balanced. Abstract ideas that the adolescent believes in firmly may become standards by which the adult evaluates reality. Adolescents tend to think in **dichotomies**; *ideas are true or false; good or bad, and there is no middle ground*. However, with experience, the adult comes to recognize that there is some right and some wrong in each position, some good or some bad in a policy or approach, some truth and some falsity in a particular idea. *This ability to bring together salient aspects of two opposing viewpoints or positions is referred to as* **dialectical thought** and is considered one of the most advanced aspects of postformal thinking (Basseches, 1984). Such thinking is more realistic because very few positions, ideas, situations, or people are completely right or wrong. So, for example, parents who were considered angels or devils by the adolescent eventually become just people with strengths and weaknesses, endearing qualities, and faults to the adult.

## Does everyone reach postformal or even formal operational thought?

Formal operational thought involves being able to think abstractly; however, this ability does not apply to all situations or all adults. Formal operational thought is influenced by experience and education. Some adults lead lives in which they are not challenged to think abstractly about their world. Many adults do not receive any formal education and are not taught to think abstractly about situations they have never experienced. Further, they are also not exposed to conceptual tools used to formally analyze hypothetical situations. Those who do think abstractly may be able to do so more easily in some subjects than others. For example, psychology majors may be able to think abstractly about psychology but be unable to use abstract reasoning in physics or chemistry. Abstract reasoning in a particular field requires a knowledge base we might not have in all areas. Consequently, our ability to think abstractly often depends on our experiences.

This page titled 13.7: Cognitive Development in Emerging and Early Adulthood is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Martha Lally & Suzanne Valentine-French via source content that was edited to the style and standards of the LibreTexts platform.

- 7.7: Cognitive Development in Emerging and Early Adulthood by Martha Lally & Suzanne Valentine-French is licensed CC BY-NC-SA 4.0. Original source: http://dept.clcillinois.edu/psy/LifespanDevelopment.pdf.

# 13.8: Education and Career

## Education

According to the National Center for Higher Education Management Systems (NCHEMS) (2016a, 2016b, 2016c, 2016d), in the United States:

- 84% of 18- to 24-year-olds and 88% of those 25 and older have a high school diploma or its equivalent
- 36% of 18- to 24-year-olds and 7% of 25- to 49-year-olds attend college
- 59% of those 25 and older have completed some college
- 32.5% of those 25 and older have a bachelor's degree or higher, with slightly more women (33%) than men (32%) holding a college degree (Ryan & Bauman, 2016).

The rate of college attainment has grown more slowly in the United States than in a number of other nations in recent years (OCED, 2014). This may be due to fact that the cost of attaining a degree is higher in the U.S. than in many other nations.

In 2017, 65% of college seniors who graduated from private and public nonprofit colleges had student loan debt, and nationally owed an average of $28650, a 1% decline from 2016 (The Institute for College Access & Success (TICAS), 2018). See Figure 13.8.1 for yearly comparisons.

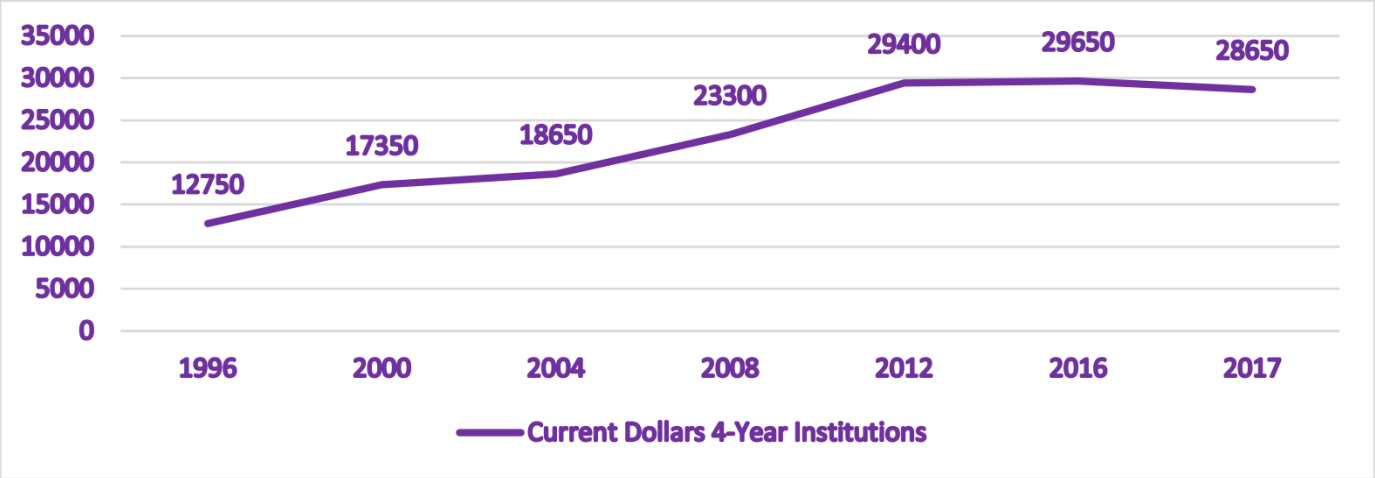



Figure 13.8.1. Average debt borrowed for graduating seniors. Adapted from TICAS, 2018.

According to the most recent TICAS annual report, the rate of debt varied widely across states, as well as between colleges. The after-graduation debt ranged from $18,850 in Utah to $38,500 in Connecticut. Low-debt states are mainly in the West, and high-debt states in the Northeast. In recent years there has been a concern about students carrying more debt and being more likely to default when attending for-profit institutions. In 2016, students at for-profit schools borrowed an average of $39,900, which was 41% higher than students at non-profit schools that year. In addition, 30% of students attending for-profit colleges default on their federal student loans. In contrast, the default level of those who attended public institutions is only 4% (TICAS, 2018).

*Table 13.8.1. Select State Data on Student Debt (2017).*

| State | Average Debt | Rank | Proportion with Debt |
|---|---|---|---|
| Illinois | 29,214 | 24 | 61% |
| Wisconsin | 29,569 | 21 | 64% |
| Michigan | 31,298 | 11 | 58% |
| Indiana | 29,561 | 22 | 57% |

| State | Average Debt | Rank | Proportion with Debt |
|---|---|---|---|
| Utah (lowest) | 18,850 | | 38% |
| Connecticut (highest) | 38,500 | | 57% |
| TICSA, 2017 Data | | | |

College student debt has become a key issue at both the state and federal political level, and some states have been taking steps to increase spending and grants to help students with the cost of college. However, 15% of the Class of 2017's college debt was owed to private lenders (TICAS, 2018). Such debt has less consumer protection, fewer options for repayment, and is typically negotiated at a higher interest rate. See Table 13.8.1 for a debt comparison of 6 U.S. States.

## Graduate School:

Larger amounts of student debt actually occur at the graduate level (Kreighbaum, 2019). In 2019, the highest average debts were concentrated in the medical fields. Average median debt for graduate programs included:

- $42,335 for a master's degree
- $95,715 for a doctoral degree
- $141,000 for a professional degree

Worldwide, over 80% of college educated adults are employed, compared with just over 70% of those with a high school or equivalent diploma, and only 60% of those with no high school diploma (OECD, 2015). Those with a college degree will earn more over the course of their lifetime. Moreover, the benefits of college education go beyond employment and finances. The OECD found that around the world, adults with higher educational attainment were more likely to volunteer, felt they had more control over their lives, and thus were more interested in the world around them. Studies of U.S. college students find that they gain a more distinct identity and become more socially competent, less dogmatic and ethnocentric compared to those not in college (Pascarella, 2006).

## Is college worth the time and investment?

College is certainly a substantial investment each year, with the financial burden falling on students and their families in the U.S., and mainly by the government in many other nations. Nonetheless, the benefits both to the individual and the society outweighs the initial costs. As can be seen in Figure 13.8.2, those in America with the most advanced degrees earn the highest income and have the lowest unemployment.

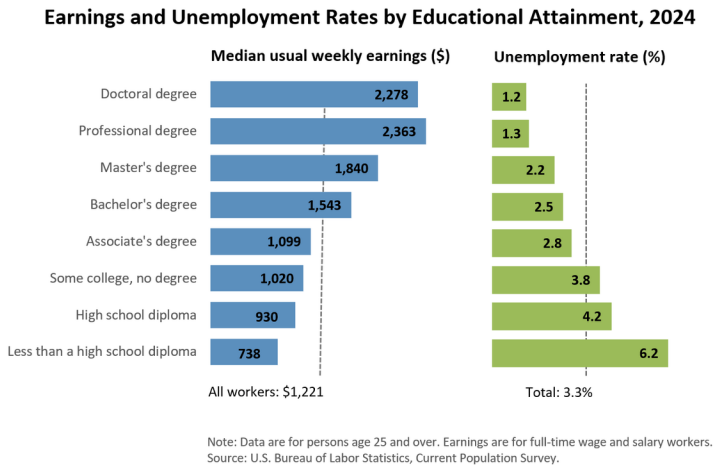



Figure 13.8.2. Image source.

# Career Development and Employment

Work plays a significant role in the lives of people, and emerging and early adulthood is the time when most of us make choices that will establish our careers. Career development has a number of stages:

- **Stage One:** As children we may select careers based on what appears glamorous or exciting to us (Patton & McMahon, 1999). There is little regard in this stage for whether we are suited for our occupational choices.
- **Stage Two:** In the second stage, teens include their abilities and limitations, in addition to the glamour of the occupation, when narrowing their choices.
- **Stage Three:** Older teens and emerging adults narrow their choices further and begin to weigh more objectively the requirements, rewards, and downsides to careers, along with comparing possible careers with their own interests, values, and future goals (Patton & McMahon, 1999). However, some young people in this stage "fall into" careers simply because these were what were available at the time, because of family pressures to pursue particular paths, or because these were high-paying jobs, rather than from an intrinsic interest in that career path (Patton & McMahon, 1999).
- **Stage Four:** Super (1980) suggests that by our mid to late thirties, many adults settle in their careers. Even though they might change companies or move up in their position, there is a sense of continuity and forward motion in their career. However, some people at this point in their working life may feel trapped, especially if there is little opportunity for advancement in a more dead-end job.

## How have things changed for Millennials compared with previous generations of early adults?

In recent years, young adults are more likely to find themselves job-hopping, and periodically returning to school for further education and retraining than in prior generations. However, researchers find that occupational interests remain fairly stable. Thus, despite the more frequent change in jobs, most people are generally seeking jobs with similar interests rather than entirely new careers (Rottinghaus et al., 2007). As of 2016, millennials became the largest generation in the labor force (Fry, 2018) (See Figure 13.8.3).

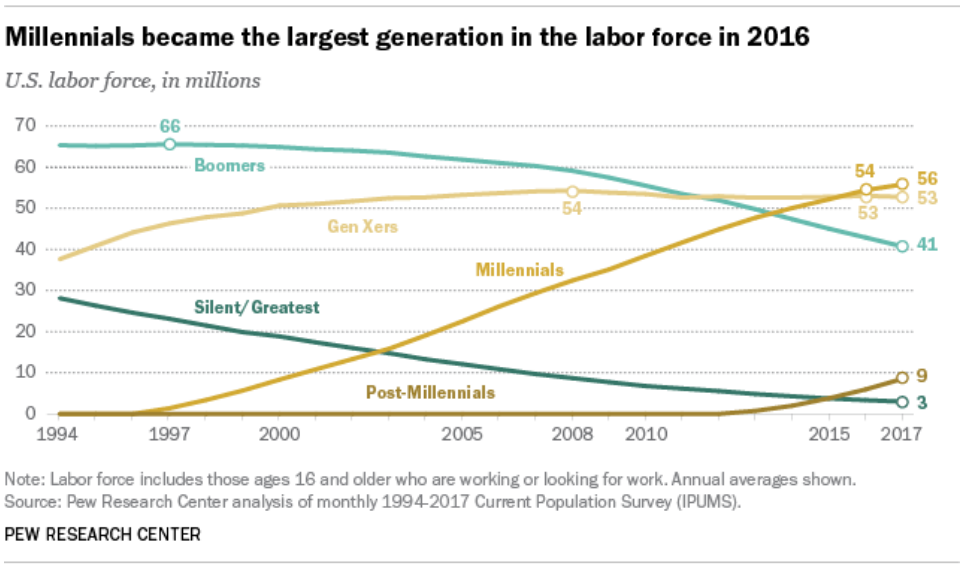



Figure 13.8.3. Image source.

Recent research also suggests that Millennials are looking for something different in their place of employment. According to a recent Gallup poll report (2016), Millennials want more than a paycheck, they want a purpose. Unfortunately, only 29% of Millennials surveyed by Gallup reported that they were "engaged" at work. In fact, they report being less engaged than Gen Xers and Baby Boomers; with 55% of Millennials saying they are not engaged at all with their job. This indifference to their workplace may explain the greater tendency to switch jobs. With their current job giving them little reason to stay, they are more likely to take any new opportunity to move on. Only half of Millennials saw themselves working at the same company a year later. Gallup estimates that this employment turnover and lack of engagement costs businesses $30.5 billion a year.

## NEETs:

Around the world, teens and young adults were some of the hardest hit by the economic downturn in recent years (Desilver, 2016). Consequently, a number of young people have become **NEETs**, *neither employed nor in education or training*. While the number of young people who are NEETs has declined more recently, there is concern that "without assistance, economically inactive young people won't gain critical job skills and will never fully integrate into the wider economy or achieve their full earning potential" (Desilver, 2016, para. 3). In parts of the world where the rates of NEETs are persistently high, there is also concern that having such large numbers of young adults with little opportunity may increase the chances of social unrest.

In the United States, in 2017 over 13% of 15 to 29 year-olds were neither employed nor in school, (Organisation for Economic Cooperation and Development, (OECD), 2019). This is down from 2013, when approximately 18.5% of this age group fit the category (Desilver, 2016). More young women than men in the United States find themselves unemployed and not in school or training for a job. Additionally, most NEETs have high school or less education, and Asians are less likely to be NEETs than any other ethnic group in the US (Desilver, 2016).

The rate of NEETs varies around the world, with higher rates found in nations that have been the hardest hit by economic recessions, and government austerity measures. The number of NEETs also varies widely between the genders, although females are more likely to be NEETs in all nations (see Table 13.8.2).

*Table 13.8.2. Percentage of Females and Males between the Ages of 15-29 who are NEETs in Select Nations.*

| | Females | Males | Overall |
|---|---|---|---|
| **Australia** | 12.80 | 9.14 | 10.9 |
| **Canada** | 11.83 | 12.46 | 12.2 |
| **Denmark** | 11.86 | 11.67 | 11.8 |
| **France** | 17.75 | 15.34 | 16.5 |
| **Germany** | 11.27 | 7.60 | 9.3 |
| **Italy** | 26.94 | 23.38 | 25.1 |
| **Mexico** | 34.21 | 7.90 | 21.2 |
| **Russia** | 16.28 | 8.66 | 12.4 |
| **Sweden** | 8.42 | 7.69 | 8 |
| **Turkey** | 39.90 | 15.08 | 27.2 |
| **United Kingdom** | 13.95 | 10.50 | 12.2 |
| **United States of America** | 15.69 | 10.89 | 13.3 |
| ***Adapted from OCED 2019*** | | | |

## What role does gender play on career and employment?

Gender also has an impact on career choices. Despite the rise in the number of women who work outside of the home, there are some career fields that are still pursued more by men than women. Jobs held by women still tend to cluster in the service sector, such as education, nursing, and child-care worker. While in more technical and scientific careers, women are greatly outnumbered by men. Jobs that have been traditionally held by women tend to have lower status, pay, benefits, and job security (Bosson et al., 2019). In recent years, women have made inroads into fields once dominated by males, and today women are almost as likely as men to become medical doctors or lawyers. Despite these changes, women are more likely to have lower-status, and thus less pay than men in these professions. For instance, women are more likely to be a family practice doctor than a surgeon or are less likely to make partner in a law firm (Ceci & Williams, 2007).

# Sexism

**Sexism or gender discrimination** *is prejudice or discrimination based on a person's sex or gender* (Bosson, Vandello, & Buckner,

2019). Sexism can affect any sex that is marginalized or oppressed in a society; however, it is particularly documented as affecting females. It has been linked to stereotypes and gender roles and includes the belief that males are intrinsically superior to other sexes and genders. Extreme sexism may foster sexual harassment, rape, and other forms of sexual violence.

Sexism can exist on a societal level, such as in hiring, employment opportunities, and education. In the United States, women are less likely to be hired or promoted in male-dominated professions, such as engineering, aviation, and construction (Blau et al., 2010; Ceci & Williams, 2011). In many areas of the world, young girls are not given the same access to nutrition, healthcare, and education as boys. Sexism also includes people's expectations of how members of a gender group should behave. For example, women are expected to be friendly, passive, and nurturing; when a woman behaves in an unfriendly or assertive manner, she may be disliked or perceived as aggressive because she has violated a gender role (Rudman, 1998). In contrast, a man behaving in a similarly unfriendly or assertive way might be perceived as strong or even gain respect in some circumstances.

**Occupational sexism** *involves discriminatory practices, statements, or actions, based on a person's sex, that occur in the workplace*. One form of occupational sexism is wage discrimination. In 2008, the Organisation for Economic Co-operation and Development (OECD) found that while female employment rates have expanded, and gender employment and wage gaps have narrowed nearly everywhere, on average women still have a 20 percent less chance to have a job. The Council of Economic Advisors (2015) found that despite women holding 49.3% of the jobs, they are paid only 78 cents for every $1.00 a man earns. It also found that despite the fact that many countries, including the U.S., have established anti-discrimination laws, these laws are difficult to enforce. A recent example of significant wage inequality occurred among athletes.



Figure 13.8.4. Image source.

## 2019 Women's World Cup:

The world witnessed the tremendous athleticism and soccer skills demonstrated by female players from 24 different countries during the 2019 Women's World Cup. Amid the cheering at the end of the final match between the United States and the Netherlands were chants of "equal pay" (Channick, 2019). Throughout the tournament, attention was focused on the discrepancy between what male soccer players earned compared to the female players. In winning the World Cup, the American women's team earned $4 million as part of a $30 million prize pool (Peterson, 2019). In contrast, the French men's team, who won the Men's World Cup in 2018, earned $38 million as part of the $400 million prize pool. The Federation of Association Football (FIFA) promised to double the prize money to $60 million for the 2023 Women's World Cup, but that still lags far behind the $440 million that will be given out for the Men's World Cup in 2022. In the United States, the women's soccer team generates more revenue and receives higher TV ratings than the men's team, yet the women get paid significantly less. By winning the 2019 Women's World Cup, each woman should receive $200,000, yet if the American men had won the 2018 Men's World Cup, each would have received $1.1 million (Hess, 2019). Because of this discrepancy, in March 2019, 28 members of the women's team filed a lawsuit against the United States Soccer Federation for gender discrimination and unequal pay (Channick, 2019). In February 2022, the U.S. women's soccer team won their case, and going forward they received back pay and were guaranteed equal pay commensurate with the men's team (Das, 2022).



Figure 13.8.5. Megan Rapinoe and Alex Morgan of the United States Women's Soccer Team. Photo by Christopher Simon/Getty-AFP.

## Factors Affecting Wage Inequality:

There are many possible explanations for the wage gap. It has been argued in the past that education may account for the wage gap. However, the wage gap exists at every of education level (Bosson et al., 2019). Men with less than high school to men with graduate degrees earn more than women with the same level of education. In addition, women now attain more associates, bachelor's, and master's degrees than men, and very similar levels of professional degrees and doctorates, according to a recent Census survey (U.S. Census Bureau, 2019). As the wage gap still exists in most occupations, education cannot be the explanation. Instead, occupational segregation is a likely contributor to the overall wage gap, as women tend to work in very different occupations than men, and those jobs tend to have lower wages. In addition, the entry of women into a field tends to reduce the wages and prestige of the job. Mandel (2013) found that jobs typically held by men who saw the biggest influx of women into those careers also saw the biggest drop in wages.

*Table 13.8.3. The Gender Wage Gap.*

| Occupation | Wage Gap |
|---|---|
| Stock clerk, order filler | 102 |
| Maid, housekeeping cleaner | 99 |
| Social worker | 94.1 |
| Registered nurse | 90.4 |
| Customer service representative | 86.8 |
| Secretary/administrative assistant | 84.5 |
| Software developer | 83.9 |
| Office supervisor | 83 |
| Waitress/waiter | 82.8 |
| Accountant, auditor | 80.8 |
| Janitor, building cleaner | 76.9 |
| Driver/sales worker/truck driver | 73.7 |
| Police and sheriff's patrol officer | 71.2 |
| Adapted from Hegewisch & Ellis (2015). | |

**Sticky floors**, *which keep low-wage workers—who are more likely to be women and minorities—from being promoted* contribute to lower wages (Bosson, et al. 2019). Women are disproportionately in low-paid occupations, such as clerical, childcare, and service workers (Hegewisch & Ellis, 2015). They also get paid less than men in the same jobs, as can be seen in Table 13.8.3. This is a list of some of the top jobs held by women (e.g., maid, social worker, nurse) and top jobs held by men (e.g., software developer, janitor, police officer) in the United States. The second column shows women's earnings as a percentage of the earnings of men in those careers. In only one occupation are women paid more than men on average: stock clerk. Men are not only being paid more in more masculine jobs, but also in jobs typically held by women.

Other factors include that more than half of men report having negotiated their salary when being hired, compared with 12% of women (Babcock et al., 2006). However, people perceive women who negotiate more negatively then they do men, as assertive women, but not men, are more likely to be penalized. Women are also more likely to have interruptions in their careers either through the birth of children, or relocation due to a change in their partner's job. Women are also less likely to relocate for the sake of their families when a better job offer comes along, and employers know this. It has been suggested that one reason why males may be offered more money is to keep them from leaving (Baldridge et al., 2006). Additionally, men are more likely to work overtime.

## Barriers to Positions of Power:

There are a few barriers to women achieving positions of power. The **glass ceiling** *is the invisible barrier that keeps women and minorities from rising to higher positions regardless of their qualifications* (Bosson et al., 2019). Women hold only 4.5% of CEO positions and 14% of top executive positions around the world (Noland et al., 2016). In addition, Noland and colleagues found that in a study of nearly 22,000 companies worldwide, in 77% of those firms only 30% of women held an executive position or board seat. There were only 11 companies, or 0.05% of all the firms studied, where women held all the executive positions and board seats. Some researchers see the root cause of this situation in the tacit discrimination based on gender conducted by current top executives and corporate directors, who are primarily male.

Often the barriers to achieving one's goals are not obvious. For instance, some argue that the gender role stereotypes cast managerial positions as "masculine". Unfortunately, when women do rise to positions of power it is often at a time when a company or country is faced with a major crisis. This is called the **glass cliff**, and it refers to *women and minorities being placed in leadership positions when the risk of failure is high*. For instance, female lawyers are more likely than their male counterparts to lead high-risk cases, and female politicians are more likely to be recommended to run in unwinnable seats (Bruckmuller et al., 2014).

## Worldwide Gender Parity:

The World Economic Forum (2017) introduced The Global Gender Gap Report in 2006 as way of tracking gender based disparities between men and women in the world. The most recent report in 2017 analyzed 144 countries on gender equality in the areas of: economic participation and opportunity, educational attainment, health and survival, and political empowerment. Countries are then ranked to create global awareness of the challenges posed by gender gaps in different areas of the world. A parity rating of 100% would mean that females and males achieved equality on these measures. Results indicated:

- 68% gender parity was found worldwide across the four areas. Specifically, there was 96% parity in health outcomes, 95% parity in educational attainment, 58% parity in economic participation, and only 23% parity in political empowerment.
- The top spots were held by smaller Western European countries, particularly the Nordic countries as Iceland (88% parity), Norway (83% parity) and Finland (82% parity) occupied the top three positions.
- The United States ranked 49$^{th}$ with 72% gender parity.
- Following the current trends, it will take 100 years for global gender parity.
- Improving gender parity is expected to provide significant economic gains for a country and closing the occupational gender gaps would be one way to achieve this.

---

This page titled 13.8: Education and Career is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Martha Lally & Suzanne Valentine-French via source content that was edited to the style and standards of the LibreTexts platform.

- 7.8: Education and Career by Martha Lally & Suzanne Valentine-French is licensed CC BY-NC-SA 4.0. Original source: http://dept.clcillinois.edu/psy/LifespanDevelopment.pdf.

# 13.9: Psychosocial Development in Emerging and Early Adulthood

**Learning Objectives: Psychosocial Development in Emerging and Early Adulthood**

- Describe the relationship between infant and adult temperament
- Explain personality in early adulthood
- Explain the five-factor model of personality
- Describe adult attachment styles
- Describe Erikson's stage of intimacy vs. isolation
- Identify the factors affecting attraction
- Differentiate among the types of love
- Describe adult lifestyles, including singlehood, cohabitation and marriage
- Describe the factors that influence parenting

## Temperament and Personality

If you remember from Chapter 3, **temperament** is defined as *the innate characteristics of the infant, including mood, activity level, and emotional reactivity, noticeable soon after birth*. Does one's temperament remain stable through the lifespan? Do shy and inhibited babies grow up to be shy adults, while the sociable child continues to be the life of the party? As with most developmental research, the answer is more complicated than a simple yes or no. Chess and Thomas (1987), who identified children as easy, difficult, slow-to-warm-up or blended, found that children identified as easy grew up to became well-adjusted adults, while those who exhibited a difficult temperament were not as well-adjusted as adults. Kagan (2002) studied the temperamental category of inhibition to the unfamiliar in children. Infants exposed to unfamiliarity reacted strongly to the stimuli and cried loudly, pumped their limbs, and had an increased heart rate. Research has indicated that these highly reactive children show temperamental stability into early childhood, and Bohlin and Hagekull (2009) found that shyness in infancy was linked to social anxiety in adulthood.

An important aspect of this research on inhibition was looking at the response of the amygdala, which is important for fear and anxiety, especially when confronted with possible threatening events in the environment. Using functional magnetic resonance imaging (FMRIs), young adults identified as strongly inhibited toddlers were found to have heightened activation of the amygdala when compared to those identified as uninhibited toddlers (Davidson & Begley, 2012).

The research does seem to indicate that temperamental stability holds for many individuals through the lifespan, yet we know that one's environment can also have a significant impact. Recall from our discussion on **epigenesis**, or *how environmental factors are thought to change gene expression by switching genes on and off*. Many cultural and environmental factors can affect one's temperament, including supportive versus abusive child-rearing, socioeconomic status, stable homes, illnesses, teratogens, etc. Additionally, individuals often choose environments that support their temperament, which in turn further strengthens them (Cain, 2012). In summary, because temperament is genetically driven, genes appear to be the major reason why temperament remains stable into adulthood. In contrast, the environment appears mainly responsible for any change in temperament (Clark & Watson, 1999).

Everybody has their own unique **personality**; *that is, their characteristic manner of thinking, feeling, behaving, and relating to others* (John et al., 2008). Personality traits refer to these characteristic, routine ways of thinking, feeling, and relating to others. Personality integrates one's temperament with cultural and environmental influences. Consequently, there are signs or indicators of these traits in childhood, but they become particularly evident when the person is an adult. Personality traits are integral to each person's sense of self, as they involve what people value, how they think and feel about things, what they like to do, and, basically, what they are like most every day throughout much of their lives.

*Table 13.9.1. Descriptions of the Big Five Personality Traits.*

| Dimension | Description | Examples of behaviors predicted by the trait |
|---|---|---|
| **Openness to experience** | A general appreciation for art, emotion, adventure, unusual ideas, imagination, curiosity, and variety of experience | Individuals who are highly open to experience tend to have distinctive and unconventional decorations in their home. They are also likely to have books on a wide variety of topics, a diverse music collection, and works of art on display. |
| **Conscientiousness** | A tendency to show self-discipline, act dutifully, and aim for achievement | Individuals who are conscientious have a preference for planned rather than spontaneous behavior. |
| **Extraversion** | The tendency to experience positive emotions and to seek out stimulation and the company of others | Extroverts enjoy being with people. In groups they like to talk, assert themselves, and draw attention to themselves. |
| **Agreeableness** | A tendency to be compassionate and cooperative rather than suspicious and antagonistic toward others; reflects individual differences in general concern for social harmony | Agreeable individuals value getting along with others. They are generally considerate, friendly, generous, helpful and willing to compromise their interests with those of others. |
| **Neuroticism** | The tendency to experience negative emotions, such as anger, anxiety, or depression; sometimes called "emotional instability" | Those who score high in neuroticism are more likely to interpret ordinary situations as threatening and minor frustrations as hopelessly difficult. They may have trouble thinking clearly, making decisions, and coping effectively with stress. |
| Adapted from John, Naumann, and Soto (2008). | | |

## Five-Factor Model:

There are hundreds of different personality traits, and all of these traits can be organized into the broad dimensions referred to as the Five-Factor Model (John et al., 2008). These five broad domains include: Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism (Think OCEAN to remember). This applies to traits that you may use to describe yourself. Table 13.9.1 provides illustrative traits for low and high scores on the five domains of this model of personality.

## Does personality change throughout adulthood?

Previously the answer was held to be no, but contemporary research shows that although some people's personalities are relatively stable over time, others' are not (Lucas & Donnellan, 2011; Roberts & Mroczek, 2008). Longitudinal studies reveal average changes during adulthood in the expression of some traits (e.g., neuroticism and openness decrease with age and conscientiousness increases) and individual differences in these patterns due to idiosyncratic life events (e.g., divorce, illness). Longitudinal research also suggests that adult personality traits, such as conscientiousness, predict important life outcomes including job success, health, and longevity (Friedman et al., 1993; Roberts et al., 2007).

The Harvard Health Letter (2012) identifies research correlations between conscientiousness and lower blood pressure, lower rates of diabetes and stroke, fewer joint problems, being less likely to engage in harmful behaviors, being more likely to stick to healthy behaviors, and more likely to avoid stressful situations. Conscientiousness also appears related to career choices, friendships, and stability of marriage. Lastly, a person possessing both self-control and organizational skills, both related to conscientiousness, may withstand the effects of aging better and have stronger cognitive skills than one who does not possess these qualities.

---

This page titled 13.9: Psychosocial Development in Emerging and Early Adulthood is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Martha Lally & Suzanne Valentine-French via source content that was edited to the style and standards of the LibreTexts platform.

- 7.9: Psychosocial Development in Emerging and Early Adulthood by Martha Lally & Suzanne Valentine-French is licensed CC BY-NC-SA 4.0. Original source: http://dept.clcillinois.edu/psy/LifespanDevelopment.pdf.

# 13.10: Attachment in Young Adulthood

Hazan and Shaver (1987) described the attachment styles of adults, using the same three general categories proposed by Ainsworth's research on young children: secure, avoidant, and anxious/ambivalent. Hazan and Shaver developed three brief paragraphs describing the three adult attachment styles. Adults were then asked to think about romantic relationships they were in and select the paragraph that best described the way they felt, thought, and behaved in these relationships (See Table 13.10.1).

*Table* 13.10.1. *Adult attachment styles according to Hazan and Shaver.*

| | ***Which of the following best describes you in your romantic relationships?*** |
|---|---|
| Secure | I find it relatively easy to get close to others and am comfortable depending on them and having them depend on me. I don't often worry about being abandoned or about someone getting too close to me. |
| Avoidant | I am somewhat uncomfortable being close to others; I find it difficult to trust them completely, difficult to allow myself to depend on them. I am nervous when anyone gets too close, and often, love partners want me to be more intimate than I feel comfortable being. |
| Anxious/ Ambivalent | I find that others are reluctant to get as close as I would like. I often worry that my partner doesn't really love me or won't stay with me. I want to merge completely with another person, and this sometimes scares people away. |
| Source | |

Bartholomew (1990) challenged the categorical view of attachment in adults and suggested that adult attachment was best described as varying along two dimensions: attachment related-anxiety and attachment-related avoidance. **Attachment-related anxiety** *refers to the extent to which an adult worries about whether their partner really loves them*. Those who score high on this dimension fear that their partner will reject or abandon them (Fraley, Hudson, Heffernan, & Segal, 2015). **Attachment-related avoidance** *refers to whether an adult can open up to others, and whether they trust and feel they can depend on others*. Those who score high on attachment-related avoidance are uncomfortable with opening up and may fear that such dependency may limit their sense of autonomy (Fraley et al., 2015). According to Bartholomew (1990) this would yield four possible attachment styles in adults: secure, dismissing, preoccupied, and fearful-avoidant (see Figure 13.10.1).

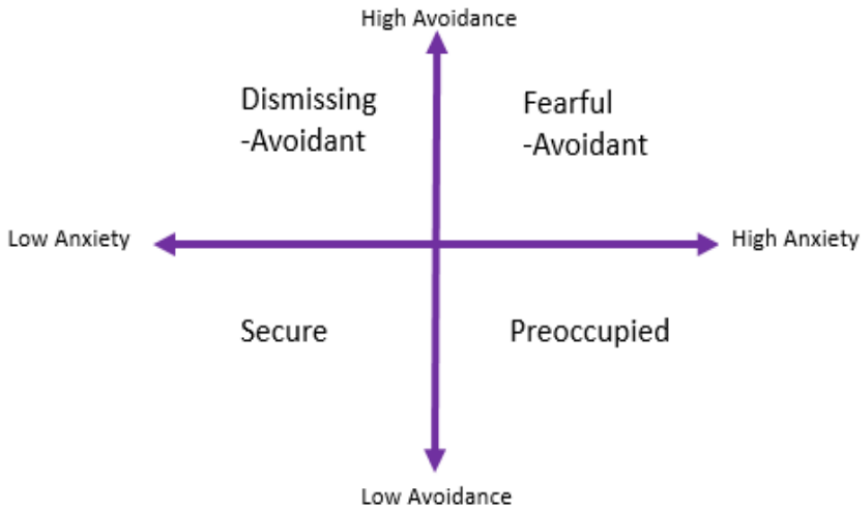



Figure 13.10.1. Four-category attachment model with two dimensions of attachment. Adapted from Fraley, et al., 2015. p. 355.

Securely attached adults score lower on both dimensions. They are comfortable trusting their partners and do not worry excessively about their partner's love for them. Adults with a dismissing style score low on attachment-related anxiety, but higher on attachment-related avoidance. Such adults dismiss the importance of relationships. They trust themselves, but do not trust others, thus do not share their dreams, goals, and fears with others. They do not depend on other people and feel uncomfortable when they have to do so.

Those with a preoccupied attachment are low in attachment-related avoidance, but high in attachment-related anxiety. Such adults are often prone to jealousy and worry that their partner does not love them as much as they need to be loved. Adults whose attachment style is fearful-avoidant score high on both attachment-related avoidance and attachment-related anxiety. These adults want close relationships, but do not feel comfortable getting emotionally close to others. They have trust issues with others and often do not trust their own social skills in maintaining relationships.

Research on attachment in adulthood has found that:

- Adults with insecure attachments report lower satisfaction in their relationships (Butzer & Campbell, 2008; Holland et al., 2012).
- Those high in attachment-related anxiety report more daily conflict in their relationships (Campbell et al., 2005).
- Those with avoidant attachment exhibit less support to their partners (Simpson et al., 2002).
- Young adults show greater attachment-related anxiety than do middle-aged or older adults (Chopik et al., 2013).
- Some studies report that young adults show more attachment-related avoidance (Schindler et al., 2010), while other studies find that middle-aged adults show higher avoidance than younger or older adults (Chopik et al., 2013).
- Young adults with more secure and positive relationships with their parents make the transition to adulthood more easily than do those with more insecure attachments (Fraley, 2013).
- Young adults with secure attachments and authoritative parents were less likely to be depressed than those with authoritarian or permissive parents or who experienced an avoidant or ambivalent attachment (Ebrahimi et al., 2017).

## Do people with certain attachment styles attract those with similar styles?

When people are asked what kinds of psychological or behavioral qualities they are seeking in a romantic partner, a large majority of people indicate that they are seeking someone who is kind, caring, trustworthy, and understanding, that is the kinds of attributes that characterize a "secure" caregiver (Chappell & Davis, 1998). However, we know that people do not always end up with others who meet their ideals. Are secure people more likely to end up with secure partners, and, vice versa, are insecure people more likely to end up with insecure partners? The majority of the research that has been conducted to date suggests that the answer is "yes." Frazier et al. (1996) studied the attachment patterns of more than 83 heterosexual couples and found that, if the man was relatively secure, the woman was also likely to be secure.

One important question is whether these findings exist because (a) secure people are more likely to be attracted to other secure people, (b) secure people are likely to create security in their partners over time, or (c) some combination of these possibilities. Existing empirical research strongly supports the first alternative. For example, when people have the opportunity to interact with individuals who vary in security in a speed-dating context, they express a greater interest in those who are higher in security than those who are more insecure (McClure et al., 2010). However, there is also some evidence that people's attachment styles mutually shape one another in close relationships. For example, in a longitudinal study, Hudson et al. (2012) found that, if one person in a relationship experienced a change in security, his or her partner was likely to experience a change in the same direction.

## Do early experiences as children shape adult attachment?

A family consisting of a mother, father, son, and daughter eat together at a dining table.

Figure 13.10.2. Image source.

The majority of research on this issue is retrospective; that is, it relies on adults' reports of what they recall about their childhood experiences. This kind of work suggests that secure adults are more likely to describe their early childhood experiences with their parents as being supportive, loving, and kind (Hazan & Shaver, 1987). A number of longitudinal studies are emerging that demonstrate prospective associations between early attachment experiences and adult attachment styles and/or interpersonal functioning in adulthood. For example, Fraley et al. (2013) found in a sample of more than 700 individuals studied from infancy to adulthood that maternal sensitivity across development prospectively predicted security at age 18. Simpson et al. (2007) found that attachment security, assessed in infancy in the strange situation, predicted peer competence in grades one to three, which, in turn, predicted the quality of friendship relationships at age 16, which, in turn, predicted the expression of positive and negative emotions in their adult romantic relationships at ages 20 to 23.

It is easy to come away from such findings with the mistaken assumption that early experiences "determine" later outcomes. To be clear, attachment theorists assume that the relationship between early experiences and subsequent outcomes is probabilistic, not deterministic. Having supportive and responsive experiences with caregivers early in life is assumed to set the stage for positive social development, but that does not mean that attachment patterns are set in stone. In short, even if an individual has far from optimal experiences in early life, attachment theory suggests that it is possible for that individual to develop well-

functioning adult relationships through a number of corrective experiences, including relationships with siblings, other family members, teachers, and close friends. Security is best viewed as a culmination of a person's attachment history rather than a reflection of his or her early experiences alone. Those early experiences are considered important, not because they determine a person's fate, but because they provide the foundation for subsequent experiences.

## Relationships with Parents and Siblings

In early adulthood the parent-child relationship has to transition toward a relationship between two adults. This involves a reappraisal of the relationship by both parents and young adults. One of the biggest challenges for parents, especially during emerging adulthood, is coming to terms with the adult status of their children. Aquilino (2006) suggests that parents who are reluctant or unable to do so may hinder young adults' identity development. This problem becomes more pronounced when young adults still reside with their parents. Arnett (2004) reported that leaving home often helped promote psychological growth and independence in early adulthood.

Sibling relationships are one of the longest-lasting bonds in people's lives. Yet, there is little research on the nature of sibling relationships in adulthood (Aquilino, 2006). What is known is that the nature of these relationships change, as adults have a choice as to whether they will maintain a close bond and continue to be a part of the life of a sibling. Siblings must make the same reappraisal of each other as adults, as parents have to with their adult children. Research has shown a decline in the frequency of interactions between siblings during early adulthood, as presumably peers, romantic relationships, and children become more central to the lives of young adults. Aquilino (2006) suggests that the task in early adulthood may be to maintain enough of a bond so that there will be a foundation for this relationship in later life. Those who are successful can often move away from the "older-younger" sibling conflicts of childhood, toward a more equal relationship between two adults. Siblings that were close to each other in childhood are typically close in adulthood (Dunn, 1984, 2007), and in fact, it is unusual for siblings to develop closeness for the first time in adulthood. Overall, the majority of adult sibling relationships are close (Cicirelli, 2009).

This page titled 13.10: Attachment in Young Adulthood is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Martha Lally & Suzanne Valentine-French via source content that was edited to the style and standards of the LibreTexts platform.

- 7.10: Attachment in Young Adulthood by Martha Lally & Suzanne Valentine-French is licensed CC BY-NC-SA 4.0. Original source: http://dept.clcillinois.edu/psy/LifespanDevelopment.pdf.

# 13.11: Relationships and Intimacy

## Erikson: Intimacy vs. Isolation

Erikson's (1950, 1968) sixth stage focuses on establishing intimate relationships or risking social isolation. Intimate relationships are more difficult if one is still struggling with identity. Achieving a sense of identity is a life-long process, as there are periods of identity crisis and stability. However, once identity is established intimate relationships can be pursued. These intimate relationships include acquaintanceships and friendships, but also the more important close relationships, which are the long-term romantic relationships that we develop with another person, for instance, in a marriage (Hendrick & Hendrick, 2000).

## Factors influencing Attraction

Because most of us enter into a close relationship at some point, it is useful to know what psychologists have learned about the principles of liking and loving. A major interest of psychologists is the study of interpersonal **attraction**, or *what makes people like, and even love, each other*.

### Similarity:

One important factor in attraction is a perceived similarity in values and beliefs between the partners (Davis & Rusbult, 2001). Similarity is important for relationships because it is more convenient if both partners like the same activities and because similarity supports one's values. We can feel better about ourselves and our choice of activities if we see that our partner also enjoys doing the same things that we do. *Having others like and believe in the same things we do makes us feel validated in our beliefs*. This is referred to as **consensual validation** and is an important aspect of why we are attracted to others.



Figure 13.11.1. Birds of a feather flock together. Image source.

### Self-Disclosure:

Liking is also enhanced by **self-disclosure**, *the tendency to communicate frequently, without fear of reprisal, and in an accepting and empathetic manner*. Friends are friends because we can talk to them openly about our needs and goals and because they listen and respond to our needs (Reis & Aron, 2008). However, self-disclosure must be balanced. If we open up about our concerns that are important to us, we expect our partner to do the same in return. If the self-disclosure is not reciprocal, the relationship may not last.

## Proximity:

Another important determinant of liking is **proximity**, or *the extent to which people are physically near us*. Research has found that we are more likely to develop friendships with people who are nearby, for instance, those who live in the same dorm that we do, and even with people who just happen to sit nearer to us in our classes (Back, Schmukle, & Egloff, 2008).

Proximity has its effect on liking through the principle of **mere exposure**, which is *the tendency to prefer stimuli (including, but not limited to people) that we have seen more frequently*. The effect of mere exposure is powerful and occurs in a wide variety of situations. Infants tend to smile at a photograph of someone they have seen before more than they smile at a photograph of someone they are seeing for the first time (Brooks-Gunn & Lewis, 1981), and people prefer side-to-side reversed images of their own faces over their normal (nonreversed) face, whereas their friends prefer their normal face over the reversed one (Mita et al., 1977). This is expected on the basis of mere exposure, since people see their own faces primarily in mirrors, and thus are exposed to the reversed face more often.

Mere exposure may well have an evolutionary basis. We have an initial fear of the unknown, but as things become familiar, they seem more similar and safer, and thus produce more positive affect and seem less threatening and dangerous (Harmon-Jones & Allen, 2001; Freitas et al., 2005). When the stimuli are people, there may well be an added effect. Familiar people become more likely to be seen as part of the ingroup rather than the outgroup, and this may lead us to like them more. Zebrowitz and her colleagues found that we like people of our own race in part because they are perceived as similar to us (Zebrowitz et al., 2007).

# Friendships

In our twenties, intimacy needs may be met in friendships rather than with partners. This is especially true in the United States today as many young adults postpone making long-term commitments to partners, either in marriage or in cohabitation. The kinds of friendships shared by women tend to differ from those shared by men (Tannen, 1990). Friendships between men are more likely to involve sharing information, providing solutions, or focusing on activities rather than discussion problems or emotions. Men tend to discuss opinions or factual information or spend time together in an activity of mutual interest. Friendships between women are more likely to focus on sharing weaknesses, emotions, or problems. Women talk about difficulties they are having in other relationships and express their sadness, frustrations, and joys. These differences in approaches lead to problems when men and women come together. She may want to vent about a problem she is having; he may want to provide a solution and move on to some activity. But when he offers a solution, she thinks he does not care. Friendships between men and women become more difficult because of the unspoken question about whether the friendships will lead to a romantic involvement. Consequently, friendships may diminish once a person has a partner or single friends may be replaced with couple friends.

# Love

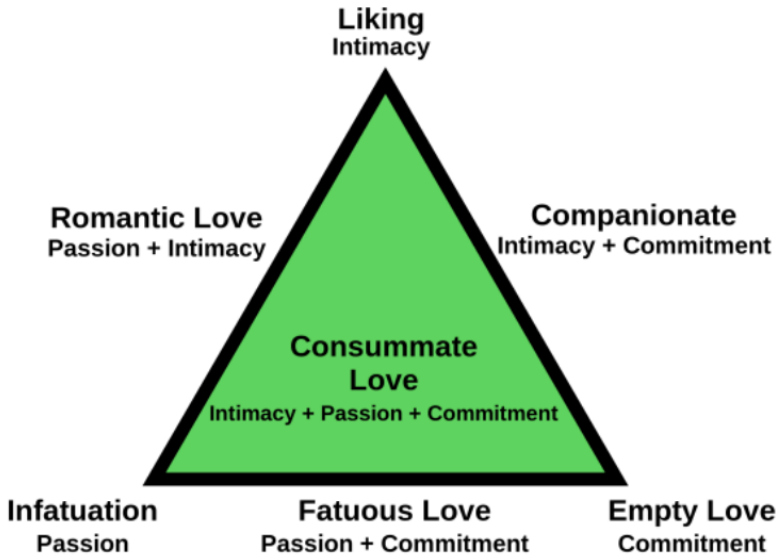



Figure 13.11.2. Sternberg's Triarchic Theory of Love.

Sternberg (1988) suggests that there are three main components of love: Passion, intimacy, and commitment (see Figure 13.11.2 ). Love relationships vary depending on the presence or absence of each of these components. **Passion** *refers to the intense, physical attraction partners feel toward one another*. **Intimacy** *involves the ability the share feelings, psychological closeness and personal thoughts with the other*. **Commitment** *is the conscious decision to stay together*. Passion can be found in the early stages of a relationship, but intimacy takes time to develop because it is based on knowledge of the partner. Once intimacy has been established, partners may resolve to stay in the relationship. Although many would agree that all three components are important to a relationship, many love relationships do not consist of all three. Let's look at other possibilities.

## Liking:

In this relationship, intimacy or knowledge of the other and a sense of closeness is present. Passion and commitment, however, are not. Partners feel free to be themselves and disclose personal information. They may feel that the other person knows them well and can be honest with them and let them know if they think the person is wrong. These partners are friends. However, being told that your partner "thinks of you as a friend" can be a devastating blow if you are attracted to them and seeking a romantic involvement.

## Infatuation:

Perhaps, this is Sternberg's version of "love at first sight". Infatuation consists of an immediate, intense physical attraction to someone. A person who is infatuated finds it hard to think of anything but the other person. Brief encounters are played over and over in one's head; it may be difficult to eat and there may be a rather constant state of arousal. Infatuation is rather short-lived, however, lasting perhaps only a matter of months or as long as a year or so. It tends to be based on physical attraction and an image of what one "thinks" the other is all about.

## Fatuous Love:

However, some people who have a strong physical attraction push for commitment early in the relationship. Passion and commitment are aspects of fatuous love. There is no intimacy and the commitment is premature. Partners rarely talk seriously or share their ideas. They focus on their intense physical attraction and yet one, or both, is also talking of making a lasting commitment. Sometimes this is out of a sense of insecurity and a desire to make sure the partner is locked into the relationship.

## Empty Love:

This type of love may be found later in a relationship or in a relationship that was formed to meet needs other than intimacy or passion, including financial needs, childrearing assistance, or attaining/maintaining status. Here the partners are committed to staying in the relationship for the children, because of a religious conviction, or because there are no alternatives. However, they do not share ideas or feelings with each other and have no physical attraction for one another.

## Romantic Love:

Intimacy and passion are components of romantic love, but there is no commitment. The partners spend much time with one another and enjoy their closeness, but have not made plans to continue. This may be true because they are not in a position to make such commitments or because they are looking for passion and closeness and are afraid it will die out if they commit to one another and start to focus on other kinds of obligations.

## Companionate Love:

Intimacy and commitment are the hallmarks of companionate love. Partners love and respect one-another and they are committed to staying together. However, their physical attraction may have never been strong or may have just died out over time. Nevertheless, partners are good friends and committed to one another.

## Consummate Love:

Intimacy, passion, and commitment are present in consummate love. This is often perceived by western cultures as "the ideal"

type of love. The couple shares passion; the spark has not died, and the closeness is there. They feel like best friends, as well as lovers, and they are committed to staying together.

This page titled 13.11: Relationships and Intimacy is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Martha Lally & Suzanne Valentine-French via source content that was edited to the style and standards of the LibreTexts platform.

- 7.11: Relationships and Intimacy by Martha Lally & Suzanne Valentine-French is licensed CC BY-NC-SA 4.0. Original source: http://dept.clcillinois.edu/psy/LifespanDevelopment.pdf.

# 13.12: Emerging and Established Adult Lifestyles

## Singlehood:

Being single is the most common lifestyle for people in their early twenties, and there has been an increase in the number of adults staying single. In 1960, only about 1 in 10 adults age 25 or older had never been married, in 2012 that had risen to 1 in 5 (Wang & Parker, 2014). While just over half (53%) of unmarried adults say they would eventually like to get married, 32% are not sure, and 13% do not want to get married. It is projected that by the time current young adults reach their mid-40s and 50s, almost 25% of them may not have married. The U.S. is not the only country to see a rise in the number of single adults.

Table 13.12.1 lists some of the reasons young adults give for staying single. In addition, adults are marrying later in life, cohabitating, and raising children outside of marriage in greater numbers than in previous generations. Young adults also have other priorities, such as education, and establishing their careers. This may be reflected by changes in attitudes about the importance of marriage. In a recent Pew Research survey of Americans, respondents were asked to indicate which of the following statements came closer to their own views:

- "Society is better off if people make marriage and having children a priority"
- "Society is just as well off if people have priorities other than marriage and children"

Slightly more adults endorsed the second statement (50%) than those who chose the first (46%), with the remainder either selecting neither, both equally, or not responding (Wang & Parker, 2014). Young adults age 18-29 were more likely to endorse this view than adults age 30 to 49; 67 percent and 53 percent respectively. In contrast, those age 50 or older were more likely to endorse the first statement (53 percent).

*Table* 13.12.1. *Reasons for Staying Single.*

| | |
|---|---|
| Have not met the right person | 30% |
| Do not have financial stability | 27% |
| Not ready to settle down | 22% |
| Too young to marry | 22% |
| Based on Data from Wang & Parker (2014), Pew Research Center. | |

## Hooking Up:

United States demographic changes have significantly affected the romantic relationships among emerging and early adults. As previously described, the age for puberty has declined, while the times for one's first marriage and first child have been pushed to older ages. This results in a "historically unprecedented time gap where young adults are physiologically able to reproduce, but not psychologically or socially ready to settle down and begin a family and child rearing," (Garcia et al., 2012, p. 172). Consequently, according to Bogle (2007, 2008) traditional forms of dating have shifted to more casual **hookups** *that involve uncommitted sexual encounters*.



Figure 13.12.1. Image source.

Even though most research on hooking up involves college students, 70% of sexually active 12–21 year olds reported having had uncommitted sex during the past year (Grello et al., 2003). Additionally, Manning et al. (2006) found that 61% of sexually active seventh, ninth, and eleventh graders reported being involved in a sexual encounter outside of a dating relationship.

## Friends with Benefits:

Hookups are different than those relationships that involve continued mutual exchange. These relationships are often referred to as **Friends with Benefits** (FWB) or "Booty Calls." These relationships *involve friends having casual sex without commitment*. Hookups do not include a friendship relationship. Bisson and Levine (2009) found that 60% of 125 undergraduates reported a FWB relationship. The concern with FWB is that one partner may feel more romantically invested than the other (Garcia et al., 2012).

## Gender Differences in Hooking Up:

When asked about their motivation for hooking up, both males and females indicated physical gratification, emotional gratification, and a desire to initiate a romantic relationship as reasons (Garcia & Reiber, 2008). Although males and females are more similar than different in their sexual behaviors, a consistent finding among the research is that males demonstrate a greater permissiveness to casual sex (Oliver & Hyde, 1993). In another study involving 16,288 individuals across 52 nations, males reported a greater desire of sexual partner variety than females, regardless of relationship status or sexual orientation (Schmitt et al., 2003). This difference can be attributed to gender role expectations for both males and females regarding sexual promiscuity. Additionally, the risks of sexual behavior are higher for females and include unplanned pregnancy, increased sexually transmitted diseases, and susceptibility to sexual violence (Garcia et al., 2012). Although hooking up relationships have become normalized for emerging adults, some research indicates that the majority of both sexes would prefer a more traditional romantic relationship (Garcia et al., 2012).

Additionally, Owen and Fincham (2011) surveyed 500 college students with experience with hookups, and 65% of women and 45% of men reported that they hoped their hookup encounter would turn into a committed relationship. Further, 51% of women and 42% of men reported that they tried to discuss the possibility of starting a relationship with their hookup partner. Casual sex has also been reported to be the norm among gay men, but they too indicate a desire for romantic and companionate relationships (Clarke & Nichols, 1972).

## Emotional Consequences of Hooking Up:

Concerns regarding hooking up behavior certainly are evident in the research literature. One significant finding is the high comorbidity of hooking up and substance use. Those engaging in non-monogamous sex are more likely to have used marijuana, cocaine, and alcohol, and the overall risks of sexual activity are drastically increased with the addition of alcohol and drugs (Garcia

et al., 2012). Regret has also been expressed, and those who had the most regret after hooking up also had more symptoms of depression (Welsh et al., 2006). Hookups were also found to lower self-esteem, increase guilt, and foster feelings of using someone or feeling used. Females displayed more negative reactions than males, and this may be due to females identifying more emotional involvement in sexual encounters than males.

Hooking up can best be explained by a biological, psychological, and social perspective. Research indicates that emerging adults feel it is necessary to engage in hooking up behavior as part of the sexual script depicted in the culture and media. Additionally, they desire sexual gratification. However, they also want a more committed romantic relationship and may feel regret with uncommitted sex.

## Online Dating:

The ways people are finding love has changed with the advent of the Internet. Nearly 50 million Americans have tried an online dating website or mobile app (Bryant & Sheldon, 2017). Online dating has also increased dramatically among those age 18 to 24. Today, one in five emerging adults report using a mobile dating app, while in 2013 only 5% did, and 27% report having used online dating, almost triple the rate in 2013 (Smith & Anderson, 2016).

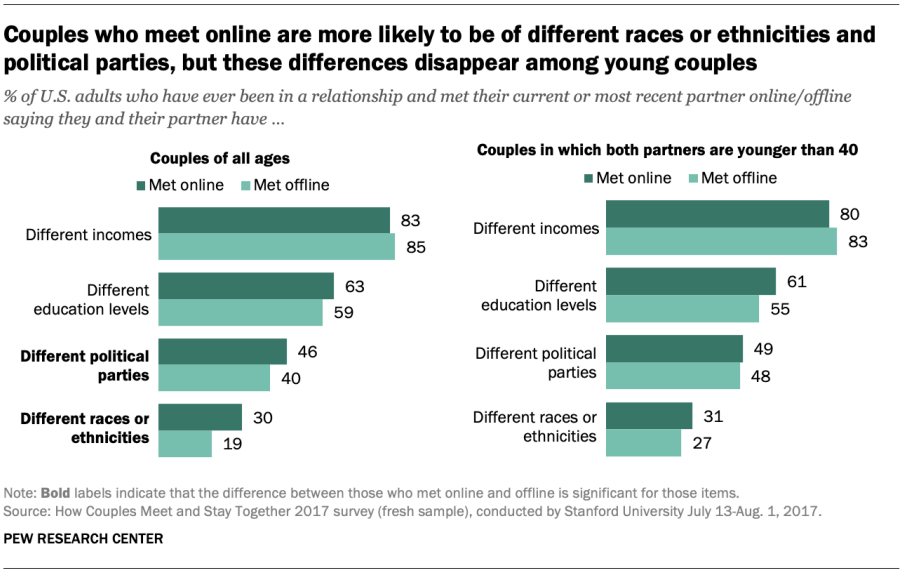



Figure 13.12.2. Image source.

According to a recent survey of couples who met online versus offline (Brown, 2019), those who met online tended to have slightly different levels of education, and political views from their partners, but, the biggest difference was that they were much more likely to come from different racial and ethnic backgrounds (see Figure 13.12.2). This is not surprising as the average age of the couples who met online was 36, while the average age of couple who met offline was 51. Young adults are more likely to a relationship with people who are different from them, regardless of how they met.

As Finkel et al. (2007) found, social networking sites and the Internet perform three important tasks. Specifically, sites provide individuals with access to a database of other individuals who are interested in meeting someone. Dating sites generally reduce issues of proximity, as individuals do not have to be close in proximity to meet. Also, they provide a medium in which individuals can communicate with others. Finally, some Internet dating websites advertise special matching strategies, based on factors such as personality, hobbies, and interests, to identify the "perfect match" for people looking for love online. Social networking sites have provided opportunities for meeting others you would not have normally met. However, social networking sites can also be forums for unsuspecting people to be duped, as the person may not be who he or she says.

Online communication differs from face-to-face interaction in a number of ways. In face-to-face meetings, people have many cues upon which to base their first impressions. A person's looks, voice, mannerisms, dress, scent, and surroundings all provide information in face-to-face meetings, but in computer-mediated meetings, written messages are the only cues provided. Fantasy is used to conjure up images of voice, physical appearance, mannerisms, and so forth. The anonymity of online involvement makes it easier to become intimate without fear of interdependence. When online, people tend to disclose more intimate details about themselves more quickly. A shy person can open up without worrying about whether or not the partner is frowning or looking away.

Someone who has been abused may feel safer in virtual relationships. It is easier to tell one's secrets because there is little fear of loss. One can find a virtual partner who is warm, accepting, and undemanding (Gwinnell, 1998), and exchanges can be focused more on emotional attraction than physical appearance.

To evaluate what individuals are looking for online, Menkin et al. (2015) reviewed data from an eHarmony.com relationship questionnaire completed by a cross-sectional representation of 5,434 new users. Their results indicated that users consistently valued communication and characteristics, such as personality and kindness over sexual attraction. Females valued communication over sexual attraction, even more when compared to males, and older users rated sexual attraction as less important than younger users. Alterovitz and Mendelsohn (2011) analyzed 600 Internet personal ads across the lifespan and found that men sought physical attractiveness and offered status related information more than women, while women were more selective than men and sought status more than men. These findings were consistent with previous research on gender differences regarding the importance of physical/sexual attraction.

Catfishing and other forms of scamming is an increasing concern for those who use dating and social media sites and apps. **Catfishing** refers to "*a deceptive activity involving the creation of a fake online profile for deceptive purposes*" (Smith et al., 2017, p. 33). Notre Dame University linebacker Manti Ta'o fell victim to a catfishing scam. The young woman "Kekua" who he had struck up an online relationship with was a hoax, and he was not the first person to have been scammed by this fictitious woman. A number of US states have passed legislation to address online impersonation, from stealing the information and creating a fake account of a real person to the creation of a fictitious persona with the intent to defraud or harm others (National Conference of State Legislatures, 2017).

## Cohabitation:

In American society, as well as in a number of other cultures, cohabitation has become increasingly commonplace (Gurrentz, 2018). For many emerging adults, cohabitation has become more commonplace than marriage, as can be seen in Figures 13.12.3. While marriage is still a more common living arrangement for those aged 25–34, cohabitation has increased, while marriage has declined, as can be seen in Figure 13.12.4.

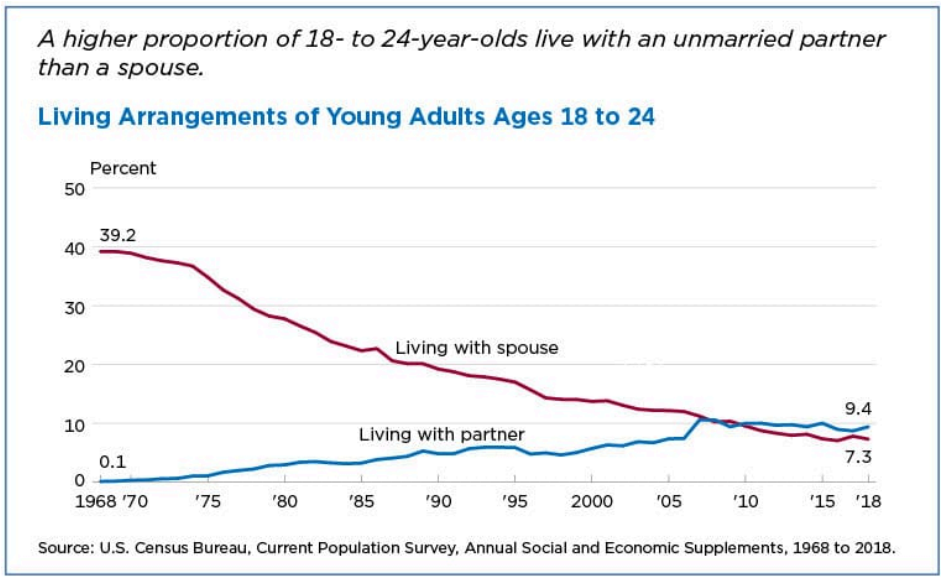



Figure 13.12.3. Image source.

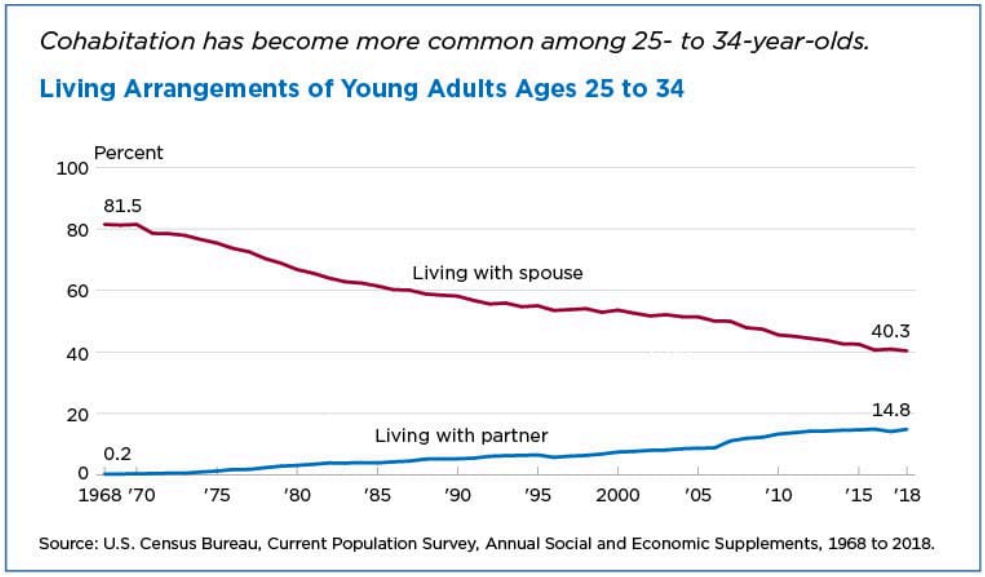



Figure 13.12.4. Image source.

Gurrentz also found that cohabitation varies by socioeconomic status. Those who are married tend to have higher levels of education, and thus higher earnings, or earning potential. Copen, Daniels, and Mosher (2013) found that from 1995 to 2010 the median length of the cohabitation relationship had increased regardless of whether the relationship resulted in marriage, remained intact, or had since dissolved. In 1995 the median length of the cohabitation relationship was 13 months, whereas it was 22 months by 2010. Cohabitation for all racial/ethnic groups except for Asian women increased between 1995 and 2010 (see Table 13.12.2). Forty percent of the cohabitations transitioned into marriage within three years, 32% were still cohabitating, and 27% of cohabitating relationships had dissolved within the three years.

*Table 13.12.2. Percentage of women by race/ethnicity whose first union was cohabitation.*

| | 1995 | 2006–2016 |
|---|---|---|
| Hispanic | 30% | 47% |
| White | 35% | 49% |
| Black | 35% | 49% |
| Asian | 22% | 22% |
| Based on data from Copen et al., 2013. | | |

Three explanations have been given for the rise of cohabitation in Western cultures. The first notes that the increase in individualism and secularism, and the resulting decline in religious observance, has led to greater acceptance and adoption of cohabitation (Lesthaeghe & Surkyn, 1988). Moreover, the more people view cohabitating couples, the more normal this relationship becomes, and the more couples who will then cohabitate. Thus, cohabitation is both a cause and the effect of greater cohabitation.

A second explanation focuses on the economic changes. The growth of industry and the modernization of many cultures has improved women's social status, leading to greater gender equality and sexual freedom, with marriage no longer being the only long-term relationship option (Bumpass, 1990). A final explanation suggests that the change in employment requirements, with many jobs now requiring more advanced education, has led to a competition between marriage and pursuing post-secondary education (Yu & Xie, 2015). This might account for the increase in the age of first marriage in many nations. Taken together, the greater acceptance of premarital sex, and the economic and educational changes would lead to a transition in relationships. Overall, cohabitation may become a step in the courtship process or may, for some, replace marriage altogether.

Similar increases in cohabitation have also occurred in other industrialized countries. For example, rates are high in Great Britain, Australia, Sweden, Denmark, and Finland. In fact, more children in Sweden are born to cohabiting couples than to married couples. The lowest rates of cohabitation in industrialized countries are in Ireland, Italy, and Japan (Benokraitis, 2005).

## Cohabitation in Non-Western Cultures, The Philippines and China:

Similar to other nations, young people in the Philippines are more likely to delay marriage, to cohabitate, and to engage in premarital sex as compared to previous generations (Williams et al., 2007). Despite these changes, many young people are still not in favor of these practices. Moreover, there is still a persistence of traditional gender norms as there are stark differences in the acceptance of sexual behavior out of wedlock for men and women in Philippine society. Young men are given greater freedom. In China, young adults are cohabitating in higher numbers than in the past (Yu & Xie, 2015). Unlike many Western cultures, in China adults with higher, rather than lower, levels of education are more likely to cohabitate. Yu and Xie suggest this may be due to seeing cohabitation as being a more "innovative" behavior and that those who are more highly educated may have had more exposure to Western culture.

# Marriage

## Marriage Worldwide:

Cohen (2013) reviewed data assessing most of the world's countries and found that marriage has declined universally during the last several decades. This decline has occurred in both poor and rich countries, however, the countries with the biggest drops in marriage were mostly rich: France, Italy, Germany, Japan and the U.S. Cohen states that the decline is not only due to individuals delaying marriage, but also because of high rates of nonmarital cohabitation. Delayed or reduced marriage is associated with higher income and lower fertility rates that are reflected worldwide.

## Marriage in the United States:

In 1960, 72% of adults age 18 or older were married, in 2010 this had dropped to barely half (Wang & Taylor, 2011). At the same time, the age of first marriage has been increasing for both men and women. In 1960, the average age for first marriage was 20 for women and 23 for men. By 2010 this had increased to 26.5 for women and nearly 29 for men (see Figure 13.12.5). Many of the explanations for increases in singlehood and cohabitation previously given can also account for the drop and delay in marriage.

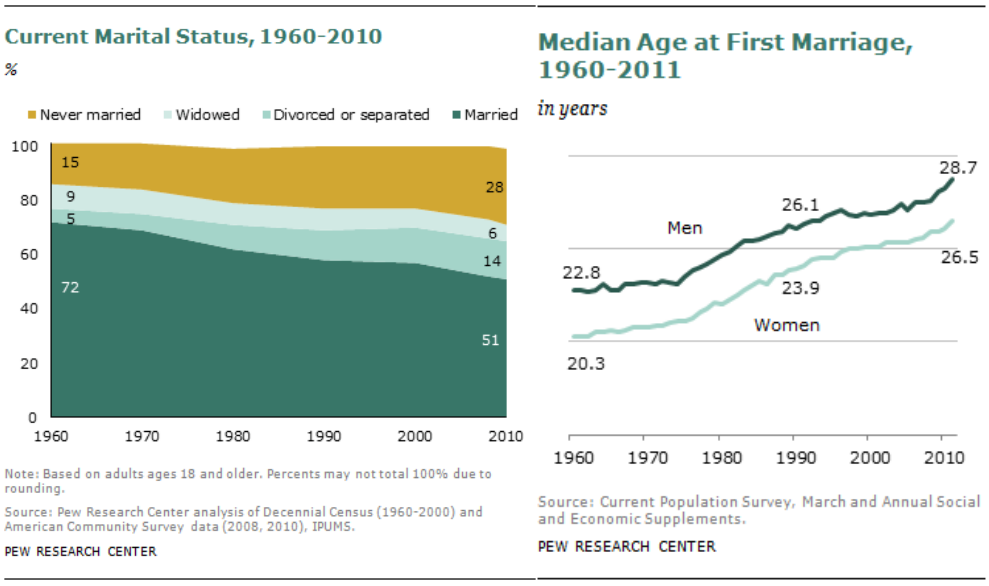



Figure 13.12.5. Marriage trends in the U.S. Image source.

## Same-Sex Marriage:

In June 26, 2015, the United States Supreme Court ruled that the Constitution guarantees same-sex marriage. The decision indicated that limiting marriage to only heterosexual couples violated the 14$^{th}$ amendment's guarantee of equal protection under the law. This ruling occurred 11 years after same-sex marriage was first made legal in Massachusetts, and at the time of the high court decision, 36 states and the District of Columbia had legalized same sex marriage. Worldwide, 29 countries currently have

national laws allowing gays and lesbians to marry (Pew Research Center, 2019). As can be seen in Table 13.12.3, these countries are located mostly in Europe and the Americas.



Figure 13.12.6. Image source.

*Table 13.12.3. Pew Research Center: Countries That Allow Gay Marriage and the Year Legalized.*

| | | | | |
|---|---|---|---|---|
| Argentina (2010) | Colombia (2016) | Germany (2017) | The Netherlands (2000) | Sweden (2009) |
| Australia (2017) | Costa Rica (2020) | Greenland (2015) | New Zealand (2013) | Switzerland (2021) |
| Austria (2019) | Denmark (2012) | Iceland (2010) | Norway (2009) | Taiwan (2019) |
| Belgium (2003) | Ecuador (2019) | Ireland (2015) | Portugal (2010) | United States (2015) |
| Brazil (2013) | England/Wales (2013) | Luxembourg (2014) | Scotland (2014) | Uruguay (2013) |
| Canada (2005) | Finland (2015) | Malta (2017) | South Africa (2006) | |
| Chile (2021) | France (2013) | Mexico (2009) | Spain (2005) | |
| Pew Research Center (2019) and the Human Rights Campaign (2022). | | | | |

## Cultural Influences on Marriage:

Many cultures have both explicit and unstated rules that specify who is an appropriate mate. Consequently, mate selection is not completely left to the individual. Rules of **endogamy** *indicate the groups we should marry within and those we should not marry in* (Witt, 2009). For example, many cultures specify that people marry within their own race, social class, age group, or religion. Endogamy reinforces the cohesiveness of the group. Additionally, these rules encourage **homogamy**, or *marriage between people who share social characteristics*. The majority of marriages in the U.S. are homogamous with respect to race, social class, age and to a lesser extent, religion. Homogamy is also seen in couples with similar personalities and interests.

## Arranged Marriages and Elopement:

Historically, marriage was not a personal choice, but one made by one's family. Arranged marriages often ensured proper transference of a family's wealth and the support of ethnic and religious customs. Such marriages were a marriage of families rather than of individuals. In Western Europe, starting in the 18$^{th}$ century the notion of personal choice in a marital partner slowly became the norm. Arranged marriages were seen as "traditional" and marriages based on love "modern". Many of these early "love" marriages were obtained by eloping (Thornton, 2005).

Around the world, more and more young couples are choosing their partners, even in nations where arranged marriages are still the norm, such as India and Pakistan. Desai and Andrist (2010) found that only 5% of the women they surveyed, aged 25–49,

had a primary role in choosing their partner. Only 22% knew their partner for more than one month before they were married. However, the younger cohort of women was more likely to have been consulted by their families before their partner was chosen than were the older cohort, suggesting that family views are changing about personal choice. Allendorf (2013) reports that this 5% figure may also underestimate young people's choice, as only women were surveyed. Many families in India are increasingly allowing sons veto power over the parents' choice of his future spouse, and some families give daughters the same say.

## Marital Arrangements in India:

As the number of arranged marriages in India is declining, elopement is increasing. Allendorf's (2013) study of a rural village in India describes the elopement process. In many cases the woman leaves her family home and goes to the man's home, where she stays with him and his parents. After a few days, a member of his family will inform her family of her whereabouts and gain consent for the marriage. In other cases, where the couple anticipate some degree of opposition to the union, the couple may run away without the knowledge of either family, often going to a relative of the male. After a few days, the couple comes back to the home of his parents, where at that point consent is sought from both families. Although in some cases families may sever all ties with their child or encourage him or her to abandon the relationship, typically, they agree to the union as the couple have spent time together overnight. Once consent has been given, the couple lives with his family and are considered married. A more formal ceremony takes place a few weeks or months later.

Arranged marriages are less common in the more urban regions of India than they are outside of the cities. In rural regions, often the family farm is the young person's only means of employment. Thus, going against family choices may carry bigger consequences. Young people who live in urban centers have more employment options. As a result, they are often less economically dependent on their families, and may feel freer to make their own choices. Thornton (2005) suggests these changes are also being driven by mass media, international travel, and general Westernization of ideas. Besides India, China, Nepal, and several nations in Southeast Asia have seen a decline in the number of arranged marriages, and an increase in elopement or couples choosing their own partners with their families' blessings (Allendorf, 2013).

## Predictors of Marital Harmony:

Advice on how to improve one's marriage is centuries old. One of today's experts on marital communication is John Gottman. Gottman (1999) differs from many marriage counselors in his belief that having a good marriage does not depend on compatibility. Rather, the way that partners communicate to one another is crucial. At the University of Washington in Seattle, Gottman has measured the physiological responses of thousands of couples as they discuss issues of disagreement. Fidgeting in one's chair, leaning closer to or further away from the partner while speaking, and increases in respiration and heart rate are all recorded and analyzed, along with videotaped recordings of the partners' exchanges. Gottman believes he can accurately predict whether or not a couple will stay together by analyzing their communication. In marriages destined to fail, partners engage in the "marriage killers": contempt, criticism, defensiveness, and stonewalling. Each of these undermines the politeness and respect that healthy marriages require. Stonewalling, or shutting someone out, is the strongest sign that a relationship is destined to fail.

Gottman, Carrere, Buehlman, Coan, and Ruckstuhl (2000) researched the perceptions newlyweds had about their partner and marriage. The Oral History Interview used in the study, which looks at eight variables in marriage including fondness/affection, we-ness, expansiveness/expressiveness, negativity, disappointment, and three aspects of conflict resolution (chaos, volatility, glorifying the struggle), was able to predict the stability of the marriage with 87% accuracy at the four- to six-year-point and 81% accuracy at the seven- to nine-year-point. Gottman (1999) developed workshops for couples to strengthen their marriages based on the results of the Oral History Interview. Interventions include increasing the positive regard for each other, strengthening their friendship, and improving communication and conflict resolution patterns.

## Accumulated Positive Deposits:

When there is a positive balance of relationship deposits, this can help the overall relationship in times of conflict. For instance, some research indicates that a husband's level of enthusiasm in everyday marital interactions was related to a wife's affection in the midst of conflict (Driver & Gottman, 2004), showing that being pleasant and making deposits can change the nature of conflict. Also, Gottman and Levenson (1992) found that couples rated as having more pleasant interactions, compared with couples with less pleasant interactions, reported marital problems as less severe, higher marital satisfaction, better physical health, and less risk for divorce. Finally, Janicki et al. (2006) showed that the intensity of conflict with a spouse predicted marital satisfaction, unless there was a record of positive partner interactions, in which case the conflict did not matter as much. Again, it seems as though having a positive balance through prior positive deposits helps to keep relationships strong even in the midst of conflict.

This page titled 13.12: Emerging and Established Adult Lifestyles is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Martha Lally & Suzanne Valentine-French via source content that was edited to the style and standards of the LibreTexts platform.

- 7.12: Emerging and Established Adult Lifestyles by Martha Lally & Suzanne Valentine-French is licensed CC BY-NC-SA 4.0. Original source: http://dept.clcillinois.edu/psy/LifespanDevelopment.pdf.

# 13.13: Intimate Partner Abuse

Violence in romantic relationships is a significant concern for women in early adulthood, as females aged 18 to 34 generally experience the highest rates of intimate partner violence. According to the most recent Violence Policy Center (2018) study, more than 1,800 women were murdered by men in 2016. The study found that nationwide, 93% of women killed by men were murdered by someone they knew, and guns were the most common weapon used. The national rate of women murdered by men in single victim/single offender incidents dropped 24%, from 1.57 per 100,000 in 1996 to 1.20 per 100,000 in 2016. However, since reaching a low of 1.08 per 100,000 women in 2014, the 2016 rate increased 11%.

Intimate partner violence is often divided into **situational couple violence**, *which is the violence that results when heated conflict escalates*, and **intimate terrorism**, *in which one partner consistently uses fear and violence to dominate the other* (Bosson, et al., 2019). Men and women equally use and experience situational couple violence, while men are more likely to use intimate terrorism than are women. Consistent with this, a national survey described below, found that female victims of intimate partner violence experience different patterns of violence, such as rape, severe physical violence, and stalking than male victims, who most often experienced more slapping, shoving, and pushing.




Figure 13.13.1. Image source.

The last National Intimate Partner and Sexual Violence Survey (NISVS) was conducted in 2015 (Smith et al., 2018). The NISVS examines the prevalence of intimate partner violence, sexual violence, and stalking among women and men in the United States over the respondent's lifetime and during the 12 months before the interview. A total of 5,758 women and 4,323 men completed the survey. Based on the results, women are disproportionately affected by intimate partner violence, sexual violence, and stalking. Results included:

- Nearly 1 in 3 women and 1 in 6 men experienced some form of contact sexual violence during their lifetime.
- Nearly 1 in 5 women and 1 in 39 men have been raped in their lifetime.
- Approximately 1 in 6 women and 1 in 10 men experienced sexual coercion (e.g., sexual pressure from someone in authority, or being worn down by requests for sex).
- Almost 1 in 5 women have been the victim of severe physical violence by an intimate partner, while 1 in 7 men have experienced the same.
- 1 in 6 women have been stalked during their lifetime, compared to 1 in 19 men.
- More than 1 in 4 women and more than 1 in 10 men have experienced contact sexual violence, physical violence, or stalking by an intimate partner and reported significant short- or long-term impacts, such as post-traumatic stress disorder symptoms and injury.
- An estimated 1 in 3 women experienced at least one act of psychological aggression by an intimate partner during their lifetime.
- Men and women who experienced these forms of violence were more likely to report frequent headaches, chronic pain,

difficulty with sleeping, activity limitations, poor physical health, and poor mental health than men and women who did not experience these forms of violence.

This page titled 13.13: Intimate Partner Abuse is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Martha Lally & Suzanne Valentine-French via source content that was edited to the style and standards of the LibreTexts platform.

- 7.13: Intimate Partner Abuse by Martha Lally & Suzanne Valentine-French is licensed CC BY-NC-SA 4.0. Original source: http://dept.clcillinois.edu/psy/LifespanDevelopment.pdf.

# 13.14: Parenthood

Parenthood is undergoing changes in the United States and elsewhere in the world. Children are less likely to be living with both parents, and women in the United States have fewer children than they did previously. The average fertility rate of women in the United States was about seven children in the early 1900s and has remained relatively stable at 2.1 since the 1970s (Hamilton et al., 2011; Martinez et al., 2012). Not only are parents having fewer children, the context of parenthood has also changed. Parenting outside of marriage has increased dramatically among most socioeconomic, racial, and ethnic groups, although college-educated women are substantially more likely to be married at the birth of a child than are mothers with less education (Dye, 2010).

People are having children at older ages, too. This is not surprising given that many of the age markers for adulthood have been delayed, including marriage, completing education, establishing oneself at work, and gaining financial independence. In 2014 the average age for American first-time mothers was 26.3 years (CDC, 2015a). The birth rate for women in their early twenties has declined in recent years, while the birth rate for women in their late thirties has risen. In 2011, 40% of births were to women ages 30 and older. For Canadian women, birth rates are even higher for women in their late 30s than in their early 20s. In 2011, 52% of births were to women ages 30 and older, and the average first-time Canadian mother was 28.5 years old (Cohn, 2013). Improved birth control methods have also enabled women to postpone motherhood. Despite the fact that young people are more often delaying childbearing, most 18- to 29-year-olds want to have children and say that being a good parent is one of the most important things in life (Wang & Taylor, 2011).

## Influences on Parenting:

Parenting is a complex process in which parents and children influence on another. There are many reasons that parents behave the way they do. The multiple influences on parenting are still being explored. Proposed influences on parenting include: Parent characteristics, child characteristics, and contextual and sociocultural characteristics. (Belsky, 1984; Demick, 1999).

### Parent Characteristics:

Parents bring unique traits and qualities to the parenting relationship that affect their decisions as parents. These characteristics include the age of the parent, gender, beliefs, personality, developmental history, knowledge about parenting and child development, and mental and physical health. Parents' personalities affect parenting behaviors. Mothers and fathers who are more agreeable, conscientious, and outgoing are warmer and provide more structure to their children. Parents who are more agreeable, less anxious, and less negative also support their children's autonomy more than parents who are anxious and less agreeable (Prinzie et al., 2009). Parents who have these personality traits appear to be better able to respond to their children positively and provide a more consistent, structured environment for their children.

Parents' developmental histories, or their experiences as children, also affect their parenting strategies. Parents may learn parenting practices from their own parents. Fathers whose own parents provided monitoring, consistent and age-appropriate discipline, and warmth were more likely to provide this constructive parenting to their own children (Kerr et al., 2009). Patterns of negative parenting and ineffective discipline also appear from one generation to the next. However, parents who are dissatisfied with their own parents' approach may be more likely to change their parenting methods with their own children.



Figure 13.14.1. Image source.

## Child Characteristics:

Parenting is **bidirectional**. *Not only do parents affect their children, children influence their parents*. Child characteristics such as gender, birth order, temperament, and health status affect parenting behaviors and roles. For example, an infant with an easy temperament may enable parents to feel more effective, as they are easily able to soothe the child and elicit smiling and cooing. On the other hand, a cranky or fussy infant elicits fewer positive reactions from his or her parents and may result in parents feeling less effective in the parenting role (Eisenberg et al., 2008). Over time, parents of more difficult children may become more punitive and less patient with their children (Clark et al., 2000; Eisenberg et al., 1999; Kiff et al., 2011). Parents who have a fussy, difficult child are less satisfied with their marriages and have greater challenges in balancing work and family roles (Hyde et al., 2004). Thus, child temperament, as previously discussed in Chapter 3, is one of the child characteristics that influences how parents behave with their children.

Another child characteristic is the gender of the child. Parents respond differently to boys and girls. Parents often assign different household chores to their sons and daughters. Girls are more often responsible for caring for younger siblings and household chores, whereas boys are more likely to be asked to perform chores outside the home, such as mowing the lawn (Grusec et al., 1996). Parents also talk differently with their sons and daughters, providing more scientific explanations to their sons and using more emotion words with their daughters (Crowley et al., 2001).

## Contextual Factors and Sociocultural Characteristics:

The parent-child relationship does not occur in isolation. Sociocultural characteristics, including economic hardship, religion, politics, neighborhoods, schools, and social support, also influence parenting. Parents who experience economic hardship are more easily frustrated, depressed, and sad, and these emotional characteristics affect their parenting skills (Conger & Conger, 2002). Culture also influences parenting behaviors in fundamental ways. Although promoting the development of skills necessary to function effectively in one's community is a universal goal of parenting, the specific skills necessary vary widely from culture to culture. Thus, parents have different goals for their children that partially depend on their culture (Tamis-LeMonda et al., 2008). Parents vary in how much they emphasize goals for independence and individual achievements, maintaining harmonious relationships, and being embedded in a strong network of social relationships. Other important contextual characteristics, such as the neighborhood, school, and social networks, also affect parenting, even though these settings do not always include both the child and the parent (Brofenbrenner, 1989). Culture is also a contributing contextual factor, as discussed previously in chapter four. For example, Latina mothers who perceived their neighborhood as more dangerous showed less warmth with their children, perhaps because of the greater stress associated with living a threatening environment (Gonzales et al., 2011). The different influences are shown in Figure 13.14.2.

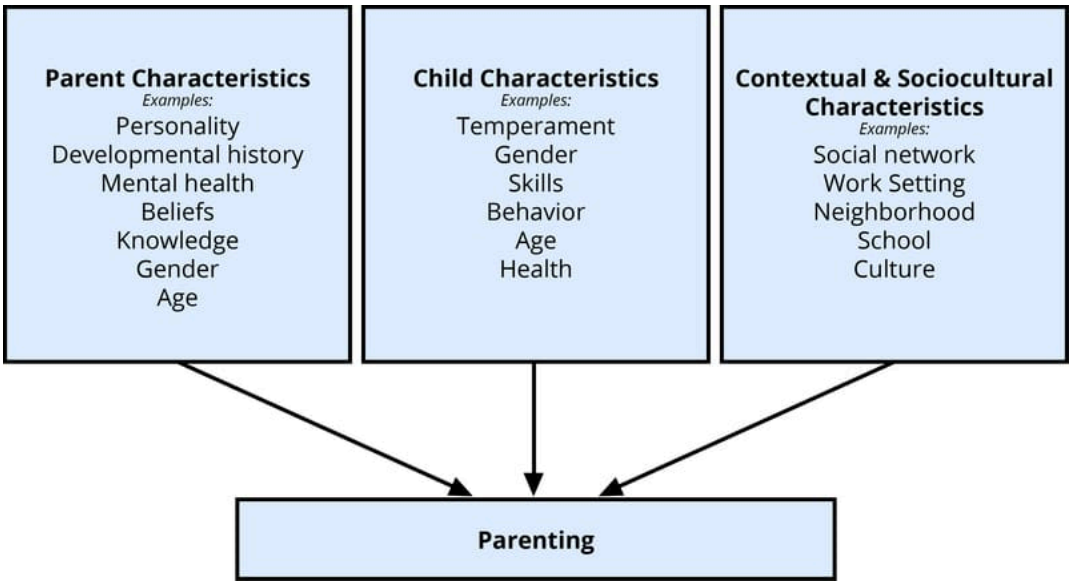



Figure 13.14.2. Influences on parenting. Image source.

This page titled 13.14: Parenthood is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Martha Lally & Suzanne Valentine-French via source content that was edited to the style and standards of the LibreTexts platform.

- 7.14: Parenthood by Martha Lally & Suzanne Valentine-French is licensed CC BY-NC-SA 4.0. Original source: http://dept.clcillinois.edu/psy/LifespanDevelopment.pdf.

# 13.C: COVID-19 Impact on Emerging and Established Adulthood

## Long Haulers:

While most people who are infected with COVID-19 completely recover within a couple of weeks, some individuals, "COVID long-haulers" experience lingering symptoms even after the acute symptoms of the infection have disappeared (Berg, 2021). This means, if tested, such individuals would now be testing negative for COVID-19, but are still experiencing debilitating effects (John Hopkins Medicine, 2021). According to one study, 72% of COVID long-haulers are between 30 and 70 years of age, and are more likely to be women (Huang et al., 2021). In addition, the Huang study found that 32% of long-haulers were initially asymptomatic, and months later started to show symptoms. This is consistent with the anecdotal evidence of medical personnel. Below are some of the more common long-term symptoms.

- **Neurological Symptoms:** Some of the more common symptoms for COVID long-haulers include cognitive impairment, sometimes referred to as brain fog, "a term used to describe the feeling of being mentally slow, fuzzy, or spaced out" (Berg, 2021, para. 18). The cause of this impairment is still an active area of study (John Hopkins Medicine, 2021).
- **Psychological Symptoms:** Anxiety, depression, or post-traumatic stress are other common symptoms (Berg, 2021). Periods of isolation during the lockdown or in the ICU, stress from financial difficulties, job loss, or death of loved ones can complicate an individual's recovery from illness.
- **Lung and Heart Problems:** COVID long-haulers may continue to experience shortness of breath, and may require ongoing oxygen treatment for weeks or even months due to lung damage (John Hopkins Medicine, 2021). Sixty percent of people who recover from COVID-19 initially show signs of heart inflammation, even in those with mild COVID-19 symptoms or no prior health issues. This inflammation can lead to a rapid heart rate and shortness of breath, common symptoms in longhaulers.
- **Other long-term effects:** Many long-haulers experience a general level of fatigue. In addition, COVID-19 can produce kidney issues, diabetes, or a worsening of preexisting kidney or diabetes problems (Berg, 2021). About 25% of people with COVID-19 who experience a loss of sense of smell and/or taste, will see an improvement in a couple of weeks, while most of the remaining patients will recover in a about a year (John Hopkins Medicine, 2021).

One intervention that has improved the health of long-haulers has been the introduction of the COVID-19 vaccine. Since the start of vaccinations, 30–40% of those individuals with lingering symptoms have identified improvements after receiving their shot (Leventis Lourgos, 2021). Theories as to why improvements may be occurring include that the vaccine may be stopping a harmful immune response, that it resets their immune system, or that the vaccine helps the immune system fight off residual amounts of the virus remaining in the body. Unfortunately, not all long-haulers exhibited improve health after the vaccine, and the reason why some benefited while others did not is not known. Regardless of the efficacy, all long-haulers are encouraged to become vaccinated with the possibility that their symptoms will improve.

## Weight Gain:

Shut at home with stockpiles of food, binge watching TV and playing video games, people jokingly referred to the lockdown as "Quarantine 15", referring to the likely weight gain (Rabin, 2021). Just how much weight did people gain during the pandemic? Lin et al. (2021) studied 269 individuals from February 1 to June 1, 2020 and noted a steady increase of 0.6 pounds every 10 days, irrespective of where they lived, or prior health issues. This meant that people gained about $1\frac{1}{2}$ to $2$ pounds every month their state was in lockdown. As the United States is only slowly returning to pre-COVID activity, it may be some time before people stop this steady weight gain.

## Mental Health:

As the pandemic continued, concerns regarding Americans' mental health became as important as their physical health. According to results obtained from a national survey completed by the Census Bureau in January 2021, 41.1% of adults in America reported symptoms of depression or anxiety (Panchal et al., 2021). In contrast, only 11% of adults reported these symptoms between January and June 2019 (see Figure $13.C.1$). Adverse symptoms included difficulty sleeping, eating issues, increased substance use, and worsening chronic health conditions.

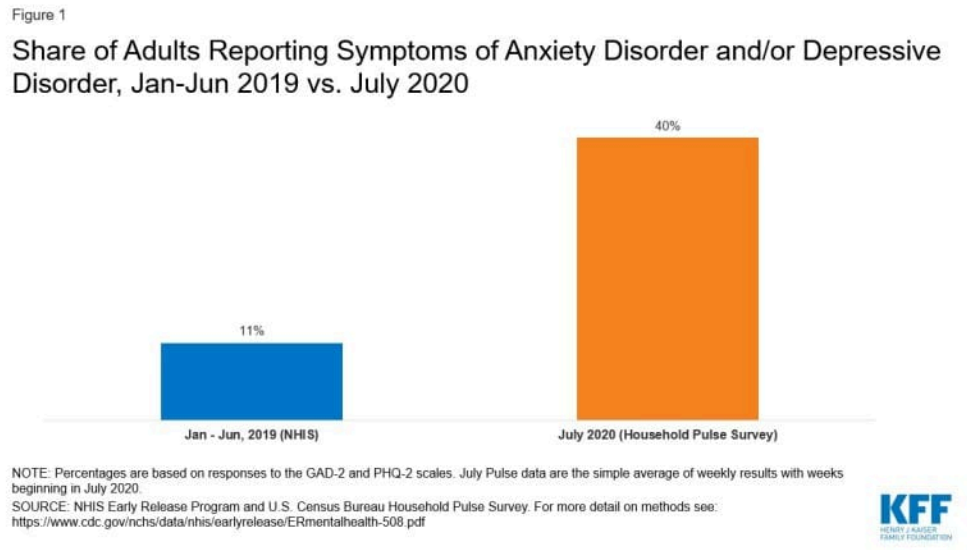



Figure 13.C.1. Image source.

Specific populations identified deteriorating mental health more than other groups. For young adults, the closure of colleges and loss of income were significant risk factors for poorer mental health (Panchal et al., 2021). The percentage of adults aged 18–24 years identifying mental health issues was the highest among all ages, at 56.2%. Prior to the pandemic, young adults were already at a higher risk than other ages and were not receiving treatment. The pandemic only increased their symptoms. Working age adults who experienced job or income loss had greater symptoms of mental health disorders than those not experiencing losses (53% vs. 32%).

Also reporting higher rates of anxiety and depression were parents of children under the age of 18, especially mothers (Panchal et al., 2021). Additionally, communities of color identified poorer mental health. Black and Hispanic communities experienced significantly higher rates of coronavirus cases and death adding to the stress of the pandemic. Black parents were also more likely to identify negative effects on their children's education compared to White parents. Lastly, essential workers, including health care providers, store employees, mail and package delivery personnel, transportation workers, and cleaning personnel, also identified poorer mental health. These essential workers were at an increased risk of contracting COVID-19, while earning less wages than other workers.

## Substance Use Disorders:

Since the beginning of the pandemic, an increased number of Americans reported starting to use, or increasing their use of, psychoactive substances to deal with the stress and emotions related to COVID-19 (Abramson, 2021). Factors contributing to the increased use include stress from the loss of wages, loneliness, general anxiety about COVID-19, and a lack of healthy alternatives due to pandemic restrictions. Additionally, clinics and community-based programs for those with substance use disorders closed making it more difficult for people to receive treatment. Overdoses also increased since the start of the pandemic, with an 18% increase in the early months of the pandemic compared to the same months the previous year. When individuals use drugs alone, they are also more likely to die as no one is there to call for help. Additionally, those with substance-use disorders are more likely to develop COVID-19, and they experience worse outcomes, including greater hospitalizations and deaths (Cahan, 2021).

## Telepsychology:

To help those with mental health and substance use disorders during the stay-at-home orders caused by the pandemic, an increase in telepsychology/telehealth emerged. Medicare, Medicaid, and private insurance companies increased reimbursing mental health clinicians for delivering services via phones and videoconferencing (Abrams, 2020). Providing mental health care remotely to those who were isolated, lacked child care, or lacked transportation had already been well established, and research indicates that telepsychology is effective in treating depression, anxiety, PTSD, and substance use disorders. Consequently, when the pandemic occurred, clinicians increased their use of telepsychology for current clients and expanded its use for new ones. A study of 2619 licensed psychologists found that only 7% of their therapy involved telepsychology before the pandemic, while 85.5% involved telepsychology during the pandemic (Pierce et al., 2021). In fact, 67.32% of psychologists indicated that they

conducted all of their clinical work with telepsychology, and post pandemic, the psychologists indicated that they would continue to perform 35% of their clinical work via telepsychology. Given the positive research outcomes and frequency of use, increased levels of telepsychology are expected in the future.

## Domestic Violence:

As the United States passed shelter-in-place directives, many advocates for women and children warned that we might face a second pandemic: domestic violence (Kofman & Garfan, 2020). Prior research revealed that during states of emergency, such as natural disasters, war and civil unrest, and health crises, the rates of domestic violence increases (Anastario et al., 2009). One month after the lockdowns, nine major metropolitan cities in the U.S. reported between a 20% and 30% increase in domestic violence calls (Tolan, 2020). Similar statistics occurred worldwide. When the Chinese government locked down cities in Hubei Province, the outbreak's epicenter, there was a surge in calls to helplines dedicated to combating domestic and sexual violence against women (Taub, 2020). Taub also reported that the emergency number for domestic violence support in Spain received 18% more calls in the first two-weeks of their lockdown, and that the French police reported a 30% increase in domestic violence calls. With shelters effectively closed off as a source of refuge for the victims of domestic violence, many had to shelter in place with their abusers until governments heeded the call for action. Taub (2020) reported that Spain and France started to use hotels to house those fleeing their abusers, and Britain granted victims the right to leave home during the lockdown.

## Emerging Adults Living with Parents:

According to the data collected by the Pew Research Center, the percentage of 18- to 29-year-olds living with their parents was at an all-time high in July 2020 at 52%, surpassing the previous peak during the Great Depression (Fry et al., 2020). The number of emerging adults living with their parents grew for men and women, metropolitan and rural residents, and all major racial and ethnic groups. In past decades, White emerging adults were less likely than Asian, Black and Hispanic emerging adults to live with their parents. With the pandemic, the number of White emerging adults living with their parent(s) actually grew more than for other racial and ethnic groups. In July 2020, more than half of Hispanic (58%) and Black (55%) emerging adults lived with their parents, compared with about half of White (49%) and Asian (51%) emerging adults. Reasons given for returning home by these emerging adults included their college campus had closed, they suffered a job loss, and/or they experienced other financial reasons.

## Work:

World-wide COVID-19 produced 4 times as many job losses as did the 2009 recession (International Labour Organization (ILO), 2021). According to ILO, there was an 8.8% drop in working hours in comparison to the last quarter of 2019 , the equivalent of the loss of 255 million full-time jobs world-wide. In the United States, unemployment in April 2020 jumped to rates not seen since the Great Depression, and a year later was still over 6% (Center on Budget and Policy Priorities, 2021). World-wide, the hardest hit were young workers, women, the self-employed, and low- and medium-skilled workers (ILO, 2021). However, positive job growth was found among higher-skilled workers, such as those in the tech industries.

## Gender Gap in Job Losses:

During a recession, men tend to experience greater job losses than do women (Gupta, 2020). The recent recession created by COVID-19 has been dubbed the "she-cession" (Boesch & Phadke, 2021) as it has proven to be the exception. The industries that were the hardest hit, that is, hospitality, childcare, and education, are dominated by female employees. In addition, many women left the workforce, or reduced their hours, because of the need to take care of their children when schools closed. Overall, women lost 5.4 million jobs, nearly 1 million jobs more than men (Boesch & Phadke, 2021). Throughout the pandemic, Hispanic, Black, and Asian women experienced greater unemployment than White women.

---

This page titled 13.C: COVID-19 Impact on Emerging and Established Adulthood is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Martha Lally & Suzanne Valentine-French via source content that was edited to the style and standards of the LibreTexts platform.

- 7.C: COVID-19 Impact on Emerging and Established Adulthood by Martha Lally & Suzanne Valentine-French is licensed CC BY-NC-SA 4.0. Original source: https://dept.clcillinois.edu/psy/LifespanDevelopment_08092022.pdf.

# 13.R: Emerging and Early Adulthood (References)


Abrams, Z. (2020). How well is telepsychology working? *Monitor on Psychology, 51*(5), 46–51.

Abramson, A. (2021). Substance use during the pandemic. *Monitor on Psychology, 52*(2), 22–25.

Allendorf, K. (2013). Schemas of marital change: From arranged marriages to eloping for love. *Journal of Marriage and Family, 75*, 453–469.

Alterovitz, S., & Mendelsohn, G. A. (2011). Partner preferences across the life span: Online dating by older adults. *Psychology of Popular Media Culture, 1*(S), 89–95.

American Psychiatric Association. (2022). Diagnostic and statistical manual of mental disorders (5th ed., text rev.). Author.

American Psychological Association. (2016). Sexual orientation and homosexuality. http://www.apa.org/topics/lgbt/orientation.aspx.

Anastario, M., Shehab, N., & Lawry, L. (2009). Increased gender-based violence among women internally displaced in Mississippi 2 years post-Hurricane Katrina. *Disaster Medicine and Public Health Preparedness, 3*, 18–26. http://dx.doi.org/10.1097/DMP.0b013e3181979c32.

Arnett, J. J. (2000). Emerging adulthood: A theory of development from late teens through the twenties. *American Psychologist, 55*, 469–480.

Arnett, J. J. (2001). Conceptions of the transitions to adulthood: Perspectives from adolescence to midlife. *Journal of Adult Development, 8*, 133–143.

Arnett, J. J. (2003). Conceptions of the transition to adulthood among emerging adults in American ethnic groups. *New Directions for Child and Adolescent Development, 100*, 63–75.

Arnett, J. J. (2004). Conceptions of the transition to adulthood among emerging adults in American ethnic groups. In J. J. Arnett & N. Galambos (Eds.), *Cultural conceptions of the transition to adulthood: New directions in child and adolescent development*. Jossey-Bass.

Arnett, J. J. (2006). G. Stanley Hall's adolescence: Brilliance and non-sense. *History of Psychology, 9*, 186–197.

Arnett, J.J. (2007). The long and leisurely route: Coming of age in Europe today. *Current History, 106*, 130–136.

Arnett, J. J. (2011). Emerging adulthood(s): The cultural psychology of a new life stage. In L.A. Jensen (Ed.), *Bridging cultural and developmental psychology: New syntheses in theory, research, and policy* (pp. 255–275). Oxford University Press.

Arnett, J. J. (2016). Does emerging adulthood theory apply across social classes? National data on a persistent question. *Emerging Adulthood, 4*(4), 227–235.

Arnett, J. J., & Taber, S. (1994). Adolescence terminable and interminable: When does adolescence end? *Journal of Youth and Adolescence, 23*, 517–537.

Aquilino, W. S. (2006). Family relationships and support systems in emerging adulthood. In J. J. Arnett & J. L. Tanner (Eds.), *Emerging adults in America: Coming of age in the 21st century* (pp. 193–217). American Psychological Association.

Babcock, L., Gelfand, M., Small, D., & Stayn, H. (2006). Gender differences in the propensity to initiate negotiations. In D. De Cremer, M. Zelenberg, & J.K. Muringham (Eds.), *Social psychology and economics* (pp. 239–262). Lawrence Erlbaum.

Back, M. D., Schmukle, S. C., & Egloff, B. (2008). Becoming friends by chance. *Psychological Science, 19*(5), 439–440.

Bailey, J. M., & Pillard, R. C. (1991). A genetic study of male sexual orientation. *Archives of General Psychiatry, 48*, 1089–1096.

Bailey, J. M., Pillard, R. C., Neale, M. C. & Agyei, Y. (1993). Heritable factors influence sexual orientation in women. *Archives of General Psychology, 50*, 217–223.

Baldridge, D.C., Eddleston, K.A., & Vega, J.F. (2006). Saying no to being uprooted: The impact of family and gender on willingness to relocate. *Journal of Occupational and Organizational Psychology, 79*, 131–149.

Balthazart, J. (2018). Fraternal birth order effect on sexual orientation explained. *Proceedings of the National Academy of Sciences of the United States of America, 115*(2), 234–236.

Bartholomew, K. (1990). Avoidance of intimacy: An attachment perspective. *Journal of Social and Personal Relationships, 7*, 147–178. DOI: 10.1037/0022-3524.61.2.226.

Basseches, M. (1984). *Dialectical thinking and adult development*. Ablex Pub.

Bauermeister, J. A., Johns, M. M., Sandfort, T. G., Eisenberg, A., Grossman, A. H., & D'Augelli, A. R. (2010). Relationship trajectories and psychological well-being among sexual minority youth. *Journal of Youth and Adolescence, 39*(10), 1148–1163.

Belsky, J. (1984). The determinants of parenting: A process model. *Child Development, 55*, 83–96.

Benokraitis, N. V. (2005). *Marriages and families: Changes, choices, and constraints* (5th ed.). Pearson.

Berg, S. (2021). *COVID long-haulers: Questions patients have about symptoms*. American Medical Association. https://www.ama-assn.org/delivering-care/public-health/covid-long-haulers-questions-patients-have-about-symptoms.

Berger, K. S. (2005). The developing person through the life span (6th ed.). Worth.

Bisson, M. A., & Levine, T. R. (2009). Negotiating a friends with benefits relationship. *Archives of Sexual Behavior, 38*, 66–73. doi:10.1007/s10508-007-9211-2.

Blanchard, R. (2001). Fraternal birth order and the maternal immune hypothesis of male homosexuality. *Hormones and Behavior, 40*, 105–114.

Blau, F. D., Ferber, M. A., & Winkler, A. E. (2010). *The economics of women, men and work* (6th ed.). Prentice Hall.

Boesch, D., & Phadke, S. (2021). *When women lose all the jobs*. Center for American Progress. https://cdn.americanprogress.org/content/uploads/2021/01/29041540/WomenLoseJobs-brief.pdf?ga=2.135942131.314380208.1622491094-342791501.1622491094.

Bogaert, A. F. (2015). Asexuality: What it is and why it matters. *Journal of Sex Research, 52*(4), 362–379. doi:10.1080/00224499.2015.1015713.

Bogle, K. A. (2007). The shift from dating to hooking up in college: What scholars have missed. *Sociology Compass, 1/2*, 775–788.

Bogle, K. A. (2008). *Hooking up: Sex, dating, and relationships on campus*. University Press.

Bohlin, G., & Hagekull, B. (2009). Socio-emotional development from infancy to young adulthood. *Scandinavian Journal of Psychology, 50*, 592–601.

Borgogna, N. C., McDermott, R. C., Aita, S. L., & Kridel, M. M. (2019). Anxiety and depression across gender and sexual minorities: Implications for transgender, gender nonconforming, pansexual, demisexual, asexual, queer and questioning individuals. *Psychology of Sexual Orientation and Gender Diversity,* 6(1), 54–63.

Bosson, J. K., Vandello, J., & Buckner, C. (2019). *The psychology of sex and gender*. Sage.

Boundless. (2016). Physical development in adulthood. *Boundless Psychology*. https://www.boundless.com/psychology/textbooks/boundless-psychology-textbook/human-development-14/early-and-middle-adulthood-74/physical-development-in-adulthood-287-12822/.

Bronfenbrenner, U. (1989). Ecological systems theory. In R. Vasta (Ed.), *Annals of Child Development, Vol. 6* (pp. 187–251). JAI

Press.

Brooks-Gunn, J., & Lewis, M. (1981). Infant social perception: Responses to pictures of parents and strangers. *Developmental Psychology, 17*(5), 647–649.

Brown, A. (2019). *Couples who meet online are more diverse than those who meet in other ways, largely because they're younger*. Pew Research Center. https://www.pewresearch.org/fact-tank/2019/06/24/couples-who-meet-online-are-more-diverse-than-those-who-meet-in-other-ways-largely-because-theyre-younger/.

Bruckmuller, S., Ryan, M.K., Floor, R., & Haslam, S.A. (2014). The glass cliff: Examining why women occupy leadership positions in precarious circumstances. In S. Kumra, R. Simpson, & R.J. Burke (Eds.), *Oxford handbook of gender in organizations* (pp. 314–331). Oxford University Press.

Bryant, K. & Sheldon, P. (2017). Cyber dating in the age of mobile apps: Understanding motives, attitudes, and characteristics of users. *American Communication Journal, 19*(2), 1–15.

Bumpass, L. L. (1990). What's happening to the family? Interactions between demographic and institutional change. *Demography, 27*(4), 483–498.

Butzer, B., & Campbell, L. (2008). Adult attachment, sexual satisfaction, and relationship satisfaction: A study of married couples. *Personal Relationships, 15*, 141–154.

Cahan, E. (2021, February 24). Pandemic fueled alcohol abuse creates wave of hospitalizations for liver disease. *Chicago Tribune*. https://www.chicagotribune.com/lifes...cgy-story.html

Cain, S. (2012). *Quiet*. Crown Publishing Group.

Campbell, L., Simpson, J. A., Boldry, J., & Kashy, D. A. (2005). Perceptions of conflict and support in romantic relationships: The role of attachment anxiety. *Journal of Personality and Social Psychology, 88*, 510–532.

Carlson, N. R. (2011). *Foundations of behavioral neuroscience* (8th ed.). Pearson Education.

Carroll, J. L. (2007). *Sexuality now: Embracing diversity* (2nd ed.). Thomson Learning.

Carroll, J. L. (2016). *Sexuality now: Embracing diversity* (5th ed.). Cengage Learning.

Ceci, S. J., & Williams, W. M. (2011). Understanding current causes of women's under-representation in science. *Proceedings of the National Academy of Science of the United States of America, 108*(8), 3157–3162. doi:10.1073/pnas.1014871108.

Center on Budget and Policy Priorities. (2021). *Tracking the COVID-19 economy's effects on food, housing, and employment hardships*. https://www.cbpp.org/research/poverty-and-inequality/tracking-the-covid-19-economys-effects-on-food-housing-and.

Centers for Disease Control and Prevention (2014). *Reported STDs in the United States*. http://www.cdc.gov/std/stats14/std-trends-508.pdf.

Centers for Disease Control and Prevention (2015a). *Births and natality*. http://www.cdc.gov/nchs/fastats/births.htm.

Centers for Disease Control and Prevention. (2015b). *Obesity and overweight*. http://www.cdc.gov/nchs/fastats/obesity-overweight.htm.

Centers for Disease Control and Prevention. (2016). *Adult obesity causes and consequences*. http://www.cdc.gov/obesity/adult/causes.html.

Channick, R. (2019, July 9). Putting gender pay gap onto a broader stage. *The Chicago Tribune*, pp. 1–2.

Chappell, K. D., & Davis, K. E. (1998). Attachment, partner choice, and perception of romantic partners: An experimental test of the attachment-security hypothesis. *Personal Relationships, 5*, 327–342.

Chess, S., & Thomas, A. (1987). *Origins and evolution of behavior disorders*. Harvard University Press.

Chopik, W. J., Edelstein, R. S., & Fraley, R. C. (2013). From the cradle to the grave: Age differences in attachment from early adulthood to old age. *Journal or Personality, 81* (2), 171–183. DOI: 10.1111/j. 1467-6494.2012.00793.

Cicirelli, V. (2009). Sibling relationships, later life. In D. Carr (Ed.), *Encyclopedia of the life course and human development*. Cengage.

Clark, L. A., Kochanska, G., & Ready, R. (2000). Mothers' personality and its interaction with child temperament as predictors of parenting behavior. *Journal of Personality and Social Psychology, 79*, 274–285.

Clark, L. A. & Watson, D. (1999). Temperament: A new paradigm for trait theory. In L.A. Pervin & O. P. John (Eds.), *Handbook of personality*. Guilford.

Clarke, L., & Nichols, J. (1972). *I have more fun with you than anybody*. St. Martin's.

Cohen, P. (2013). *Marriage is declining globally. Can you say that?* https://familyinequality.wordpress.com/2013/06/12/marriage-is-declining/.

Cohen-Bendehan, C. C., van de Beek, C. & Berenbaum, S. A. (2005). Prenatal sex hormone effects on child and adult sex-typed behavior: Methods and findings. *Neuroscience and Biobehavioral Reviews, 47*, 230–237.

Cohn, D. (2013). *In Canada, most babies now born to women 30 and older*. Pew Research Center.

Conger, R. D., & Conger, K. J. (2002). Resilience in Midwestern families: Selected findings from the first decade of a prospective longitudinal study. *Journal of Marriage and Family, 64*, 361–373.

Copen, C.E., Daniels, K., & Mosher, W.D. (2013). *First premarital cohabitation in the United States: 2006-2010 National Survey of Family Growth*. National health statistics reports; no 64. National Center for Health Statistics.

Council of Economic Advisors. (2015). *Gender pay gap: Recent trends and explanations*. https://www.whitehouse.gov/sites/default/files/docs/equal_pay_issue_brief_final.pdf.

Crowley, K., Callanan, M. A., Tenenbaum, H. R., & Allen, E. (2001). Parents explain more often to boys than to girls during shared scientific thinking. *Psychological Science, 12*, 258–261.

Das, A. (2022, May 18). *U.S. Soccer and Top Players Agree to Guarantee Equal Pay*. https://www.nytimes.com/2022/05/18/sports/soccer/us-soccer-equal-pay-deal.html?searchResultPosition=1.

Davidson, R. J. & Begley, S. (2012). *The emotional life of your brain*. Penguin.

Davis, J. L., & Rusbult, C. E. (2001). Attitude alignment in close relationships. *Journal of Personality & Social Psychology, 81*(1), 65–84.

Demick, J. (1999). Parental development: Problem, theory, method, and practice. In R. L. Mosher, D. J. Youngman, & J. M. Day (Eds.), *Human development across the life span: Educational and psychological applications* (pp. 177–199). Praeger.

Desai, S., & Andrist, L. (2010). Gender scripts and age at marriage in India. *Demography, 47*, 667–687. doi:10.1353/dem.0.0118.

Desilver, D. (2016). *Millions of young people in the US and EU are neither working nor learning*. Pew Research Center (January 28, 2016). http://www.pewresearch.org/fact-tank/2016/01/28/us-eu-neet-population/.

Diamond, M. (2002). Sex and gender are different: Sexual identity and gender identity are different. *Clinical Child Psychology and Psychiatry, 7*(3), 320–334.

Douglass, C. B. (2007). From duty to desire: Emerging adulthood in Europe and its consequences. *Child Development Perspectives, 1*, 101–108.

Driver, J., & Gottman, J. (2004). Daily marital interactions and positive affect during marital conflict among newlywed couples. *Family Process, 43*, 301–314.

Dunn, J. (1984). Sibling studies and the developmental impact of critical incidents. In P.B. Baltes & O.G. Brim (Eds.), *Life-span*

*development and behavior* (Vol 6). Academic Press.

Dunn, J. (2007). Siblings and socialization. In J. E. Grusec & P. D. Hastings (Eds.), *Handbook of socialization*. Guilford.

Dye, J. L. (2010). *Fertility of American women: 2008. Current Population Reports*. http://www.census.gov/prod/2010pubs/p20-563.pdf.

Ebrahimi, L., Amiri, M., Mohamadlou, M., & Rezapur, R. (2017). Attachment stules, parenting styles, and depression. *International Journal of Mental Health, 15*, 1064–1068.

Eisenberg, N., Fabes, R. A., Shepard, S. A., Guthrie, I.K., Murphy, B.C., & Reiser, M. (1999). Parental reactions to children 's negative emotions: Longitudinal relations to quality of children's social functioning. *Child Development, 70*, 513–534.

Eisenberg, N., Hofer, C., Spinrad, T., Gershoff, E., Valiente, C., Losoya, S. L., Zhou, Q., Cumberland, A., Liew, J., Reiser, M., & Maxon, E. (2008). Understanding parent-adolescent conflict discussions: Concurrent and across-time prediction from youths' dispositions and parenting. *Monographs of the Society for Research in Child Development, 73*, (Serial No. 290, No. 2), 1–160.

Erikson, E. H. (1950). *Childhood and society*. Norton.

Erikson, E. H. (1968). *Identity: Youth and crisis*. Norton.

Finkel, E. J., Burnette J. L., & Scissors L. E. (2007). Vengefully ever after: Destiny beliefs, state attachment anxiety, and forgiveness. *Journal of Personality and Social Psychology, 92*, 871–886.

Fraley, R. C. (2013). *Attachment through the life course*. In R. Biswas-Diener & E. Diener (Eds), Noba textbook series: Psychology. DEF publishers. http://nobaproject.com.

Fraley, R. C., Hudson, N. W., Heffernan, M. E., & Segal, N. (2015). Are adult attachment styles categorical or dimensional? A taxometric analysis of general and relationship-specific attachment orientations. *Journal of Personality and Social Psychology, 109*(2), 354–368.

Fraley, R. C., Roisman, G. I., Booth-LaForce, C., Owen, M. T., & Holland, A. S. (2013). Interpersonal and genetic origins of adult attachment styles: A longitudinal study from infancy to early adulthood. *Journal of Personality and Social Psychology, 104*, 817–838.

Frazier, P. A, Byer, A. L., Fischer, A. R., Wright, D. M., & DeBord, K. A. (1996). Adult attachment style and partner choice: Correlational and experimental findings. *Personal Relationships, 3*, 117–136.

Freitas, A. L., Azizian, A., Travers, S., & Berry, S. A. (2005). The evaluative connotation of processing fluency: Inherently positive or moderated by motivational context? *Journal of Experimental Social Psychology, 41*(6), 636–644.

Frieden, T. (2011, January 14). *Morbidity and Mortality Weekly Report for the Centers for Disease Control* (United States, Center for Disease Control). http://www.cdc.gov/mmwr/preview/mmwrhtml/su6001al.htm?s_su6001al_w.

Friedman, H. S., Tucker, J. S., Tomlinson-Keasey, C., Schwartz, J. E., Wingard, D. L., & Criqui, M. H. (1993). Does childhood personality predict longevity? *Journal of Personality and Social Psychology, 65*, 176–185. doi:10.1037/00223514.65.1.176.

Fry, R. (2016). *For first time in modern era, living with parents edges out other living arrangements for 18- to 34-year-olds*. Pew Research Center.

Fry, R. (2018). *Millenials are the largest generation in the U. S. labor force*. https://www.pewresearch.org/fact-tank/2018/04/11/millennials-largest-generation-us-labor-force/.

Fry, R., Passel, J. S., & Cohn, D. (2020). *A majority of young adults in the U.S. live with their parents for the first time since the Great Depression*. Pew Research Center. https://www.pewresearch.org/fact-tank/2020/09/04/a-majority-of-young-adults-in-the-u-s-live-with-their-parents-for-the-first-time-since-the-great-depression/.

Fryar, C. D., Carroll, M. D., & Ogden, C. L. (2014). *Prevalence of overweight, obesity, and extreme obesity among adults: United States, 1960–1962 through 2011–2012*. http://www.cdc.gov/nchs/data/hestat/obesity_adult_11_12/obesity_adult_11_12.htm.

Gallup Poll Report (2016). What millennials want from work and life? *Business Journal*. http://www.gallup.com/businessjournal/191435/millennials-work-life.aspx.

Garcia, J. R., & Reiber, C. (2008). Hook-up behavior: A biopsychosocial perspective. *The Journal of Social, Evolutionary, and Cultural Psychology, 2*, 192–208.

Garcia, J. R., Reiber, C., Massey, S. G., & Merriwether, A. M. (2012). Sexual hookup culture: A review. *Review of General Psychology, 16*(2), 161–176. doi:10.1037/a0027911.

Gates, G. J. (2011). *How many people are lesbian, gay, bisexual and transgender?* http://williamsinstitute.law.ucla.edu/research/census-lgbt-demographics-studies/how-many-people-are-lesbian-gay-bisexual-and-transgender/.

Gonzales, N. A., Coxe, S., Roosa, M. W., White, R. M. B., Knight, G. P., Zeiders, K. H., & Saenz, D. (2011). Economic hardship, neighborhood context, and parenting: Prospective effects on Mexican-American adolescent's mental health. *American Journal of Community Psychology, 47*, 98–113. doi: 10.1007/s10464-010-9366-1.

Gottman, J. M. (1999). *Couple's handbook: Marriage Survival Kit Couple's Workshop*. Gottman Institute.

Gottman, J. M., Carrere, S., Buehlman, K. T., Coan, J. A., & Ruckstuhl, L. (2000). Predicting marital stability and divorce in newlywed couples. *Journal of Family Psychology, 14*(1), 42–58.

Gottman, J. M., & Levenson, R. W. (1992). Marital processes predictive of later dissolution: Behavior, physiology and health. *Journal of Personality and Social Psychology, 63*, 221–233.

Grello, C. M., Welsh, D. P., Harper, M. S., & Dickson, J. W. (2003). Dating and sexual relationship trajectories and adolescent functioning. *Adolescent & Family Health, 3*, 103–112.

Grusec, J. E., Goodnow, J. J., & Cohen, L. (1996). Household work and the development of concern for others. *Developmental Psychology, 32*, 999–1007.

Gupta, A. H. (2020, March 12). Why women may face a greater risk of catching coronavirus. *The New York Times*. https://www.nytimes.com/2020/03/12/us/women-coronavirus-greater-risk.html.

Gurrentz, B. (2018). For young adults, cohabitation is up, and marriage is down. *U.S. Census Bureau*. https://www.census.gov/library/stories/2018/11/cohabitation-is-up-marriage-is-down-for-young-adults.html.

Gwinnell, E. (1998). *Online seductions: Falling in love with strangers on the Internet*. Johnson Publishing.

Hales, C.M., Carroll, M.D., Fryar, C.D., & Ogden, C.L. (2017). *Prevalence of obesity among adults and youth: United States, 2015–2016. NCHS data brief, no 288*. National Center for Health Statistics.

Hamilton, B. E., Martin, J. A., & Ventura, S. J. (2011). Births: Preliminary data for 2010. *National Vital Statistics Reports, 60*(2). U.S. Department of Health and Human Services.

Harmon-Jones, E., & Allen, J. J. B. (2001). The role of affect in the mere exposure effect: Evidence from psychophysiological and individual differences approaches. *Personality & Social Psychology Bulletin, 27*(7), 889–898.

Harvard Health Letter. (2012). *Raising your conscientiousness*. https://www.health.harvard.edu/staying-healthy/raising-your-conscientiousness.

Hatfield, E., & Rapson, R. L. (2006). *Love and sex: Cross-cultural perspectives*. University Press of America.

Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology, 52*(3), 511–524.

Hegewisch, A., & Ellis, E. (2015). *The gender wage gap by occupation 2014 and by race and ethnicity*. Institute for Women's Policy Research. http://www.iwpr.org/publications/pubs/the-gender-wage-gap-by-occupation-2014-and-by-race-and-ethnicity.

Hendrick, C., & Hendrick, S. S. (Eds.). (2000). *Close relationships: A sourcebook*. Sage.

Heron, M. P., & Smith, B. L. (2007). Products - Health E Stats - Homepage. *Centers for Disease Control and Prevention*. http://www.cdc.gov/nchs/products/pubs/pubd/hestats/leadingdeath03/leadingdeath03.htm.

Hess, A. (2019). *Today is the Women's World Cup final between the US and Netherlands–here's how much money is on the line*. https://www.cnbc.com/2019/07/04/womens-world-cup-final-how-much-money-is-on-the-line.html.

Holland, A. S., Fraley, R. C., & Roisman, G. I. (2012). Attachment styles in dating couples: Predicting relationship functioning over time. *Personal Relationships, 19*, 234–246. doi: 10.1111/j.1475-6811.2011.01350.x.

Huang, Y., Pinto, M. D., Borelli, J. L., Mehrabadi, M. A., Abrihim, H., Dutt, N., Lambert, N. L. Nurmi, E. L. Chakraborty, R., Rahmani, A. M., & Downs, C. A. (2021). COVID symptoms, symptom clusters, and predictors for becoming a long- hauler: Looking for clarity in the haze of the pandemic, *medRxiv*, Advance online publication. https://doi.org/10.1101/2021.03.03.21252086.

Hudson, N. W., Fraley, R. C., Vicary, A. M., & Brumbaugh, C. C. (2012). *Attachment coregulation: A longitudinal investigation of the coordination in romantic partners' attachment styles*. Manuscript under review.

Human Rights Campaign. (2022). *Marriage equality around the world*. https://www.hrc.org/resources/marriage-equality-around-the-world.

Hyde, J. S., Bigler, R., Joel, D., Tate, C., & van Anders, S. (2019). The future of sex and gender in psychology: Five challenges to the gender binary. *American Psychologist, 74*(2), 171–193.

Hyde, J. S., Else-Quest, N. M., & Goldsmith, H. H. (2004). Children's temperament and behavior problems predict their employed mothers' work functioning. *Child Development, 75*, 580–594.

Institute for College Access & Success. (2018). *Student debt and the class of 2017*. https://ticas.org/posd/home.

International Labour Organization. (2021). *ILO Monitor: COVID-19 and the world of work*. https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/briefingnote/wcms_767028.pdf.

Janicki, D., Kamarck, T., Shiffman, S., & Gwaltney, C. (2006). Application of ecological momentary assessment to the study of marital adjustment and social interactions during daily life. *Journal of Family Psychology, 20*, 168–172.

John, O. P., Naumann, L. P., & Soto, C. J. (2008). Paradigm shift to the integrative Big Five trait taxonomy: History, measurement, and conceptual issues. In O. P. John, R. R. Robins, & L. A. Pervin (Eds.), *Handbook of personality. Theory and research* (3rd ed., pp. 114–158). Guilford Press.

John, O. P., Robins, R. W., & Pervin, L. A. (2008). *Handbook of personality. Theory and research* (3rd ed.). Guilford Press.

John Hopkins Medicine. (2021). *COVID "long-haulers": Long-term effects of COVID-19*. https://www.hopkinsmedicine.org/health/conditions-and-diseases/coronavirus/covid-long-haulers-long-term-effects-of-covid19.

Kagan, J. (2002). Behavioral inhibition as a temperamental category. In R.J. Davidson, K. R. Scherer, & H. H. Goldsmith (Eds.), *Handbook of affective sciences*. Oxford University Press.

Kofman, Y. B., & Garfin, D. R. (2020). Home is not always a haven: The domestic violence crisis amid the COVID-19 pandemic. *Psychological Trauma: Theory, Research, practice and Policy, 12*(S1), S199–S201. https://doi.org/10.1037/tra0000866.

Kerr, D. C. R., Capaldi, D. M., Pears, K. C., & Owen, L. D. (2009). A prospective three generational study of fathers' constructive parenting: Influences from family of origin, adolescent adjustment, and offspring temperament. *Developmental Psychology, 45*, 1257–1275.

Kiff, C. J., Lengua, L. J., & Zalewski, M. (2011). Nature and nurturing: Parenting in the context of child temperament. *Clinical Child and Family Psychology Review, 14*, 251–301. doi: 10.1007/s10567011-0093-4.

Kinsey, A., Pomeroy, W.B., & Martin, C. E. (1948). *Sexual behavior in the human male*. Saunders.

Krebs, C., Lindquist, C., Warner, T., Fisher, B., & Martin, S. (2009). College women's experiences with physically forced, alcohol or other drug-enabled, and drug-facilitated sexual assault before and since entering college. *Journal of American College Health, 57*(6), 639–649.

Kreighbaum, A. (2019). *Six figures in debt for a master's degree*. https://www.insidehighered.com/news/2019/06/03/updated-college-scorecard-puts-spotlight-graduate-student-borrowing.

Laursen, B., & Jensen-Campbell, L. A. (1999). The nature and functions of social exchange in adolescent romantic relationships. In W. Furman, B. B. Brown, & C. Feiring (Eds.), *The development of romantic relationships in adolescence* (pp. 5074). Cambridge University Press.

Lesthaeghe, R. J., & Surkyn, J. (1988). Cultural dynamics and economic theories of fertility change. *Population and Development Review 14*(1), 1–45.

Leventis Lourgos, A. (2021, June 6). *I can feel the clouds lifting. Long-haulers report improvement after vaccine*. Chicago Tribune. https://www.chicagotribune.com/coronavirus/vaccine/ct-coronavirus-long-haul-vaccine-relief-20210605-ylltsptl5ferxawxikjzmvr7bi-story.html.

Lin, A. L., Vittinghoff, E., Olgin, J. E., Pletcher, M. P., & Marcus, G. M. (2021). Body weight changes during pandemic-related sheltering-in-place in a longitudinal cohort study. *JAMA Network Open, 4(3), e212536*. https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2777737?utm_source=For_The_Media&utm_medium_referral&utm_campaign=ftm_links&utm_term=032221.

Lucas, R. E. & Donnellan, A. B. (2011). Personality development across the life span: Longitudinal analyses with a national sample from Germany. *Journal of Personality and Social Psychology, 1*01, 847–861.

Madden, M. & Lenhart, A. (2006). Americans who are seeking romance use the Internet to help them in their search, but there is still widespread public concern about safety of online dating. *Pew/Internet and American Life Project*. http://www.pewinternet.org/Reports/2006/OnlineDating.aspx.

Mandel, H. (2013). Up the down staircase: Women's upward mobility and the wage penalty for occupational feminization, 1970–2007. *Social Forces, 91*, 1183–1207.

Manning, W. S., Giordano, P. C., & Longmore, M. A. (2006). Hooking up: The relationship contexts of "nonrelationship" sex. *Journal of Adolescent Research, 21*, 459–483. doi:10.1177/0743558406291692.

Martinez, G., Daniels, K., & Chandra, A. (2012). Fertility of men and women aged 15–44 years in the United States: National Survey of Family Growth, 2006–2010. *National Health Statistics Reports, 51*(April). U.S. Department of Health and Human Services.

McClure, M. J., Lydon., J. E., Baccus, J., & Baldwin, M. W. (2010). A signal detection analysis of the anxiously attached at speed-dating: Being unpopular is only the first part of the problem. *Personality and Social Psychology Bulletin, 36*, 1024–1036.

Mehta, C. M., Arnett, J. J., Palmer, C. G., & Nelson, L. J. (2020). Established adulthood: A new conception of ages 30 to 45. *American Psychologist, 75*(4), 431–444. https://dx.doi.org/10.1037/amp0000600.

Menkin, J. A., Robles, T. F., Wiley, J. F., & Gonzaga, G. C. (2015). Online dating across the life span: Users' relationship goals. *Psychology and Aging, 3*0(4), 987–993.

Mita, T. H., Dermer, M., & Knight, J. (1977). Reversed facial images and the mere-exposure hypothesis. *Journal of Personality & Social Psychology, 35*(8), 597–601.

National Center for Transgender Equality. (2015). *National transgender discrimination survey*. http://www.transequality.org/issues/national-transgender-discrimination-survey.

National Conference of State Legislatures. (2017, June). Cyberbullies go catfishing. *State Legislatures, 8*.

National Institute on Alcohol Abuse and Alcoholism. (2015). *College Drinking*. http://pubs.niaaa.nih.gov/publications/CollegeFactSheet/CollegeFact.htm.

National Institute on Alcohol Abuse and Alcoholism. (2016). *Alcohol facts and statistics*. http://pubs.niaaa.nih.gov/publications/AlcoholFacts&Stats/AlcoholFacts&Stats.htm.

National Institute on Drug Abuse. (2015). *College-age and young adults*. https://www.drugabuse.gov/related-topics/college-age-young-adults/college-addiction-studies-programs.

National Institute of Drug Abuse. (2018). *College-age and young adults*. https://www.drugabuse.gov/related-topics/college-age-young-adults.

NCHEMS. (2016a). *Percent of adults 18 to 24 with a high school diploma*. National Center for Higher Education Management Systems. http://www.higheredinfo.org/dbrowser/?level=nation&mode=graph&state=0&submeasure=344.

NCHEMS. (2016b). *Percent of adults 18 to 24 who are attending college*. National Center for Higher Education Management Systems. http://www.higheredinfo.org/dbrowser/index.php?submeasure=331&year=2009&level=nation&mode=graph&state=0.

NCHEMS. (2016c). *Percent of adults 25 to 49 who are attending college*. National Center for Higher Education Management Systems. http://www.higheredinfo.org/dbrowser/index.php?submeasure=332&year=2009&level=nation&mode=graph&state=0.

NCHEMS. (2016d). *Percent who earn a Bachelor's degree within 6 years*. National Center for Higher Education Management Systems. http://www.higheredinfo.org/dbrowser/?level=nation&mode=graph&state=0&submeasure=27.

Nelson, L. J., Badger, S., & Wu, B. (2004). The influence of culture in emerging adulthood: Perspectives of Chinese college students. *International Journal of Behavioral Development, 28*, 26–36.

Noland, M., Moran, T., & Kotschwar, B. (2016). *Is gender diversity profitable? Evidence from a global survey*. Peterson Institute for International Economics. https://www.piie.com/publications/working-papers/gender-diversity-profitable-evidence-global-survey.

OECD. (2014). *Education at a Glance 2014: United States*, OECD Publishing. https://www.oecd.org/unitedstates/United%20States-EAG2014-Country-Note.pdf.

OECD. (2015). *Education at a Glance 2015: OECD Indicators*, OECD Publishing. http://dx.doi.org/10.1787/eag-2015-en.

Office of Adolescent Health. (2019). *Prevalence of adolescent opioid misuse*. https://www.hhs.gov/ash/oah/adolescent-development/substance-use/drugs/opioids/index.html#prevalence.

O'Hearn, M., Liu, J., Cudhea, F., Micha, R., & Mozaffarian, D. (2021). Coronavirus disease 2019 hospitalizations attributable to cardiometabolic conditions in the United States: A comparative risk assessment analysis. *Journal of the American Heart Association, 10*(5), e019259. https://www.ahajournals.org/doi/10.1161/JAHA.120.019259.

Oliver, M. B., & Hyde, J. S. (1993). Gender differences in sexuality: A meta-analysis. *Psychological Bulletin, 114*, 29–51. doi:10.1037/0033-2909.114.1.29.

Organisation for Economic Cooperation and Development. (2019). *Youth on in employment, education, or training data*. https://data.oecd.org/youthinac/youth-not-in-employment-education-or-training-neet.htm.

Owen, J., & Fincham, F. D. (2011). Young adults' emotional reactions after hooking up encounters. *Archives of Sexual Behavior, 40*, 321–330. doi:10.1007/s10508-010-9652-x

Panchal, N., Kamal, R., Cox, C., & Garfield, R. (2021). *The implications of COVID-19 for mental health and substance use*. Kaiser Family Foundation. https://www.kff.org/coronavirus-covid-19/issue-brief/the-implications-of-covid-19-for-mental-health-and-substance-use/.

Pascarella, E.T. (2006). How college effects students: Ten directions for future research. *Journal of College Student Development, 47*, 508–520.

Patton, W. & McMahon, M. (1999). *Career development and systems theory: A new relationship*. Brooks Cole Publishers.

Peterson, A. (2019, July 9). Women's World Cup. Changes could go global. *The Chicago Tribune*, p. 5.

Pew Research Center. (2019). *Same-sex marriage around the world*. https://www.pewforum.org/fact-sheet/gay-marriage-around-the-world/.

Phinney, J. S. & Baldelomar, O. A. (2011). Identity development in multiple cultural contexts. In L. A. Jensen (Ed.), *Bridging cultural and developmental psychology: New syntheses in theory, research and policy* (pp. 161–186). Oxford University Press.

Pierce, B. S., Perrin, P. B., Tyler, C. M., McKee, G. B., & Watson, J.D. (2021). The COVID-19 telepsychology revolution: A national study

of pandemic-based changes in U.S. mental health care delivery. *American Psychologist, 76*(1), 14–25. doi: 10.1037/amp0000722.

Potard, C., Courtois, R., & Rusch, E. (2008). The influences of peers on risky behavior during adolescence. *European Journal of Contraception and Reproductive Health Care, 13*(30), 264-270.

Prinzie, P., Stams, G. J., Dekovic, M., Reijntjes, A. H., & Belsky, J. (2009). The relations between parents' Big Five personality factors and parenting: A meta-review. *Journal of Personality and Social Psychology, 97*, 351–362.

Rabin, R. C. (2021, March 22). How much weight did we gain during lockdowns? *New York Times*. https://www.nytimes.com/2021/03/22/health/virus-weight-gain.html.

Rankin, L. A. & Kenyon, D. B. (2008). Demarcating role transitions as indicators of adulthood in the 21st century. Who are they? *Journal of Adult Development, 15*(2), 87–92. doi: 10.1007/s10804-007-9035-2.

Reis, H. T., & Aron, A. (2008). Love: What is it, why does it matter, and how does it operate? *Perspectives on Psychological Science, 3*(1), 80–86.

Roberts, B. W., Kuncel, N., Shiner, R., N., Caspi, A., & Goldberg, L. R. (2007). The power of personality: The comparative validity of personality traits, socioeconomic status, and cognitive ability for predicting important life outcomes. *Perspectives on Psychological Science, 2*(4), 313–345. doi:10.1111/j.1745-6916.2007.00047.

Roberts, B. W., & Mroczek, D. K. (2008). Personality trait change in adulthood. *Current Directions in Psychological Science, 17*, 31–35.

Rosenberger, N. (2007). Rethinking emerging adulthood in Japan: Perspectives from long-term single women. *Child Development Perspectives, 1*, 92–95.

Rottinghaus, P. J., Coon, K. L., Gaffey, A. R., & Zytowski, D. G. (2007). Thirty-year stability and predictive validity of vocational interests. *Journal of Career Assessment, 15*(1), 5–23.

Rudman, L. A. (1998). Self-promotion as a risk factor for women: The costs and benefits of counterstereotypical impression management. *Journal of Personality and Social Psychology, 74*(3), 629–645.

Ryan, C. L. & Bauman, K. (March 2016). *Educational Attainment in the United States: 2015*. U.S. Department of Commerce Economics and Statistics Administration. https://www.census.gov/content/dam/Census/library/publications/2016/demo/p20-578.pdf.

Ryle, R. (2011). *Questioning gender*. Sage Publishing.

Schindler, I., Fagundes, C. P., & Murdock, K. W. (2010). Predictors of romantic relationship formation: Attachment style, prior relationships, and dating goals. *Personal Relationships, 17*, 97–105.

Schmitt, D. P., Alcalay, L., Allik, J., Ault, L., Austers, I., Bennett, K. L., . . . Zupane'ie, A. (2003). Universal sex differences in the desire for sexual variety: Tests from 52 nations, 6 continents, and 13 islands. *Journal of Personality and Social Psychology, 85*, 85–104. doi:10.1037/ 0022-3514.85.1.85.

Schwartz, G., Kim, R., Kolundzija, A., Rieger, G., & Sanders, A. (2010). Biodemographic and physical correlates of sexual orientation in men. *Archives of Sexual Behavior, 39*, 93–109.

Simpson, J. A., Collins, W. A., Tran, S., & Haydon, K. C. (2007). Attachment and the experience and expression of emotions in adult romantic relationships: A developmental perspective. *Journal of Personality and Social Psychology, 92*, 355–367.

Simpson, J. A., Rholes, W. S., Oriña, M. M., & Grich, J. (2002). Working models of attachment, support giving, and support seeking in a stressful situation. *Personality and Social Psychology Bulletin*, 28, 598–608.

Sinnott, J. D. (1998). *The development of logic in adulthood*. Plenum Press.

Smith, A., & Anderson, M. (2016). *5 facts about online dating*. Pew Research Center. http://www.pewresearch.org/fact-tank/2016/02/29/5-facts-about-online-dating.

Smith, S., Zhang, X., Basile, K., Merrick, M., Wang, J., Kresnow, M., & Chen, J. (2018). *National Intimate Partner and Sexual Violence Survey, United States, 2015*. https://www.cdc.gov/violenceprevention/pdf/2015data-brief508.pdf.

Society for the Study of Emerging Adulthood (SSEA). (2016). *Overview*. http://ssea.org/about/index.htm.

Sternberg, R. (1988). *A triangular theory of love*. Basic.

Super, D. E. (1980). A life-span life-space approach to career development. *Journal of Vocational Behavior, 13*, 282–298.

Tamis-LeMonda, C. S., Way, N., Hughes, D., Yoshikawa, H., Kalman, R. K., & Niwa, E. Y. (2008). Parents' goals for children: The dynamic coexistence of individualism and collectivism in cultures and individuals. *Social Development, 17*, 183–209. doi:10.1111/j.1467.9507.2007.00419.x.

Tannen, D. (1990). *You just don't understand: Women and men in conversation*. Morrow.

Taub, A. (2020, April 14). A new COVID-19 crisis: Domestic violence rises worldwide. *New York Times*. https://www.nytimes.com/2020/04/06/world/coronavirus-domestic-violence.html.

Thornton, A. (2005). *Reading history sideways: The fallacy and enduring impact of the developmental paradigm on family life*. University of Chicago Press.

TICAS. (2015). *Student debt and the class of 2014*, The Institute for College Access & Success. http://ticas.org/sites/default/files/pub_files/classof2014.pdf.

Tolan, C. (2020, April 4). *Some cities see jumps in domestic violence during the pandemic*. CNN. https://www.cnn.com/2020/04/04/us/domestic-violence-coronavirus-calls-cases-increase-invs/index.html.

Tye, M. H. (2006). Social inequality and well-being: Race-related stress, self-esteem, and life satisfaction among African American gay and bisexual men. *Dissertation Abstracts International: Section B*, 67(4-B), 0419–4217.

UNdata (2010). *Gross enrollment ratio in tertiary education*. United Nations Statistics Division. http://data.un.org/Data.aspx?d=GenderStat&f=inID:68.

United Nations Development Programme (UNDP). (2011). *Human development report*. Oxford University Press.

Untied, A., Orchowski, L., Mastroleo, N., & Gidycz, C. (2012). College students' social reactions to the victim in a hypothetical sexual assault scenario: The role of victim and perpetrator alcohol use. *Violence and Victims, 27*(6), 957–972.

U.S. Census Bureau. (2019). *Educational attainment in the United States: 2018*. https://www.census.gov/data/tables/2018/demo/education-attainment/cps-detailed-tables.html.

Violence Policy Center. (2018). More than 1,800 women murdered by men in one year, new study finds. http://vpc.org/press/more-than-1800-women-murdered-by-men-in-one-year-new-study-finds/.

Volko, N. D. (2004, September 19). *Exploring the Whys of Adolescent Drug Use*. United States, National Institute on Drug Abuse. http://www.drugabuse.gov/NIDA_notes/NNvol19N3/DirRepVol19N3.html.

Wang, W., & Parker, K. (2014). *Record share of Americans have never married: As values, economics and gender patterns change*. Pew Research Center. http://www.pewsocialtrends.org/files/2014/09/2014-09-24_Never-Married-Americans.pdf.

Wang, W., & Taylor, P. (2011). *For Millennials, parenthood trumps marriage*. Pew Research Center.

Welsh, D. P., Grello, C. M., & Harper, M. S. (2006). No strings attached: The nature of casual sex in college students. *Journal of Sex Research*, 43, 255–267. doi:10.1080/00224490609552324.

Wighton, K. (2016). World's obese population hits 640 million, according to largest ever study. *Imperial College*. http://www3.imperial.ac.uh/newsandeventspggrp/imperialcollege/newssummary/news_311-3-2016-22-34-39.

Williams, L., Kabamalan, M., & Ogena, N. (2007). Cohabitation in the Philippines: Attitudes and behaviors among young women and men. *Journal of Marriage and Family, 69*(5), 1244–1256.

Witt, J. (2009). *SOC*. McGraw Hill.

World Economic Forum. (2017). *Global Gender Gap Report 2017*. http://reports.weforum.org/global-gender-gap-report-2017/key-findings/.

Yu, J., & Xie, Y. (2015). Cohabitation in China: Trends and determinants. *Population & Development Review, 41*(4), 607–628.

Zebrowitz, L. A., Bronstad, P. M., & Lee, H. K. (2007). The contribution of face familiarity to ingroup favoritism and stereotyping. *Social Cognition, 25*(2), 306–338.

This page titled 13.R: Emerging and Early Adulthood (References) is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Martha Lally & Suzanne Valentine-French via source content that was edited to the style and standards of the LibreTexts platform.

- 7.R: Emerging and Early Adulthood (References) by Martha Lally & Suzanne Valentine-French is licensed CC BY-NC-SA 4.0. Original source: http://dept.clcillinois.edu/psy/LifespanDevelopment.pdf.

# 14: ISSUES IN ADOLESCENCE

14.1: Adolescent Sleep
14.2: Health During Adolescence
14.3: Eating Disorders
14.4: Adolescents' Relationships
14.5: Adolescent Sexual Activity
14.6: COVID-19 Impact on Adolescence
14.7: Teenage Drivers
14.8: Behavioral and Psychological Adjustment
14.9: Teenagers and Working

This page titled 14: Issues in Adolescence is shared under a license and was authored, remixed, and/or curated by LibreTexts.

# 14.1: Adolescent Sleep

According to the National Sleep Foundation (NSF) (2016), adolescents need about 8 to 10 hours of sleep each night to function best. The most recent Sleep in America poll in 2006 indicated that adolescents between sixth and twelfth grade were not getting the recommended amount of sleep. On average adolescents only received $7\frac{1}{2}$ hours of sleep per night on school nights with younger adolescents getting more than older ones (8.4 hours for sixth graders and only 6.9 hours for those in twelfth grade). For the older adolescents, only about one in ten (9%) get an optimal amount of sleep, and they are more likely to experience negative consequences the following day. These include feeling too tired or sleepy, being cranky or irritable, falling asleep in school, having a depressed mood, and drinking caffeinated beverages (NSF, 2016). Additionally, they are at risk for substance abuse, car crashes, poor academic performance, obesity, and a weakened immune system (Weintraub, 2016).

Troxel et al. (2019) found that insufficient sleep in adolescents is a predictor of risky sexual behaviors. Reasons given for this include that those adolescents who stay out late, typically without parental supervision, are more likely to engage in a variety of risky behaviors, including risky sex, such as not using birth control or using substances before/during sex. An alternative explanation for risky sexual behavior is that the lack of sleep negatively affects impulsivity and decision-making processes.

## Why do adolescents not get adequate sleep?

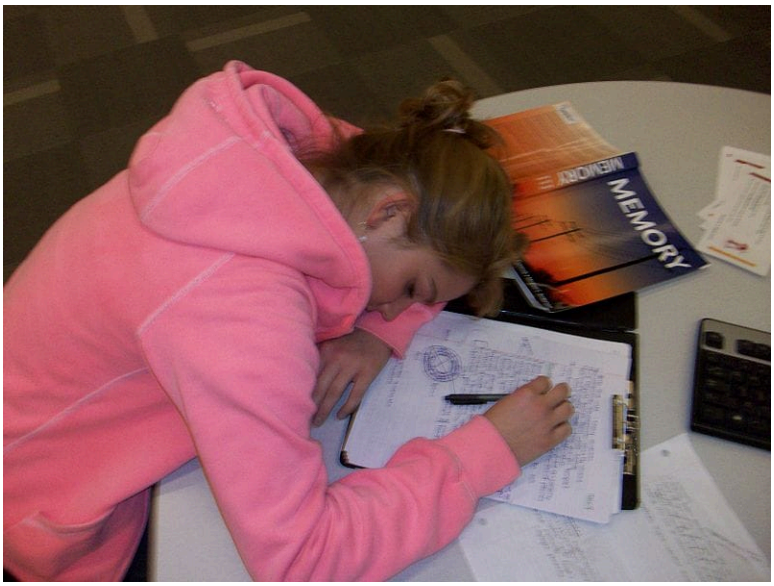



Figure 14.1.1. Image source.

In addition to known environmental and social factors, including work, homework, media, technology, and socializing, the adolescent brain is also a factor. As adolescent go through puberty, their circadian rhythms change and push back their sleep time until later in the evening (Weintraub, 2016). This biological change not only keeps adolescents awake at night, it makes it difficult for them to wake up. When they are awake too early, their brains do not function optimally. Impairments are noted in attention, academic achievement, and behavior while increases in tardiness and absenteeism are also seen.

To support adolescents' later sleeping schedule, the Centers for Disease Control and Prevention recommended that school not begin any earlier than 8:30 a.m. Unfortunately, over 80% of American schools begin their day earlier than 8:30 a.m., with an average start time of 8:03 a.m. (Weintraub, 2016). Psychologists and other professionals have been advocating for later school times, and they have produced research demonstrating better student outcomes for later start times. More middle and high schools have changed their start times to better reflect the sleep research. However, the logistics of changing start times and bus schedules are proving too difficult for some schools, leaving many adolescents vulnerable to the negative consequences of sleep deprivation. Troxel et al. (2019) cautions that adolescents should find a middle ground between sleeping too little during the school week and too much during the weekends. Keeping consistent sleep schedules of too little sleep will result in sleep deprivation, but oversleeping on weekends can affect the natural biological sleep cycle making it harder to sleep on weekdays.

This page titled 14.1: Adolescent Sleep is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Martha Lally & Suzanne Valentine-French via source content that was edited to the style and standards of the LibreTexts platform.

- 6.3: Adolescent Sleep by Martha Lally & Suzanne Valentine-French is licensed CC BY-NC-SA 4.0. Original source: http://dept.clcillinois.edu/psy/LifespanDevelopment.pdf.

# 14.2: Health During Adolescence

**Learning Outcomes**

- Describe health and sexual concerns during adolescence
- Discuss concerns associated with eating disorders

## Health Concerns During Adolescence

### Nutrition

Adequate adolescent nutrition is necessary for optimal growth and development. Dietary choices and habits established during adolescence greatly influence future health, yet many studies report that teens consume few fruits and vegetables and are not receiving the calcium, iron, vitamins, or minerals necessary for healthy development.[1]

One of the reasons for poor nutrition is anxiety about **body image,** which is a person's idea of how his or her body looks. The way adolescents feel about their bodies can affect the way they feel about themselves as a whole. Few adolescents welcome their sudden weight increase, so they may adjust their eating habits to lose weight. Adding to the rapid physical changes, they are simultaneously bombarded by messages, and sometimes teasing, related to body image, appearance, attractiveness, weight, and eating that they encounter in the media, at home, and from their friends/peers (both in person and via social media).

Much research has been conducted on the psychological ramifications of body image on adolescents. Modern day teenagers are exposed to more media on a daily basis than any generation before them. Recent studies have indicated that the average teenager watches roughly 1500 hours of television per year, and 70% use social media multiple times a day.[2] As such, modern day adolescents are exposed to many representations of ideal, societal beauty. The concept of a person being unhappy with their own image or appearance has been defined as "**body dissatisfaction**." In teenagers, body dissatisfaction is often associated with body mass, low self-esteem, and atypical eating patterns. Scholars continue to debate the effects of media on body dissatisfaction in teens. What we do know is that two-thirds of U.S. high school girls are trying to lose weight and one-third think they are overweight, while only one-sixth are actually overweight (MMWR, June 10, 2016). [3]

## Eating Disorders

Dissatisfaction with body image can explain why many teens, mostly girls, eat erratically or ingest diet pills to lose weight and why boys may take steroids to increase their muscle mass. Although eating disorders can occur in children and adults, they frequently appear during the teen years or young adulthood (National Institute of Mental Health (NIMH), 2019). https://www.nimh.nih.gov/health/topi...rs/index.shtml Eating disorders affect both genders, although rates among women are 2½ times greater than among men. Similar to women who have eating disorders, some men also have a distorted sense of body image, including **muscle dysmorphia** or an extreme concern with becoming more muscular.

Because of the high mortality rate, researchers are looking into the etiology of the disorder and associated risk factors. Researchers are finding that eating disorders are caused by a complex interaction of genetic, biological, behavioral, psychological, and social factors (NIMH, 2019). Eating disorders appear to run in families, and researchers are working to identify DNA variations that are linked to the increased risk of developing eating disorders. Researchers have also found differences in patterns of brain activity in women with eating disorders in comparison with healthy women. The main criteria for the most common eating disorders: **anorexia nervosa**, **bulimia nervosa**, and **binge-eating disorder** are described in the Diagnostic and Statistical Manual of Mental Disorders-Fifth Edition, DSM-5 (American Psychiatric Association, 2013).

## Health Consequences of Eating Disorders

For those suffering from anorexia, health consequences include an abnormally slow heart rate and low blood pressure, which increases the risk for heart failure. Additionally, there is a reduction in bone density (osteoporosis), muscle loss and weakness,

severe dehydration, fainting, fatigue, and overall weakness. Anorexia nervosa has the highest mortality rate of any psychiatric disorder. Individuals with this disorder may die from complications associated with starvation, while others die of suicide. In women, suicide is much more common in those with anorexia than with most other mental disorders.

The binging and purging cycle of bulimia can affect the digestive system and lead to electrolyte and chemical imbalances that can affect the heart and other major organs. Frequent vomiting can cause inflammation and possible rupture of the esophagus, as well as tooth decay and staining from stomach acids. Lastly, binge eating disorder results in similar health risks to obesity, including high blood pressure, high cholesterol levels, heart disease, Type II diabetes, and gall bladder disease (National Eating Disorders Association, 2016).

## Eating Disorders Treatment

To treat eating disorders, getting adequate nutrition and stopping inappropriate behaviors, such as purging, are the foundations of treatment. Treatment plans are tailored to individual needs and include medical care, nutritional counseling, medications (such as antidepressants), and individual, group, and/or family psychotherapy (NIMH, 2019). For example, the Maudsley Approach has parents of adolescents with anorexia nervosa be actively involved their child's treatment, such as assuming responsibility for feeding their child. To eliminate binge eating and purging behaviors, cognitive behavioral therapy (CBT) assists sufferers by identifying distorted thinking patterns and changing inaccurate beliefs.

**Link to Learning**

Visit National Eating Disorders Association to learn more about eating disorders.

**Try It**

https://assessments.lumenlearning.co...essments/16612

# Sexual Development

Developing sexually is an expected and natural part of growing into adulthood. Healthy sexual development involves more than sexual behavior. It is the combination of physical sexual maturation (puberty, age-appropriate sexual behaviors), the formation of a positive sexual identity, and a sense of sexual well-being (discussed more in depth later in this module). During adolescence, teens strive to become comfortable with their changing bodies and to make healthy, safe decisions about which sexual activities, if any, they wish to engage in.

Earlier in the physical development section, we discussed **primary and secondary sex characteristics**. During puberty, every primary sex organ (the ovaries, uterus, penis, and testes) increases dramatically in size and matures in function. During puberty, reproduction becomes possible. Simultaneously, secondary sex characteristics develop. These characteristics are not required for reproduction, but they do signify masculinity and femininity. At birth, boys and girls have similar body shapes, but during puberty, males widen at the shoulders and females widen at the hips and develop breasts (examples of secondary sex characteristics). Sexual development is impacted by a dynamic mixture of physical and cognitive change coupled with social expectations. With physical maturation, adolescents may become alternately fascinated with and chagrined by their changing bodies, and often compare themselves to the development they notice in their peers or see in the media. For example, many adolescent girls focus on their breast development, hoping their breasts will conform to an ideal body image.

As the sex hormones cause biological changes, they also affect the brain and trigger sexual thoughts. Culture, however, shapes actual sexual behaviors. Emotions regarding sexual experience, like the rest of puberty, are strongly influenced by cultural norms regarding what is expected at what age, with peers being the most influential. Simply put, the most important influence on adolescents' sexual activity is not their bodies, but their close friends, who have more influence than do sex or ethnic group norms (van de Bongardt et al., 2015). [4]

Sexual interest and interaction are a natural part of adolescence. Sexual fantasy and **masturbation** episodes increase between the ages of 10 and 13. Masturbation is very ordinary—even young children have been known to engage in this behavior. As the bodies of children mature, powerful sexual feelings begin to develop, and masturbation helps release sexual tension. For

adolescents, masturbation is a common way to explore their erotic potential, and this behavior can continue throughout adult life.

## Sexual Interactions

Many early social interactions tend to be nonsexual—text messaging, phone calls, email—but by the age of 12 or 13, some young people may pair off and begin dating and experimenting with kissing, touching, and other physical contact, such as oral sex. The vast majority of young adolescents are not prepared emotionally or physically for oral sex and sexual intercourse. If adolescents this young do have sex, they are highly vulnerable for sexual and emotional abuse, **sexually transmitted infections (STIs)**, HIV, and early pregnancy (https://pedsinreview.aappublications...ontent/34/1/29). For STI's in particular, adolescents are slower to recognize symptoms, tell partners, and get medical treatment, which puts them at risk of infertility and even death.

**Link to Learning**

Visit the CDC website to learn more about sexual behavior in adolescence.

Adolescents ages 14 to 16 understand the consequences of unprotected sex and teen parenthood, if properly taught, but cognitively they may lack the skills to integrate this knowledge into everyday situations or consistently to act responsibly in the heat of the moment. By the age of 17, many adolescents have willingly experienced sexual intercourse. Teens who have early sexual intercourse report strong peer pressure as a reason behind their decision. Some adolescents are just curious about sex and want to experience it. [5]

Becoming a sexually healthy adult is a developmental task of adolescence that requires integrating psychological, physical, cultural, spiritual, societal, and educational factors. It is particularly important to understand the adolescent in terms of his or her physical, emotional, and cognitive stage. Additionally, healthy adult relationships are more likely to develop when adolescent impulses are not shamed or feared. Guidance is certainly needed, but acknowledging that adolescent sexuality development is both normal and positive would allow for more open communication so adolescents can be more receptive to education concerning the risks (Tolman & McClelland, 2011). [6]

Adolescents are receptive to their culture, to the models they see at home, in school, and in the mass media. These observations influence moral reasoning and moral behavior, which we discuss in more detail later in this module. Decisions regarding sexual behavior are influenced by teens' ability to think and reason, their values, and their educational experience. Helping adolescents recognize all aspects of sexual development encourages them to make informed and healthy decisions about sexual matters.

## Freud and Sexual Development

According to Sigmund Freud, adolescents are in the genital stage of psychosexual development. This stage begins around the time that puberty starts, and ends at death. According to Freud, the genital stage is similar to the phallic stage, in that its main concern is the genitalia; however, this concern is now conscious. The genital stage comes about when the sexual and aggressive drives have returned, but the source of sexual pleasure expands outside of the mother and father (as in the Oedipus or Electra complex).

During the genital stage the ego and superego have become more developed. This allows the individual to have a more realistic way of thinking and to establish an assortment of social relations apart from the family. The genital stage is the last stage and is considered the highest level of maturity. In this stage a person's concern shifts from primary-drive gratification (instinct) to applying secondary process-thinking to gratify desire symbolically and intellectually by means of friendships, intimate relationships, and family and adult responsibilities.

**Try It**

https://assessments.lumenlearning.co...essments/16611

## Glossary

*anorexia nervosa available at the end of this section.*

*binge-eating disorder available at the end of this section.*

*body dissatisfaction available at the end of this section.*

*body image available at the end of this section.*

*bulimia nervosa available at the end of this section.*

*masturbation available at the end of this section.*

*muscle dysmorphia available at the end of this section.*

*primary sex characteristics available at the end of this section.*

*secondary sex characteristics available at the end of this section.*

*sexually transmitted infections (STIs) available at the end of this section.*


1. Christian P, Smith E, R: Adolescent Undernutrition: Global Burden, Physiology, and Nutritional Risks. Ann Nutr Metab 2018;72:316-328. doi: 10.1159/000488865 mailto:/Sandboxes/lhrli@ucdavis.edu
2. Markey, Charlotte (2019). "Teens, Body Image, and Social Media." Psychology Today. Retrieved from https://www.psychologytoday.com/us/blog/smart-people-don-t-diet/201902/teens-body-image-and-social-media. mailto:/Sandboxes/lhrli@ucdavis.edu
3. MMWR, (206, June 10). Youth risk behavior surveillance- United States, 2015: Morbidity Weekly Report, 65 (6). Altlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. mailto:/Sandboxes/lhrli@ucdavis.edu
4. van de Bongardt, D., Reitz, E., Sandfort, T. & Dekovic, J (2015). A meta-analysis of the relations between three types of peer norms and adolescent sexual behavior. Personality and Social Psychology Review, 19 (3), 203-234. mailto:/Sandboxes/lhrli@ucdavis.edu
5. Adolescent Sexuality Trisha Tulloch, Miriam Kaufman Pediatrics in Review Jan 2013, 34 (1) 29-38; DOI: 10.1542/pir.34-1-29 mailto:/Sandboxes/lhrli@ucdavis.edu
6. Tolman, D.L. & McClelland, S.I. (2011). Normative sexuality development in adolescence; A decade in review, 2000-2009. Journal of Research on Adolescence, 21 (1), 242-255. mailto:/Sandboxes/lhrli@ucdavis.edu


# Contributors and Attributions


CC licensed content, Original

- Modification, adaptation, and original content. **Authored by**: Tera Jones for Lumen Learning. **Provided by**: Lumen Learning. **License**: *CC BY-SA: Attribution-ShareAlike*

CC licensed content, Shared previously

- Body image in adolescence. **Provided by**: Wikipedia. **Located at**: https://en.Wikipedia.org/wiki/Adolescence. **License**: *CC BY-SA: Attribution-ShareAlike*
- Genital Stage. **Provided by**: Wikipedia. **Located at**: https://en.Wikipedia.org/wiki/Genital_stage. **License**: *CC BY-SA: Attribution-ShareAlike*
- Psychosexual Development. **Provided by**: Wikipedia. **Located at**: https://en.Wikipedia.org/wiki/Psychosexual_development. **License**: *CC BY-SA: Attribution-ShareAlike*

## Answers

**Glossary**

an eating disorder characterized by self-starvation. Affected individuals voluntarily undereat and often overexercise, depriving their vital organs of nutrition. Anorexia can be fatal

**Glossary**

an eating disorder characterized by recurrent episodes of eating large quantities of food (often very quickly and to the point of discomfort); a feeling of a loss of control during the binge; experiencing shame, distress or guilt afterwards; and not regularly using unhealthy compensatory measures (e.g., purging) to counter the binge eating. It is the most common eating disorder in the United States

**Glossary**

negative subjective evaluation of the weight and shape of one's own body, which may predict the onset, severity, and treatment outcomes of eating disorders

**Glossary**

a person's idea of how his or her body looks

**Glossary**

an eating disorder characterized by binge eating and subsequent purging, usually by induced vomiting and/or use of laxatives

**Glossary**

sexual self-stimulation, usually achieved by touching, stroking, or massaging the male or female genitals until this triggers an orgasm

**Glossary**

sometimes called "reverse anorexia" this is an obsession with being small and underdeveloped; extreme concern with becoming more muscular

**Glossary**

the parts of the body that are directly involved in reproduction, including the vagina, uterus, ovaries, testicles, and penis

**Glossary**

physical traits that are not directly involved in reproduction but that indicate sexual maturity, such as a man's beard or a woman's breasts

**Glossary**

diseases that are spread by sexual contact, including syphilis, gonorrhea, genital herpes, chlamydia, and HIV/AIDS

This page titled 14.2: Health During Adolescence is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 7.5: Health During Adolescence by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 14.3: Eating Disorders

According to the DSM-5-TR (American Psychiatric Association, 2022), **eating disorders** *are characterized by a persistent disturbance of eating or eating-related behavior that results in the altered consumption or absorption of food and that significantly impairs physical health or psychosocial functioning*. Although eating disorders can occur in children and adults, they frequently appear during the teen years or young adulthood (National Institute of Mental Health (NIMH), 2016). Eating disorders affect both genders, although rates among women are $2\frac{1}{2}$ times greater than among men. Similar to women who have eating disorders, men also have a distorted sense of body image, including **muscle dysmorphia**, *which is an extreme desire to increase one's muscularity* (Bosson et al., 2019). The prevalence of eating disorders in the United States is similar among Non-Hispanic Whites, Hispanics, African-Americans, and Asians, with the exception that anorexia nervosa is more common among Non-Hispanic Whites (Hudson et al., 2007; Wade et al., 2011).



Figure 14.3.1. Eating disorders can distort self-image. Image source.

## Risk Factors for Eating Disorders:

Because of the high mortality rate, researchers are looking into the etiology of the disorder and associated risk factors. Researchers are finding that eating disorders are caused by a complex interaction of genetic, biological, behavioral, psychological, and social factors (NIMH, 2016). Eating disorders appear to run in families, and researchers are working to identify DNA variations that are linked to the increased risk of developing eating disorders. Researchers from King's College London (2019) found that the genetic basis of anorexia overlaps with both metabolic and body measurement traits. The genetic factors also influence physical activity, which may explain the high activity level of those with anorexia. Further, the genetic basis of anorexia overlaps with other psychiatric disorders. Researchers have also found differences in patterns of brain activity in women with eating disorders in comparison with healthy women.

The main criteria for the most common eating disorders—anorexia nervosa, bulimia nervosa, and binge-eating disorder—are described in the DSM-5-TR (American Psychiatric Association, 2022) and listed in Table 14.3.1.

*Table 14.3.1. DSM-5-TR Eating Disorders.*

| | |
|---|---|
| **Anorexia nervosa** | • Restriction of energy intake leading to a significantly low body weight<br>• Intense fear of gaining weight<br>• Disturbance in one's self-evaluation regarding body weight |

| | |
|---|---|
| **Bulimia nervosa** | • Recurrent episodes of binge eating<br>• Recurrent inappropriate compensatory behaviors to prevent weight gain, including purging, laxatives, fasting or excessive exercise<br>• Self-evaluation is unduly affected by body shape and weight |
| **Binge-eating disorder** | • Recurrent episodes of binge eating<br>• Marked distress regarding binge eating<br>• The binge eating is not associated with the recurrent use of inappropriate compensatory behavior |

## Health Consequences of Eating Disorders:

For those suffering from anorexia, health consequences include an abnormally slow heart rate and low blood pressure, which increases the risk for heart failure. Additionally, there is a reduction in bone density (osteoporosis), muscle loss and weakness, severe dehydration, fainting, fatigue, and overall weakness. Anorexia nervosa has the highest mortality rate of any psychiatric disorder (Arcelus et al., 2011). Individuals with this disorder may die from complications associated with starvation, while others die of suicide. In women, suicide is much more common in those with anorexia than with most other mental disorders.

The binge and purging cycle of bulimia can affect the digestives system and lead to electrolyte and chemical imbalances that can affect the heart and other major organs. Frequent vomiting can cause inflammation and possible rupture of the esophagus, as well as tooth decay and staining from stomach acids. Lastly, binge eating disorder results in similar health risks to obesity, including high blood pressure, high cholesterol levels, heart disease, Type II diabetes, and gall bladder disease (National Eating Disorders Association, 2016).

## Eating Disorders Treatment:

To treat eating disorders, adequate nutrition and stopping inappropriate behaviors, such as purging, are the foundations of treatment. Treatment plans are tailored to individual needs and include medical care, nutritional counseling, medications (such as antidepressants), and individual, group, and/or family psychotherapy (NIMH, 2016). For example, the **Maudsley Approach** *has parents of adolescents with anorexia nervosa be actively involved in their child's treatment*, such as assuming responsibility for feeding the child. To eliminate binge-eating and purging behaviors, **cognitive behavioral therapy (CBT)** *assists sufferers by identifying distorted thinking patterns and changing inaccurate beliefs*.



Figure 14.3.2. Therapy session. Image source.

This page titled 14.3: Eating Disorders is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Martha Lally & Suzanne Valentine-French via source content that was edited to the style and standards of the LibreTexts platform.

- 6.5: Eating Disorders by Martha Lally & Suzanne Valentine-French is licensed CC BY-NC-SA 4.0. Original source: http://dept.clcillinois.edu/psy/LifespanDevelopment.pdf.

# 14.4: Adolescents' Relationships

## Parents and Teens: Autonomy and Attachment

While most adolescents get along with their parents, they do spend less time with them (Smetana, 2011). This decrease in the time spent with families may reflect a *teenager's greater desire for independence* or **autonomy**. It can be difficult for many parents to deal with this desire for autonomy. However, it is likely adaptive for teenagers to increasingly distance themselves and establish relationships outside of their families in preparation for adulthood. This means that both parents and teenagers need to strike a balance between autonomy, while still maintaining close and supportive familial relationships.

Children in middle and late childhood are increasingly granted greater freedom regarding moment-to-moment decision making. This continues in adolescence, as teens are demanding greater control in decisions that affect their daily lives. This can increase conflict between parents and their teenagers. For many adolescents this conflict centers on chores, homework, curfew, dating, and personal appearance. These are all things many teens believe they should manage that parents previously had considerable control over. Teens report more conflict with their mothers, as many mothers believe they should still have some control over many of these areas, yet often report their mothers to be more encouraging and supportive (Costigan et al., 2007). As teens grow older, more compromise is reached between parents and teenagers (Smetana, 2011). Parents are more controlling of daughters, especially early maturing girls, than they are sons (Caspi et al., 1993). In addition, culture and ethnicity also play a role in how restrictive parents are with the daily lives of their children (Chen et al., 2013).

Having supportive, less conflict-ridden relationships with parents also benefits teenagers. Research on attachment in adolescence find that teens who are still securely attached to their parents have fewer emotional problems (Rawatlal et al., 2015), are less likely to engage in drug abuse and other criminal behaviors (Meeus et al., 2004), and have more positive peer relationships (Shomaker & Furman, 2009).

## Peers

As children become adolescents, they usually begin spending more time with their peers and less time with their families, and these peer interactions are increasingly unsupervised by adults. Children's notions of friendship often focus on shared activities, whereas adolescents' notions of friendship increasingly focus on intimate exchanges of thoughts and feelings. During adolescence, peer groups evolve from primarily single-sex to mixed-sex. Adolescents within a peer group tend to be similar to one another in behavior and attitudes, which has been explained as a function of **homophily**, that is, *adolescents who are similar to one another choose to spend time together in a "birds of a feather flock together" way*. Adolescents who spend time together also shape each other's behavior and attitudes.



Figure 14.4.1. Image source.

Peers can serve both positive and negative functions during adolescence. Negative peer pressure can lead adolescents to make riskier decisions or engage in more problematic behavior than they would alone or in the presence of their family. For example,

adolescents are much more likely to drink alcohol, use drugs, and commit crimes when they are with their friends than when they are alone or with their family. One of the most widely studied aspects of adolescent peer influence is known as **deviant peer contagion** (Dishion & Tipsord, 2011), which is *the process by which peers reinforce problem behavior by laughing or showing other signs of approval that then increase the likelihood of future problem behavior*.

However, peers also serve as an important source of social support and companionship during adolescence, and adolescents with positive peer relationships are happier and better adjusted than those who are socially isolated or have conflictual peer relationships.

Crowds are an emerging level of peer relationships in adolescence. In contrast to friendships, which are reciprocal dyadic relationships, and **cliques**, which refer to *groups of individuals who interact frequently*, **crowds** *are characterized more by shared reputations or images than actual interaction*s (Brown & Larson, 2009). These crowds reflect different prototypic identities, such as jocks or brains, and are often linked with adolescents' social status and peers' perceptions of their values or behaviors.

## Romantic Relationships

Adolescence is the developmental period during which romantic relationships typically first emerge. By the end of adolescence, most American teens have had at least one romantic relationship (Dolgin, 2011). However, culture does play a role as Asian Americans and Latinas are less likely to date than other ethnic groups (Connolly et al., 2004). Dating serves many purposes for teens, including having fun, companionship, status, socialization, sexual experimentation, intimacy, and partner selection for those in late adolescence (Dolgin, 2011).

There are several stages in the dating process beginning with engaging in mixed-sex group activities in early adolescence (Dolgin, 2011). The same-sex peer groups that were common during childhood expand into mixed-sex peer groups that are more characteristic of adolescence. Romantic relationships often form in the context of these mixed-sex peer groups (Connolly et al., 2000). Interacting in mixed-sex groups is easier for teens as they are among a supportive group of friends, can observe others interacting, and are kept safe from a too early intimate relationship. By middle adolescence teens are engaging in brief, casual dating or in group dating with established couples (Dolgin, 2011). Then in late adolescence dating involves exclusive, intense relationships. These relationships tend to be long-lasting and continue for a year or longer; however, they may also interfere with friendships.



Figure 14.4.2. Image source.

Although romantic relationships during adolescence are often short-lived rather than long-term committed partnerships, their importance should not be minimized. Adolescents spend a great deal of time focused on romantic relationships, and their positive and negative emotions are more tied to romantic relationships, or lack thereof, than to friendships, family relationships, or school (Furman & Shaffer, 2003). Romantic relationships contribute to adolescents' identity formation, changes in family and peer relationships, and emotional and behavioral adjustment.

Furthermore, romantic relationships are centrally connected to adolescents' emerging sexuality. Parents, policymakers, and researchers have devoted a great deal of attention to adolescents' sexuality, in large part because of concerns related to sexual intercourse, contraception, and preventing teen pregnancies. However, sexuality involves more than this narrow focus. For example, adolescence is often when individuals who are lesbian, gay, bisexual, or transgender come to perceive themselves as such (Russell et al., 2009). Thus, romantic relationships are a domain in which adolescents experiment with new behaviors and identities.

However, a negative dating relationship can adversely affect an adolescent's development. Soller (2014) explored the link between relationship inauthenticity and mental health. **Relationship inauthenticity** refers to *an incongruence between thoughts/feelings and actions within a relationship*. Desires to gain partner approval and demands in the relationship may negatively affect an adolescent's sense of authenticity. Soller found that relationship inauthenticity was positively correlated with poor mental health, including depression, suicidal ideation and suicide attempts, especially for females.

This page titled 14.4: Adolescents' Relationships is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Martha Lally & Suzanne Valentine-French via source content that was edited to the style and standards of the LibreTexts platform.

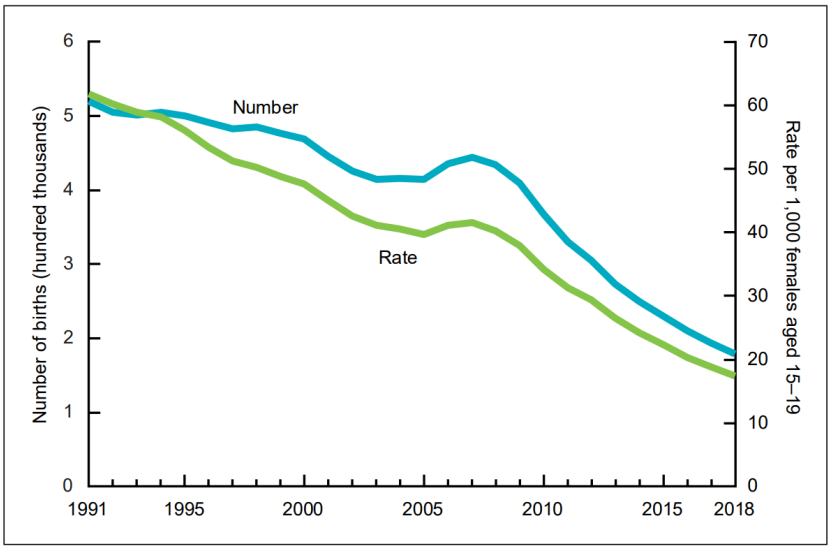
- 6.11: Adolescents' Relationships by Martha Lally & Suzanne Valentine-French is licensed CC BY-NC-SA 4.0. Original source: http://dept.clcillinois.edu/psy/LifespanDevelopment.pdf.

# 14.5: Adolescent Sexual Activity

By about age ten or eleven, most children experience increased sexual attraction to others that affects social life, both in school and out (McClintock & Herdt, 1996). By the end of high school, more than half of boys and girls report having experienced sexual intercourse at least once, though it is hard to be certain of the proportion because of the sensitivity and privacy of the information. (Center for Disease Control, 2004; Rosenbaum, 2006).

## Adolescent Pregnancy:

As can be seen in Figure 14.5.1, in 2018 females aged 15-19 years experienced a birth rate (live births) of 17.4 per 1,000 women. The birth rate for teenagers has declined by 58% since 2007 and 72% since 1991, the most recent peak (Hamilton, Joyce, Martin, & Osterman, 2019). It appears that adolescents seem to be less sexually active than in previous years, and those who are sexually active seem to be using birth control (CDC, 2016).




SOURCE: NCHS, National Vital Statistics System, Natality.

Figure 14.5.1. Number of live births and birth rates for U.S. females aged 15–19, for years 1991–2018. Source.

## Risk Factors for Adolescent Pregnancy:

Miller et al. (2001) found that parent/child closeness, parental supervision, and parents' values against teen intercourse (or unprotected intercourse) decreased the risk of adolescent pregnancy. In contrast, residing in disorganized/dangerous neighborhoods, living in a lower SES family, living with a single parent, having older sexually active siblings or pregnant/parenting teenage sisters, early puberty, and being a victim of sexual abuse place adolescents at an increased risk of adolescent pregnancy.

## Consequences of Adolescent Pregnancy:

After the child is born, life can be difficult for a teenage mother. Only 40% of teenagers who have children before age 18 graduate from high school. Without a high school degree her job prospects are limited, and economic independence is difficult. Teen mothers are more likely to live in poverty, and more than 75% of all unmarried teen mother receive public assistance within 5 years of the birth of their first child. Approximately, 64% of children born to an unmarried teenage high-school dropout live in poverty. Further, a child born to a teenage mother is 50% more likely to repeat a grade in school and is more likely to perform poorly on standardized tests and drop out before finishing high school (March of Dimes, 2012).

Research analyzing the age that men father their first child and how far they complete their education have been summarized by the Pew Research Center (2015) and reflect the research for females. Among dads ages 22 to 44, 70% of those with less

than a high school diploma say they fathered their first child before the age of 25. In comparison, less than half (45%) of fathers with some college experience became dads by that age. Additionally, becoming a young father occurs much less for those with a bachelor's degree or higher as just 14% had their first child prior to age 25. Like men, women with more education are likely to be older when they become mothers.

This page titled 14.5: Adolescent Sexual Activity is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Martha Lally & Suzanne Valentine-French via source content that was edited to the style and standards of the LibreTexts platform.

- 6.4: Adolescent Sexual Activity by Martha Lally & Suzanne Valentine-French is licensed CC BY-NC-SA 4.0. Original source: http://dept.clcillinois.edu/psy/LifespanDevelopment.pdf.

# 14.6: COVID-19 Impact on Adolescence

## Mental Health:

Since the beginning of the pandemic, as schools closed, sports involvement stopped, and hanging out with friends ceased, concerns were raised about the mental health of adolescents. To assess their impact, Van Beusekom (2021) reported on the healthcare insurance claims filed on behalf of adolescents from January 2020-November 2020 compared to those filed at the same time in 2019. Results indicated that mental health insurance claims rose sharply at the same time that medical claims decreased. Among those 13–18 years of age, insurance claims increased for the following mental health areas: self-harm, overdose-related, substance use disorders, generalized anxiety, major depressive disorder, and adjustment disorder. Mental health related conditions became the sixth most common reason for emergency room visits in 2020 and were 19% higher than in 2019.

## Adolescents as Caregivers:

The pandemic also increased the stress level on those adolescents who identify as caregivers. According to De Marco (2021), more than 3 million children and teens assist an ill or disabled family member, and compared to non-Hispanic white youth, Hispanic and African American youth were more likely to be caregivers. Because of COVID-19 and school closures, more youth were not able to escape from the daily home stressors of caregiving by attending school or socializing with their friends. By being denied normal social experiences, their emotional functioning and overall development may be negatively impacted. Unfortunately, many state and national caregiving programs are designed for adults and not youth, and these younger caregivers do not obtain the support they need.

## College Exams:

As schools closed during the pandemic, so too did SAT and ACT testing sites. Both exams are typically required for college admission applications, and consequently, colleges and universities needed to quickly move to a test-optional admission policy. As of March 2021, 1450 college and universities announced that they were moving to a test-optional policy, at least temporarily (Barber, 2021). This change for a more holistic view of applicants was endorsed by the National Association for College Admission Counseling (NACAC) and other academicians who have viewed the tests as culturally biased. For many low-income and first-generation students, the standardized tests are seen as barriers for entry into colleges due to attending lower-performing high schools, as well as not having access to expensive test preparation courses or tutors. Moving forward, college admissions officers will need to determine the best way to evaluate prospective students for entry, and some may no longer include standardized exams.

This page titled 14.6: COVID-19 Impact on Adolescence is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Martha Lally & Suzanne Valentine-French via source content that was edited to the style and standards of the LibreTexts platform.

- 6.C: COVID-19 Impact on Adolescence by Martha Lally & Suzanne Valentine-French is licensed CC BY-NC-SA 4.0. Original source: https://dept.clcillinois.edu/psy/LifespanDevelopment_08092022.pdf.

# 14.7: Teenage Drivers

Driving gives teens a sense of freedom and independence from their parents. It can also free up time for parents as they are not shuttling teens to and from school, activities, or work. The National Highway Traffic Safety Administration (NHTSA) reports that in 2014 young drivers (15- to 20 year-olds) accounted for 5.5% (11.7 million) of the total number of drivers (214 million) in the US (National Center for Statistics and Analysis (NCSA), 2016).



Figure 14.7.1. Image source.

However, almost 9% of all drivers involved in fatal crashes that year were young drivers (NCSA, 2016), and according to the National Center for Health Statistics (2014), motor vehicle accidents are the leading cause of death for 15 to 20 year-olds. "In all motorized jurisdictions around the world, young, inexperienced drivers have much higher crash rates than older, more experienced drivers" (NCSA, 2016, p. 1). A teen's risk of an accident is especially high during the first months of receiving a license (CDC, 2018a). The rate of fatal crashes is twice as high for young males as for young females (CDC, 2018a), although for both genders the rate was highest for the 15-20 years-old age group. For young males, the rate for fatal crashes was approximately 46 per 100,000 drivers, compared to 20 per 100,000 drivers for young females. The NHTSA (NCSA, 2016) reported that of the young drivers who were killed and who had alcohol in their system, 81% had a blood alcohol count past what was considered the legal limit. Fatal crashes involving alcohol use were higher among young men than young women. The NHTSA also found that teens were less likely to use seat belt restraints if they were driving under the influence of alcohol, and that restraint use decreased as the level of alcohol intoxication increased. Overall, teens have the lowest rate of seat belt use. In a 2017 CDC survey, only 59% of teens reported that they always wore a seat belt when riding as a passenger (CDC, 2018b). Crash data shows that almost half of teenage passengers who die in a car crash were not wearing a seat belt (Insurance Institute for Highway Safety, 2017).

In a AAA study of non-fatal, but moderate to severe motor vehicle accidents in 2014, more than half involved young male drivers 16 to 19 years of age (Carney et al., 2015). In 36% of rear-end collisions, teen drivers were following cars too closely to be able to stop in time, and in single-vehicle accidents, driving too fast for weather and road conditions was a factor in 79% of crashes involving teens. Distraction was also a factor in nearly 60% of the accidents involving teen drivers. Fellow passengers, often also teenagers (84% of the time), and cell phones were the top two sources of distraction, respectively. This data suggested that having another teenager in the car increased the risk of an accident by 44% (Carney et al., 2015). According to the NHTSA, 10% of drivers aged 15 to 19 years involved in fatal crashes were reported to be distracted at the time of the crash; the highest figure for any age group (NCSA, 2016). Distraction coupled with inexperience has been found to greatly increase the risk of an accident (Klauer et al., 2014). Finally, despite all the public service announcements warning of the dangers of texting while driving, four out of ten teens report having engaged in this within the past 12 months (CDC, 2018b).

The NHTSA did find that the number of accidents has been on a decline since 2005. They attribute this to greater driver training, more social awareness to the challenges of driving for teenagers, and to changes in laws restricting the drinking age. The NHTSA estimates that the raising of the legal drinking age to 21 in all 50 states and the District of Columbia has saved 30,323 lives since 1975. The CDC also credits graduated driver licenses (GDL) for reducing the number of accidents. While GDL programs vary

widely, a comprehensive program has a longer practice period, requires greater parental participation, and limits newly licensed drivers from driving under certain high-risk conditions (CDC, 2018a).

This page titled 14.7: Teenage Drivers is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Martha Lally & Suzanne Valentine-French via source content that was edited to the style and standards of the LibreTexts platform.

- 6.9: Teenage Drivers by Martha Lally & Suzanne Valentine-French is licensed CC BY-NC-SA 4.0. Original source: http://dept.clcillinois.edu/psy/LifespanDevelopment.pdf.

# 14.8: Behavioral and Psychological Adjustment

**Learning Outcomes**

- Explain the role that aggression, anxiety, and depression play in adolescent development



Figure 1. Early antisocial behavior leads to befriending others who also engage in antisocial behavior, which only perpetuates the downward cycle of aggression and wrongful acts. [Image: Philippe Put]

## Aggression and Antisocial Behavior

Several major theories of the development of antisocial behavior treat adolescence as an important period. Patterson's (1982)[1] *early versus late starter model* of the development of aggressive and antisocial behavior distinguishes youths whose antisocial behavior begins during childhood (early starters) versus adolescence (late starters). According to the theory, early starters are at greater risk for long-term antisocial behavior that extends into adulthood than are late starters. Late starters who become antisocial during adolescence are theorized to experience poor parental monitoring and supervision, aspects of parenting that become more salient during adolescence. Poor monitoring and lack of supervision contribute to increasing involvement with deviant peers, which in turn promotes adolescents' own antisocial behavior. Late starters desist from antisocial behavior when changes in the environment make other options more appealing.

Similarly, Moffitt's (1993)[2] *life-course persistent versus adolescent-limited model* distinguishes between antisocial behavior that begins in childhood versus adolescence. Moffitt regards adolescent-limited antisocial behavior as resulting from a "maturity gap" between adolescents' dependence on and control by adults and their desire to demonstrate their freedom from adult constraint. However, as they continue to develop, and legitimate adult roles and privileges become available to them, there are fewer incentives to engage in antisocial behavior, leading to desistance in these antisocial behaviors.

**Watch It**

Experiencing violence as an adolescent increases the odds of that adolescent later becoming an abusive adult, although it is not a given. Watch this video to learn more about the effects of abuse and perpetuated violence.




A YouTube element has been excluded from this version of the text. You can view it online here: http://pb.libretexts.org/lsdm/?p=288

You can view the transcript for "Does Having Abusive Parents Mean You'll Become One?" here (opens in new window).

## Psychology and MASS Shootings

Virginia Tech, Columbine, Stoneman Douglas High School, Santa Fe High School, Sandy Hook, Aurora, Las Vegas, Orlando—all sites of horrific and tragic mass shootings. Why are they so common? And what led the perpetrators to commit these acts of violence? Several possible factors may work together to create a fertile environment for mass murder in the United States. Most commonly suggested include:

- Higher accessibility and ownership of guns. The U.S. has the highest per-capita gun ownership in the world with 120.5 firearms per 100 people; the second highest is Yemen with 52.8 firearms per 100 people.[3]
- Mental illness[4] and its treatment (or the lack thereof) with psychiatric drugs. This is controversial.[5] Many of the mass shooters in the U.S. suffered from mental illness, but the estimated number of mental illness cases has not increased as significantly as the number of mass shootings.[6] Under 5% of violent behaviors in the U.S. are committed by persons with mental health diagnoses. A 2002 report by the U.S. Secret Service and U.S. Department of Education found evidence that a majority of school shooters displayed evidence of mental health symptoms, often undiagnosed or untreated. Criminologists Fox and DeLateur note that mental illness is only part of the issue, however, and mass shooters tend to externalize their problems, blaming others, and are unlikely to seek psychiatric help, even if available.[7] Other scholars have concluded that mass murderers display a common constellation of chronic mental health symptoms, chronic anger or antisocial traits, and a tendency to blame others for problems.[8] However, they note that attempting to "profile" school shooters with such a constellation of traits will likely result in many false positives as many individuals with such a profile do not engage in violent behaviors.
- The desire to seek revenge for a long history of being bullied at school. In recent years, citizens calling themselves "targeted individual" have cited adult bullying campaigns as a reason for their deadly violence.[9]
- The widespread chronic gap between people's expectations for themselves and their actual achievement, and individualistic culture.
- Desire for fame and notoriety. Also, mass shooters learn from one another through "media contagion," that is, "the mass media coverage of them and the proliferation of social media sites that tend to glorify the shooters and downplay the victims."
- The copycat phenomenon.
- Failure of government background checks due to incomplete databases and/or staff shortages

Read this NPR article on school shooters to learn more about common threads shared by *some* who commit mass violence.

## Anxiety and Depression

Developmental models of anxiety and depression also treat adolescence as an important period, especially in terms of the emergence of gender differences in prevalence rates that persist through adulthood (Rudolph, 2009) [10] Starting in early adolescence, compared with males, females have rates of anxiety that are about twice as high and rates of depression that are 1.5 to 3 times as high (American Psychiatric Association, 2013) [11] Although the rates vary across specific anxiety and depression diagnoses, rates for some disorders are markedly higher in adolescence than in childhood or adulthood. For example, prevalence rates for specific phobias are about 5% in children and 3%–5% in adults but 16% in adolescents. Additionally, some adolescents sink into **major depression**, a deep sadness and hopelessness that disrupts all normal, regular activities. Causes include many factors such as genetics and early childhood experiences that predate adolescence, but puberty may push vulnerable children, especially girls into despair.

During puberty, the rate of major depression more than doubles to an estimated 15%, affecting about one in five girls and one in ten boys. The gender difference occurs for many reasons, biological and cultural (Uddin et al., 2010) [12] Anxiety and depression are particularly concerning because **suicide** is one of the leading causes of death during adolescence. Some adolescents experience **suicidal ideation** (distressing thoughts about killing oneself) which become most common at about age 15 (Berger, 2019) [13] and can lead to **parasuicide**, also called attempted suicide or failed suicide. Suicidal ideation and parasuicide should be taken seriously and serve as a warning that emotions may be overwhelming.

### Watch It

This short video emphasizes how suicide is a major health issue and concern for teenagers, and also how it is important for parents, caregivers, teachers, and friends to be open enough to talk about it.

A link to an interactive elements can be found at the bottom of this page.

You can view the transcript for “Talking with Kids About Suicide” here (opens in new window).

Developmental models focus on interpersonal contexts in both childhood and adolescence that foster depression and anxiety (e.g., Rudolph, 2009) [14] Family adversity, such as abuse and parental psychopathology, during childhood sets the stage for social and behavioral problems during adolescence. Adolescents with such problems generate stress in their relationships (e.g., by resolving conflict poorly and excessively seeking reassurance) and select into more maladaptive social contexts (e.g., “misery loves company” scenarios in which depressed youths select other depressed youths as friends and then frequently co-ruminate as they discuss their problems, exacerbating negative affect and stress). These processes are intensified for girls compared with boys because girls have more relationship-oriented goals related to intimacy and social approval, leaving them more vulnerable to disruption in these relationships. Anxiety and depression then exacerbate problems in social relationships, which in turn contribute to the stability of anxiety and depression over time.

### Try It

https://assessments.lumenlearning.co...essments/16622

### Glossary

*major depression available at the end of this section.*

*parasuicide available at the end of this section.*

*suicide available at the end of this section.*

*suicidal ideation available at the end of this section.*


1. Patterson, G. R. (1982). Coercive family process. Eugene, OR: Castalia Press. mailto:/Sandboxes/lhrli@ucdavis.edu
2. Moffitt, T. E. (1993). Adolescence-limited and life course persistent antisocial behavior: Developmental taxonomy. Psychological Review, 100, 674–701. mailto:/Sandboxes/lhrli@ucdavis.edu
3. Healy, Melissa (August 24, 2015). "Why the U.S. is No. 1 – in mass shootings". Los Angeles Times. Retrieved November 6, 2017. mailto:/Sandboxes/lhrli@ucdavis.edu
4. Grinberg, Emanuella (January 25, 2016). "The real mental health issue behind gun violence". CNN. Retrieved November 7, 2017. mailto:/Sandboxes/lhrli@ucdavis.edu
5. Campbell, Holly (December 2, 2015). "Inside the mind of a mass murderer". WANE-TV. Retrieved November 9, 2017. mailto:/Sandboxes/lhrli@ucdavis.edu
6. Christensen, Jen (October 5, 2017). "Why the US has the most mass shootings". CNN. Retrieved November 6, 2017. mailto:/Sandboxes/lhrli@ucdavis.edu
7. Peters, Justin (December 19, 2013). "Everything You Think You Know about Mass Murder Is Wrong". Slate. mailto:/Sandboxes/lhrli@ucdavis.edu
8. Ferguson, Christopher J.; Coulson, Mark; Barnett, Jane (January 1, 2011). "Psychological Profiles of School Shooters: Positive Directions and One Big Wrong Turn". Journal of Police Crisis Negotiations. 11 (2): 141–158. doi:10.1080/15332586.2011.581523. mailto:/Sandboxes/lhrli@ucdavis.edu
9. Burgess, Ann Wolbert; Garbarino, Christina; Carlson, Mary I. (2006). "Pathological teasing and bullying turned deadly: Shooters and suicide". Victims and Offenders. 1 (1): 1–14. doi:10.1080/15564880500498705. mailto:/Sandboxes/lhrli@ucdavis.edu
10. Rudolph, K. D. (2009). The interpersonal context of adolescent depression. In S. Nolen-Hoeksema & L. M. Hilt (Eds.), Handbook of depression in adolescents (pp. 377–418). New York, NY: Taylor and Francis. mailto:/Sandboxes/lhrli@ucdavis.edu
11. American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.). Arlington, VA: American Psychiatric Publishing. mailto:/Sandboxes/lhrli@ucdavis.edu
12. Uddin, M., Koenen, K.C., de los Santos, R., Bakshis, E., Aielle, A.E., & Galea, S. (2010). Gender differences in the genetic and environmental determinants of adolescent depression. Depression and Anxiety, 27(7), 658-666. mailto:/Sandboxes/lhrli@ucdavis.edu
13. Berger, K.S. (2019). Invitation to the Lifespan (4th ed). Worth Publishers, NY. mailto:/Sandboxes/lhrli@ucdavis.edu
14. Rudolph, K. D. (2009). The interpersonal context of adolescent depression. In S. Nolen-Hoeksema & L. M. Hilt (Eds.), Handbook of depression in adolescents (pp. 377–418). New York, NY: Taylor and Francis. mailto:/Sandboxes/lhrli@ucdavis.edu


## Contributors and Attributions


CC licensed content, Original

- Modification, adaptation, and original content. **Authored by**: Tera Jones for Lumen Learning. **Provided by**: Lumen Learning. **License**: *CC BY: Attribution*

CC licensed content, Shared previously

- Adolescent Development . **Authored by**: Jennifer Lansford. **Located at**: http://nobaproject.com/modules/adolescent-development?r=LDE2MjU3. **Project**: The Noba Project. **License**: *CC BY-NC-SA: Attribution-NonCommercial-ShareAlike*
- School Shooting. **Provided by**: Wikipedia. **Located at**: https://en.Wikipedia.org/wiki/School_shooting. **License**: *CC BY-SA: Attribution-ShareAlike*
- Mass Shootings in the United States. **Located at**: https://en.Wikipedia.org/wiki/Mass_shootings_in_the_United_States. **License**: *CC BY-SA: Attribution-ShareAlike*

All rights reserved content

- Talking with Kids About Suicide. **Provided by**: NationwideChildrens. **Located at**: https://www.youtube.com/watch?v=axoTuFd51Pk. **License**: *Other*. **License Terms**: Standard YouTube License
- Does Having Abusive Parents Mean You'll Become One?. **Provided by**: SciShow Psych. **Located at**: https://www.youtube.com/watch?v=3ZeMOsXSc6Q. **License**: *Other*. **License Terms**: Standard YouTube License

## Answers

**Glossary**

feelings of hopelessness, lethargy, and worthlessness that last two weeks or more

**Glossary**

any potentially lethal action against the self that does not result in death. (also called attempted suicide or failed suicide)

**Glossary**

the act of intentionally causing one's own death

**Glossary**

thinking about suicide, usually with some serious emotional and intellectual or cognitive overtones

This page titled 14.8: Behavioral and Psychological Adjustment is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 7.13: Behavioral and Psychological Adjustment by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 14.9: Teenagers and Working

Many adolescents work either summer jobs, or during the school year. Holding a job may offer teenagers extra funds, the opportunity to learn new skills, ideas about future careers, and perhaps the true value of money. However, there are numerous concerns about teenagers working, especially during the school year. A long-standing concern is that that it "engenders precocious maturity of more adult-like roles and problem behaviors" (Staff et al., 2011, p. 150).



Figure 14.9.1. Teenage baristas. Image source.

Several studies have found that working more than 20 hours per week can lead to declines in grades, a general disengagement from school (Staff et al., 2010; Lee & Staff, 2007; Marsh & Kleitman, 2005), an increase in substance abuse (Longest & Shanahan, 2007), engaging in earlier sexual behavior, and pregnancy (Staff et al., 2011). However, like many employee groups, teens have seen a drop in the number of jobs. The summer jobs of previous generations have been on a steady decline, according to the United States Department of Labor, Bureau of Labor Statistics (2016). See Figure 14.9.2 for recent trends.

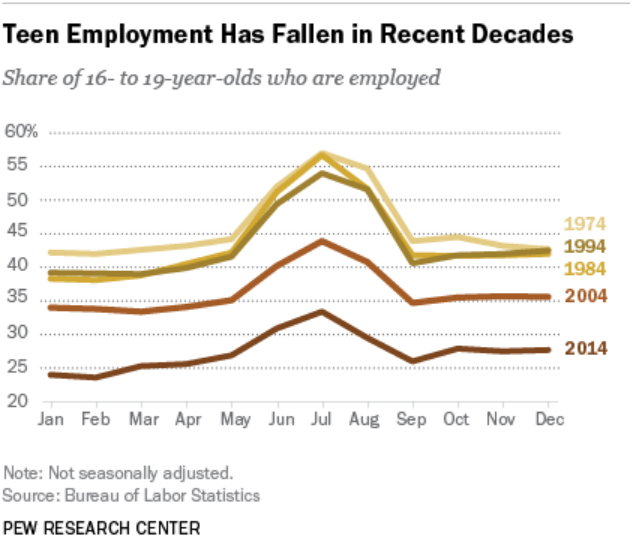



Figure 14.9.2. Percentage of teen employment every decade between 1974 and 2014. Image source.

This page titled 14.9: Teenagers and Working is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Martha Lally & Suzanne Valentine-French via source content that was edited to the style and standards of the LibreTexts platform.

- 6.8: Teenagers and Working by Martha Lally & Suzanne Valentine-French is licensed CC BY-NC-SA 4.0. Original source: http://dept.clcillinois.edu/psy/LifespanDevelopment.pdf.

# 15: EXTRA CHAPTERS/CONTENT


## 15.1: Adolescence

15.1.1: Growth in Adolescence

15.1.2: Adolescent Brain

15.1.3: Cognitive Development in Adolescence

15.1.4: Psychosocial Development in Adolescence

15.1.R: Adolescence (References)

## 15.2: Adolescence

15.2.1: Why It Matters- Adolescence

15.2.2: Introduction to Physical Growth and Development in Adolescence

15.2.3: Physical Development during Adolescence

15.2.4: Brain Development During Adolescence

15.2.5: Introduction to Cognitive Development in Adolescence

15.2.6: Cognitive Development during Adolescence

15.2.7: Introduction to Emotional and Social Development in Adolescence

15.2.8: Social Development during Adolescence

15.2.9: Putting It Together- Adolescence

15.2.10: Discussion- Adolescence

15.2.11: Assignment- Build an Interactive

15.2.12: Discussion- Adolescence Interview Assignment

## 15.3: Adolescence

15.3.1: Introduction to Adolescence

15.3.2: Physical Development

15.3.3: Cognitive Development

15.3.4: Social Development

15.3.5: Adolescence

15.3.6: Adolescence

## 15.4: Adolescence

15.4.1: Introduction to Adolescense

15.4.2: Physical Development

15.4.3: Cognitive Development

15.4.4: Social Development

15.4.5: Lecture- Adolescence

## 15.5: Early Adulthood

15.5.1: Introduction to Early Adulthood

15.5.2: Physical Development

15.5.3: Cognitive Development

15.5.4: Psychosocial Development
15.5.5: Types of Love
15.5.6: Love Attitude Scale
15.5.7: Love Styles
15.5.8: Adolescence and Early Adulthood
15.5.9: Early Adulthood
15.5.10: Early Adulthood
15.5.11: Adolescence and Early Adulthood
15.5.12: Unit 3 Exam

**15.6: Early Adulthood**

15.6.1: Lecture- Early Adulthood
15.6.2: Physical Development
15.6.3: Cognitive Development
15.6.4: Psychosocial Development
15.6.5: Activity- Love Attitude Scale
15.6.6: Types of Love
15.6.7: Work and Personality

**15.7: Young Adulthood**

15.7.1: Emerging Adulthood
15.7.2: Health and Physical Development for Young Adults
15.7.3: Gender in Young Adulthood
15.7.4: Sexuality in Young Adulthood
15.7.5: Cognitive Development in Young Adulthood
15.7.6: Work and Education in Young Adulthood
15.7.7: Psychosocial Development in Young Adulthood
15.7.8: Young Adult Lifestyles
15.7.9: Part 4 References

**15.8: Physical and Cognitive Development in Adolescence (Ages 12 to 18)**

15.8.1: What Does Psychology Say?
15.8.2: Physical Growth and Development in Adolescence
15.8.3: Puberty, Sexual Behavior, and Sexual Health in Adolescence
15.8.4: Cognition in Adolescence
15.8.5: Decision-Making and Risky Behaviors in Adolescence
15.8.6: Key Terms
15.8.7: Summary
15.8.8: Review Questions
15.8.9: Check Your Understanding Questions
15.8.10: Personal Application Questions
15.8.11: Essay Questions

## 15.9: Physical and Cognitive Development in Early Adulthood (Ages 18 to 29)

15.9.1: What Does Psychology Say?

15.9.2: Becoming an Adult

15.9.3: Physical Health and Growth in Early Adulthood

15.9.4: Sexuality in Early Adulthood

15.9.5: Cognitive Development in Early Adulthood

15.9.6: Contexts - Higher Education and Work Achievement in Early Adulthood

15.9.7: Key Terms

15.9.8: Summary

15.9.9: Review Questions

15.9.10: Check Your Understanding Questions

15.9.11: Personal Application Questions

15.9.12: Essay Questions

## 15.10: Social and Emotional Development in Adolescence (Ages 12 to 18)

15.10.1: What Does Psychology Say?

15.10.2: Theories of Adolescent Socioemotional Development

15.10.3: Emotional and Self-Development in Adolescence

15.10.4: Identity and Culture- Race/Ethnicity, Gender, and Sexuality in Adolescence

15.10.5: Social Contexts in Adolescence

15.10.6: Family and Community Contexts in Adolescence

15.10.7: Key Terms

15.10.8: Summary

15.10.9: Review Questions

15.10.10: Check Your Understanding Questions

15.10.11: Personal Application Questions

15.10.12: Essay Questions

## 15.11: Social and Emotional Development in Early Adulthood (Ages 18 to 29)

15.11.1: What Does Psychology Say?

15.11.2: The Development of Self in Early Adulthood

15.11.3: Identity Development in Context in Early Adulthood

15.11.4: Relationships with Friends and Family in Early Adulthood

15.11.5: Contexts- School and Work Settings in Early Adulthood

15.11.6: Key Terms

15.11.7: Summary

15.11.8: Review Questions

15.11.9: Check Your Understanding Questions

15.11.10: Personal Application Questions

15.11.11: Essay Questions

## 15.12: Early Adulthood

15.12.1: Why It Matters- Early Adulthood

15.12.2: Introduction to Physical Development in Early Adulthood
15.12.3: Developmental Tasks of Early Adulthood
15.12.4: Physical Development in Early Adulthood
15.12.5: Sex and Fertility in Early Adulthood
15.12.6: Introduction to Cognitive Development in Early Adulthood
15.12.7: Cognitive Development in Early Adulthood
15.12.8: Education and Work
15.12.9: Introduction to Theories of Adult Psychosocial Development
15.12.10: Theories of Early Adult Psychosocial Development
15.12.11: Emerging Adulthood
15.12.12: Introduction to Relationships in Early Adulthood
15.12.13: Attraction and Love
15.12.14: Trends in Dating, Cohabitation, and Marriage
15.12.15: Parenting
15.12.16: Putting It Together- Early Adulthood
15.12.17: Discussion- Early Adulthood
15.12.18: Assignment- Emerging Adulthood in the Media
15.12.19: Discussion- Dating and Marriage Interview Assignment
15.12.20: Assignment- My Development Journal

15.13: Research Methods
15.13.1: Introduction to Research in Lifespan Development
15.13.2: Research Methods
15.13.3: Correlational and Experimental Research
15.13.4: Developmental Research Designs
15.13.5: Challenges Conducting Developmental Research
15.13.6: Conducting Ethical Research
**15.13.7: Extras - Keep/Delete**
15.13.7.1: Research Methods
15.13.7.2: Research Designs
15.13.7.3: Developmental Research Designs
15.13.7.4: The Cohort Effect

15.14: Developmental Theories
**15.14.1: Historical Theories on Development**
15.14.1.1: Psychodynamic Theory
**15.14.2: Contemporary Theories on Development**
15.14.2.1: Psychosocial Theory
15.14.2.2: Exploring Behaviour
15.14.2.3: Exploring Cognition

**15.15: Adolescence - Physical Development**

15.15.1: Physical Growth
15.15.2: Brain Growth
15.15.3: Physical Changes in Adolescence
15.15.4: Adolescent Health- Sleep, Diet, and Exercise
15.15.5: Maintaining Emotional Health
15.15.6: Disorders and Syndromes
15.15.S: Summary

**15.16: Adolescence - Cognitive Development**

15.16.1: Cognitive Development in Adolescence
15.16.2: Cognitive Changes in the Brain
15.16.3: Cognitive Theorists- Piaget, Elkind, Kohlberg, and Gilligan
15.16.4: Information Processing Theory- Memory, Encoding, and Storage
15.16.5: Adolescence (A Time of Transitions)
15.16.6: Wisdom and Risk-Taking
15.16.S: Summary

**15.17: Adolescence - Social Emotional Development**

15.17.1: Erik Erikson – Theory of Psychosocial Development
15.17.2: James Marcia – Theory of Identity Development
15.17.3: Development of Identity and Self Concept - Who am I?
15.17.4: Development of Gender Identity
15.17.5: Socialization Agents During Adolescence
15.17.6: Community, Society, and Culture
15.17.7: Media- Influences on Teens
15.17.8: Development of Sexual Identity
15.17.9: Antisocial Behavior in Adolescence
15.17.10: Antisocial Behaviors, Violence, and Child Abuse
15.17.11: Violence and Abuse
15.17.12: Emerging Adulthood - The Bridge Between Adolescence and Adulthood
15.17.S: Summary

**15.18: Education**

15.18.1: School During Adolescence

**15.19: Identity Formation**

15.19.1: Moral Reasoning During Adolescence

This page titled 15: Extra chapters/content is shared under a license and was authored, remixed, and/or curated by LibreTexts.

# 15.1: ADOLESCENCE

15.1.1: Growth in Adolescence
15.1.2: Adolescent Brain
15.1.3: Cognitive Development in Adolescence
15.1.4: Psychosocial Development in Adolescence
15.1.R: Adolescence (References)

This page titled 15.1: Adolescence is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Martha Lally & Suzanne Valentine-French via source content that was edited to the style and standards of the LibreTexts platform.

- 6: Adolescence by Martha Lally & Suzanne Valentine-French is licensed CC BY-NC-SA 4.0. Original source: http://dept.clcillinois.edu/psy/LifespanDevelopment.pdf.

# 15.1.1: Growth in Adolescence

Adolescence is a period that begins with puberty and ends with the transition to adulthood (approximately ages 10–18). Physical changes associated with puberty are triggered by hormones. Changes happen at different rates in distinct parts of the brain and increase adolescents' propensity for risky behavior. Cognitive changes include improvements in complex and abstract thought. Adolescents' relationships with parents go through a period of redefinition in which adolescents become more autonomous. Peer relationships are important sources of support, but companionship during adolescence can also promote problem behaviors. Identity formation occurs as adolescents explore and commit to different roles and ideological positions. Because so much is happening in these years, psychologists have focused a great deal of attention on the period of adolescence.

**Learning Objectives: Physical Development in Adolescence**

- Summarize the overall physical growth
- Describe the changes that occur during puberty
- Describe the changes in brain maturation
- Describe the changes in sleep
- Describe gender intensification
- Identify nutritional concerns
- Describe eating disorders
- Explain the prevalence, risk factors, and consequences of adolescent pregnancy

## Growth in Adolescence

**Puberty** *is a period of rapid growth and sexual maturation*. These changes begin sometime between eight and fourteen. Girls begin puberty at around ten years of age and boys begin approximately two years later. Pubertal changes take around three to four years to complete. Adolescents experience an overall physical growth spurt. *The growth proceeds from the extremities toward the torso. This is referred to as* **distalproximal development**. First the hands grow, then the arms, and finally the torso. The overall physical growth spurt results in 10 to 11 inches of added height and 50 to 75 pounds of increased weight. The head begins to grow sometime after the feet have gone through their period of growth. Growth of the head is preceded by growth of the ears, nose, and lips. The difference in these patterns of growth result in adolescents appearing awkward and out-of-proportion. As the torso grows, so do the internal organs. The heart and lungs experience dramatic growth during this period.

During childhood, boys and girls are quite similar in height and weight. However, gender differences become apparent during adolescence. From approximately age ten to fourteen, the average girl is taller, but not heavier, than the average boy. After that, the average boy becomes both taller and heavier, although individual differences are certainly noted. As adolescents physically mature, weight differences are more noteworthy than height differences. At eighteen years of age, those that are heaviest weigh almost twice as much as the lightest, but the tallest teens are only about 10% taller than the shortest (Seifert, 2012).

Both height and weight can certainly be sensitive issues for some teenagers. Most modern societies, and the teenagers in them, tend to favor relatively short women and tall men, as well as a somewhat thin body build, especially for girls and women. Yet, neither socially preferred height nor thinness is the destiny for many individuals. Being overweight, in particular, has become a common, serious problem in modern society due to the prevalence of diets high in fat and lifestyles low in activity (Tartamella et al., 2004). The educational system has, unfortunately, contributed to the problem as well by gradually restricting the number of physical education courses and classes in the past two decades.

Average height and weight are also related somewhat to racial and ethnic background. In general, children of Asian background tend to be slightly shorter than children of European and North American background. The latter in turn tend to be shorter than children from African societies (Eveleth & Tanner, 1990). Body shape differs slightly as well, though the differences are not always visible until after puberty. Asian background youth tend to have arms and legs that are a bit short relative to their torsos, and African background youth tend to have relatively long arms and legs. The differences are only averages, as there are large individual differences as well.

# Sexual Development

Typically, the growth spurt is followed by the development of sexual maturity. Sexual changes are divided into two categories: Primary sexual characteristics and secondary sexual characteristics. **Primary sexual characteristics** *are changes in the reproductive organs*. For males, this includes growth of the testes, penis, scrotum, and **spermarche**, or *the first ejaculation of semen*. This occurs between 11 and 15 years of age. For females, primary characteristics include growth of the uterus and **menarche**, or *the first menstrual period*. The female gametes, which are stored in the ovaries, are present at birth, but are immature. Each ovary contains about 400,000 gametes, but only 500 will become mature eggs (Crooks & Baur, 2007). Beginning at puberty, one ovum ripens and is released about every 28 days during the menstrual cycle. Stress and higher percentage of body fat can bring menstruation at younger ages.

## Male Anatomy:

Males have both internal and external genitalia that are responsible for procreation and sexual intercourse. Males produce their sperm on a cycle, and unlike the female's ovulation cycle, the male sperm production cycle is constantly producing millions of sperm daily. The main male sex organs are the penis and the testicles, the latter of which produce semen and sperm. The semen and sperm, as a result of sexual intercourse, can fertilize an ovum in the female's body; the fertilized ovum (zygote) develops into a fetus which is later born as a child.

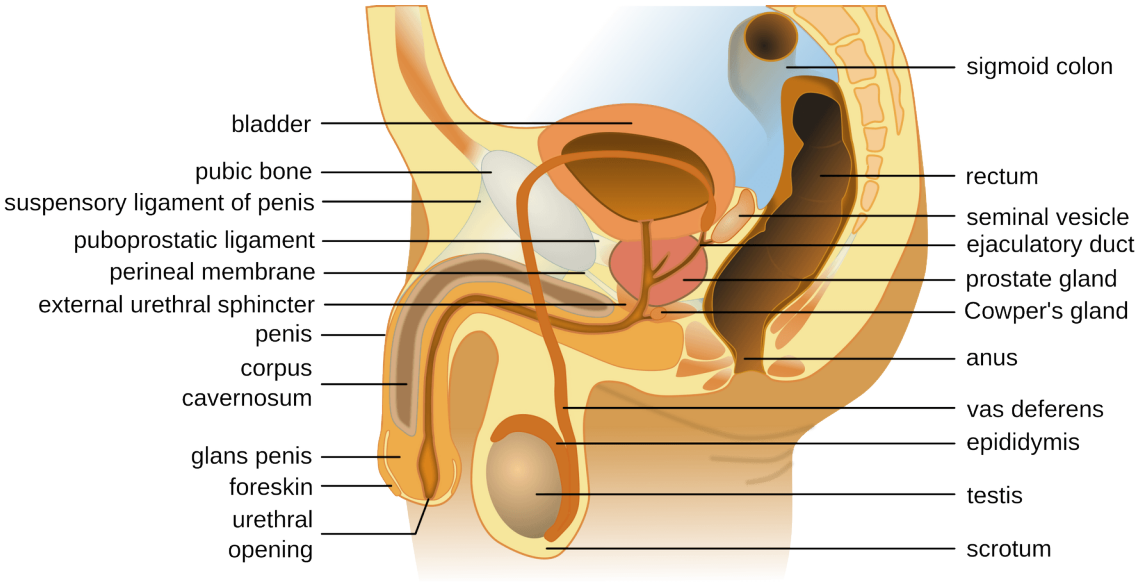



Figure 15.1.1.1. Male reproductive system. Image source.

## Female Anatomy:

Female external genitalia is collectively known as the vulva, which includes the mons veneris, labia majora, labia minora, clitoris, vaginal opening, and urethral opening. Female internal reproductive organs consist of the vagina, uterus, fallopian tubes, and ovaries. The uterus hosts the developing fetus, produces vaginal and uterine secretions, and passes the male's sperm through to the fallopian tubes while the ovaries release the eggs. A female is born with all her eggs already produced. The vagina is attached to the uterus through the cervix, while the uterus is attached to the ovaries via the fallopian tubes. Females have a monthly reproductive cycle; at certain intervals the ovaries release an egg, which passes through the fallopian tube into the uterus. If, in this transit, it meets with sperm, the sperm might penetrate and merge with the egg, fertilizing it. If not fertilized, the egg is flushed out of the system through menstruation.

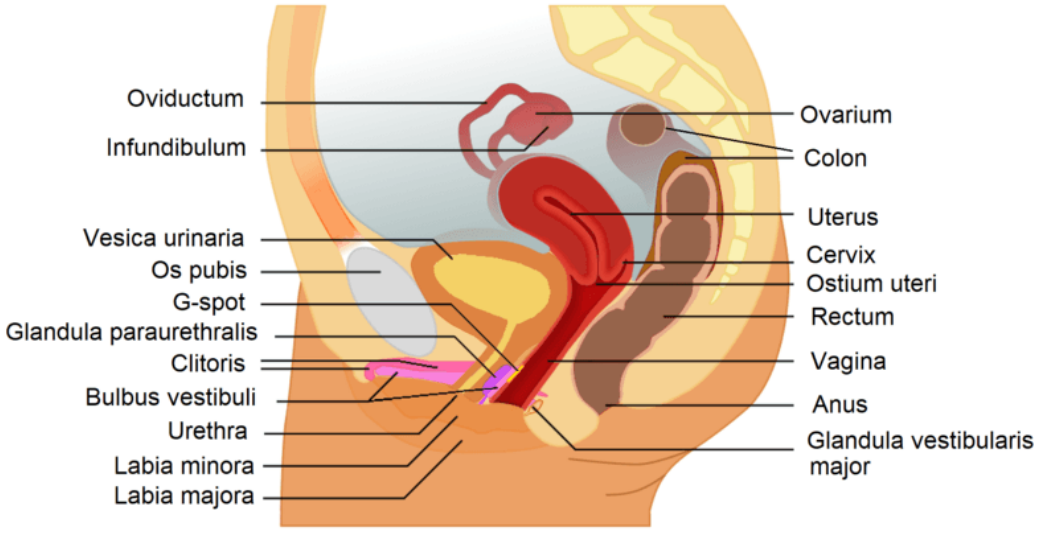



Figure 15.1.1.2. Female reproductive system. Image source.

## Secondary sexual characteristics:

**Secondary sexual characteristics** *are visible physical changes not directly linked to reproduction but signal sexual maturity*. For males this includes broader shoulders and a lower voice as the larynx grows. Hair becomes coarser and darker, and hair growth occurs in the pubic area, under the arms and on the face. For females, breast development occurs around age 10, although full development takes several years. Hips broaden, and pubic and underarm hair develops and also becomes darker and coarser.



Figure 15.1.1.3. First time shaving. Image source.

## Acne:

An unpleasant consequence of the hormonal changes in puberty is **acne**, defined as *pimples on the skin due to overactive sebaceous (oil-producing) glands* (Dolgin, 2011). These glands develop at a greater speed than the skin ducts that discharges the oil. Consequently, the ducts can become blocked with dead skin and acne will develop. According to the University of California at Los Angeles Medical Center (2000), approximately 85% of adolescents develop acne, and boys develop acne more than girls because of greater levels of testosterone in their systems (Dolgin, 2011). Experiencing acne can lead the adolescent to withdraw socially, especially if they are self-conscious about their skin or teased (Goodman, 2006).

## Effects of Pubertal Age:

The age of puberty is getting younger for children throughout the world. According to Euling et al. (2008) data are sufficient to suggest a trend toward an earlier breast development onset and menarche in girls. A century ago the average age of a girl's first period in the United States and Europe was 16, while today it is around 13. Because there is no clear marker of puberty for boys, it is harder to determine if boys are maturing earlier too. In addition to better nutrition, less positive reasons associated with early puberty for girls include increased stress, obesity, and endocrine disrupting chemicals.

Cultural differences are noted with Asian-American girls, on average, developing last, while African American girls enter puberty the earliest. Hispanic girls start puberty the second earliest, while European-American girls rank third in their age of starting puberty. Although African-American girls are typically the first to develop, they are less likely to experience negative consequences of early puberty when compared to European-American girls (Weir, 2016).

Research has demonstrated mental health problems linked to children who begin puberty earlier than their peers. For girls, early puberty is associated with depression, substance use, eating disorders, disruptive behavior disorders, and early sexual behavior (Graber, 2013). Early maturing girls demonstrate more anxiety and less confidence in their relationships with family and friends, and they compare themselves more negatively to their peers (Weir, 2016).

Problems with early puberty seem to be due to the mismatch between the child's appearance and the way she acts and thinks. Adults especially may assume the child is more capable than she actually is, and parents might grant more freedom than the child's age would indicate. For girls, the emphasis on physical attractiveness and sexuality is emphasized at puberty and they may lack effective coping strategies to deal with the attention they may receive.



Figure 15.1.1.3. Unknown image source.

Additionally, mental health problems are more likely to occur when the child is among the first in his or her peer group to develop. Because the preadolescent time is one of not wanting to appear different, early-developing children stand out among their peer group and gravitate toward those who are older. For girls, this results in them interacting with older peers who engage in risky behaviors such as substance use and early sexual behavior (Weir, 2016).

Boys also see changes in their emotional functioning at puberty. According to Mendle, Harden, Brooks-Gunn, and Graber (2010), while most boys experienced a decrease in depressive symptoms during puberty, boys who began puberty earlier and exhibited a rapid tempo, or a fast rate of change, actually increased in depressive symptoms. The effects of pubertal tempo were stronger than those of pubertal timing, suggesting that rapid pubertal change in boys may be a more important risk factor than the timing of development. In a further study to better analyze the reasons for this change, Mendle et al. (2012) found that both early-maturing boys and rapidly maturing boys displayed decrements in the quality of their peer relationships as they moved into early adolescence, whereas boys with more typical timing and tempo development actually experienced improvements in peer relationships. The researchers concluded that the transition in peer relationships may be especially challenging for boys whose pubertal maturation differs significantly from those of others their age. Consequences for boys attaining early puberty were

increased odds of cigarette, alcohol, or another drug use (Dudovitz, et al., 2015).

## Gender Role Intensification:

At about the same time that puberty accentuates gender, role differences also accentuate for at least some teenagers. Some girls who excelled at math or science in elementary school, may curb their enthusiasm and displays of success at these subjects for fear of limiting their popularity or attractiveness as girls (Taylor et al., 1995; Sadker, 2004). Some boys who were not especially interested in sports previously may begin dedicating themselves to athletics to affirm their masculinity in the eyes of others. Some boys and girls who once worked together successfully on class projects may no longer feel comfortable doing so, or alternatively may now seek to be working partners, but for social rather than academic reasons. Such changes do not affect all youngsters equally, nor affect any one youngster equally on all occasions. An individual may act like a young adult on one day, but more like a child the next.



Figure 15.1.1.4. Image source.

This page titled 15.1.1: Growth in Adolescence is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Martha Lally & Suzanne Valentine-French via source content that was edited to the style and standards of the LibreTexts platform.

- 6.1: Growth in Adolescence by Martha Lally & Suzanne Valentine-French is licensed CC BY-NC-SA 4.0. Original source: http://dept.clcillinois.edu/psy/LifespanDevelopment.pdf.

# 15.1.2: Adolescent Brain

The brain undergoes dramatic changes during adolescence. Although it does not get larger, it matures by becoming more interconnected and specialized (Giedd, 2015). The myelination and development of connections between neurons continues. This results in an increase in the white matter of the brain and allows the adolescent to make significant improvements in their thinking and processing skills. Different brain areas become myelinated at different times. For example, the brain's language areas undergo myelination during the first 13 years. Completed insulation of the axons consolidates these language skills but makes it more difficult to learn a second language. With greater myelination, however, comes diminished plasticity as a myelin coating inhibits the growth of new connections (Dobbs, 2012).

Even as the connections between neurons are strengthened, synaptic pruning occurs more than during childhood as the brain adapts to changes in the environment. This synaptic pruning causes the gray matter of the brain, or the cortex, to become thinner but more efficient (Dobbs, 2012). The corpus callosum, which connects the two hemispheres, continues to thicken allowing for stronger connections between brain areas. Additionally, the hippocampus becomes more strongly connected to the frontal lobes, allowing for greater integration of memory and experiences into our decision making.

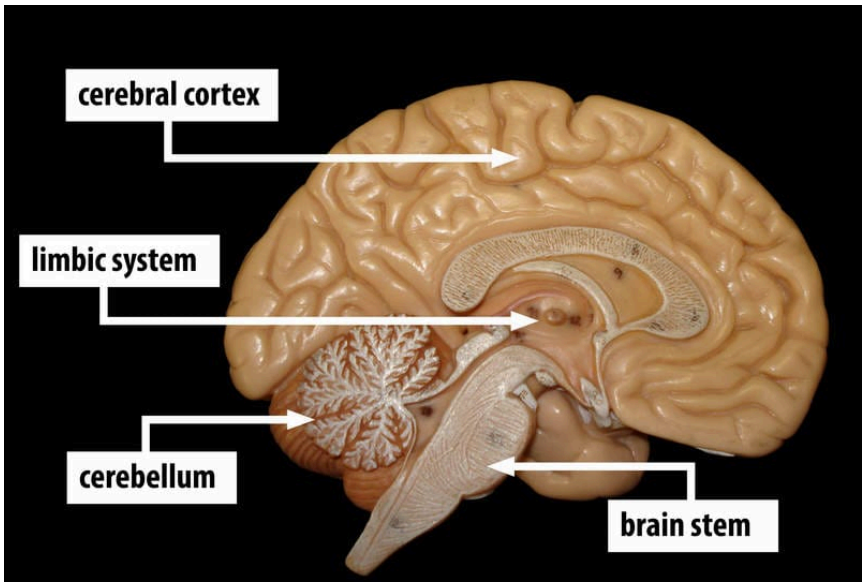



Figure 15.1.2.1. The limbic system. Image source.

The **limbic system**, *which regulates emotion and reward*, is linked to the hormonal changes that occur at puberty. The limbic system is also related to novelty seeking and a shift toward interacting with peers. In contrast, the **prefrontal cortex**, *which is involved in the control of impulses, organization, planning, and making good decisions*, does not fully develop until the mid-20s. According to Giedd (2015) the significant aspect of the later developing prefrontal cortex and early development of the limbic system is the "mismatch" in timing between the two. The approximately ten years that separates the development of these two brain areas can result in risky behavior, poor decision making, and weak emotional control for the adolescent. When puberty begins earlier, this mismatch extends even further.

Teens often take more risks than adults, and according to research it is because they weigh risks and rewards differently than adults do (Dobbs, 2012). For adolescents the brain's sensitivity to the neurotransmitter dopamine peaks, and **dopamine** *is involved in reward circuits*, so the possible rewards outweighs the risks. Adolescents respond especially strongly to social rewards during activities, and they prefer the company of others their same age. Chein et al. (2011) found that peers sensitize brain regions associated with potential rewards. For example, adolescent drivers make risky driving decisions when with friends to impress them, and teens are much more likely to commit crimes together in comparison to adults (30 and older) who commit them alone (Steinberg et al., 2017). In addition to dopamine, the adolescent brain is affected by **oxytocin**, *which facilitates bonding and makes social connections more rewarding*. With both dopamine and oxytocin engaged, it is no wonder that adolescents seek peers and excitement in their lives that could end up actually harming them.

Because of all the changes that occur in the adolescent brain, the chances for abnormal development can occur, including mental

illness. In fact, 50% of the mental illness occurs by the age 14 and 75% occurs by age 24 (Giedd, 2015). Additionally, during this period of development the adolescent brain is especially vulnerable to damage from drug exposure. For example, repeated exposure to marijuana can affect cellular activity in the endocannabinoid system. Consequently, adolescents are more sensitive to the effects of repeated marijuana exposure (Weir, 2015).

However, researchers have also focused on the highly adaptive qualities of the adolescent brain which allow the adolescent to move away from the family towards the outside world (Dobbs, 2012; Giedd, 2015). Novelty-seeking and risk-taking can generate positive outcomes including meeting new people and seeking out new situations. Separating from the family and moving into new relationships and different experiences are actually quite adaptive for society.

This page titled 15.1.2: Adolescent Brain is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Martha Lally & Suzanne Valentine-French via source content that was edited to the style and standards of the LibreTexts platform.

- 6.2: Adolescent Brain by Martha Lally & Suzanne Valentine-French is licensed CC BY-NC-SA 4.0. Original source: http://dept.clcillinois.edu/psy/LifespanDevelopment.pdf.

# 15.1.3: Cognitive Development in Adolescence

**Learning Objectives: Cognitive Development in Adolescence**

- Describe Piaget's formal operational stage and the characteristics of formal operational thought
- Describe adolescent egocentrism
- Describe Information Processing research on attention and memory
- Describe the developmental changes in language
- Describe the various types of adolescent education
- Identify changes in high school drop-out rates based on gender and ethnicity

## Piaget's Formal Operational Stage

During the formal operational stage, adolescents are able to understand **abstract principles**, or *principles which have no physical reference*. They can now contemplate such abstract constructs as beauty, love, freedom, and morality. The adolescent is no longer limited by what can be directly seen or heard. Additionally, while younger children solve problems through trial and error, adolescents demonstrate **hypothetical-deductive reasoning**, *which is developing hypotheses based on what might logically occur*. They are able to think about all the possibilities in a situation beforehand, and then test them systematically (Crain, 2005). Now they are able to engage in true scientific thinking.

Formal operational thinking also involves accepting hypothetical situations. Adolescents understand the concept of **transitivity**, which means that *a relationship between two elements is carried over to other elements logically related to the first two*, such as if $\mathrm{A} < \mathrm{B}$ and $\mathrm{B} < \mathrm{C}$, then $\mathrm{A} < \mathrm{C}$ (Thomas, 1979). For example, when asked: If Maria is shorter than Alicia and Alicia is shorter than Caitlyn, who is the shortest? Adolescents are able to answer the question correctly as they understand the transitivity involved.

### Does everyone reach formal operations?

According to Piaget, most people attain some degree of formal operational thinking, but use formal operations primarily in the areas of their strongest interest (Crain, 2005). In fact, most adults do not regularly demonstrate formal operational thought, and in small villages and tribal communities, it is barely used at all. A possible explanation is that an individual's thinking has not been sufficiently challenged to demonstrate formal operational thought in all areas.

### Adolescent Egocentrism:

Once adolescents can understand abstract thoughts, they enter a world of hypothetical possibilities and demonstrate **egocentrism**, or *a heightened self-focus*. The egocentricity comes from attributing unlimited power to their own thoughts (Crain, 2005). Piaget believed it was not until adolescents took on adult roles that they would be able to learn the limits to their own thoughts.



Figure 15.1.3.1. Image source.

David Elkind (1967) expanded on the concept of Piaget's adolescent egocentricity. Elkind theorized that the physiological changes that occur during adolescence result in adolescents being primarily concerned with themselves. Additionally, since adolescents fail to differentiate between what others are thinking and their own thoughts, they believe that others are just as fascinated with their behavior and appearance. This belief results in the adolescent anticipating the reactions of others, and consequently constructing an imaginary audience. "The **imaginary audience** *is the adolescent's belief that those around them are as concerned and focused on their appearance as they themselves are*" (Schwartz et al., 2008, p. 441). Elkind thought that the imaginary audience contributed to the self-consciousness that occurs during early adolescence. The desire for privacy and reluctance to share personal information may be a further reaction to feeling under constant observation by others. Alternatively, recent research has indicated that the imaginary audience is not imaginary. Specifically, adolescents and adults feel that they are often under scrutiny by others, especially if they are active on social media (Yau & Reich, 2018).

Another important consequence of adolescent egocentrism is the **personal fable**, or *belief that one is unique, special, and invulnerable to harm*. Elkind (1967) explains that because adolescents feel so important to others (imaginary audience), they regard themselves and their feelings as being special and unique. Adolescents believe that only they have experienced strong and diverse emotions, and therefore others could never understand how they feel. This uniqueness in one's emotional experiences reinforces the adolescent's belief of invulnerability, especially to death. Adolescents will engage in risky behaviors, such as drinking and driving or unprotected sex, and feel they will not suffer any negative consequences. Elkind believed that adolescent egocentricity emerged in early adolescence and declined in middle adolescence; however, recent research has also identified egocentricity in late adolescence (Schwartz, et al., 2008).

## Consequences of Formal Operational Thought:

As adolescents are now able to think abstractly and hypothetically, they exhibit many new ways of reflecting on information (Dolgin, 2011). For example, they demonstrate greater **introspection**, or *thinking about one's thoughts and feelings*. They begin to imagine how the world could be which leads them to become **idealistic**, *insisting upon high standards of behavior*. Because of their idealism, they may become critical of others, especially adults in their life. Additionally, adolescents can demonstrate **hypocrisy**, or *pretending to be what they are not*. Since they are able to recognize what others expect of them, they will conform to those expectations for their emotions and behavior seemingly hypocritical to themselves. Lastly, adolescents can exhibit **pseudostupidity**. This is when *they approach problems at a level that is too complex, and they fail because the tasks are too simple*. Their new ability to consider alternatives is not completely under control and they appear "stupid" when they are in fact bright, just not experienced.

# Information Processing

## Cognitive Control:

As noted in earlier chapters, executive functions, such as attention, increases in working memory, and cognitive flexibility have been steadily improving since early childhood. Studies have found that executive function is very competent in adolescence. However, **self-regulation**, or *the ability to control impulses*, may still fail. A failure in self-regulation is especially true when there is high stress or high demand on mental functions (Luciano & Collins, 2012). While high stress or demand may tax even an adult's self-regulatory abilities, neurological changes in the adolescent brain may make teens particularly prone to more risky decision making under these conditions.

## Inductive and Deductive Reasoning:

**Inductive reasoning** emerges in childhood and occurs when *specific observations, or specific comments from those in authority, may be used to draw general conclusions*. This is sometimes referred to as "bottom-up-processing". However, in inductive reasoning the veracity of the information that created the general conclusion does not guarantee the accuracy of that conclusion. For instance, a child who has only observed thunder on summer days may conclude that it only thunders in the summer. In contrast, **deductive reasoning** emerges in adolescence and refers to *reasoning that starts with some overarching principle and based on this proposes specific conclusions*. This is sometimes referred to as "top-down-processing". Deductive reasoning guarantees a truthful conclusion if the premises on which it is based are accurate.

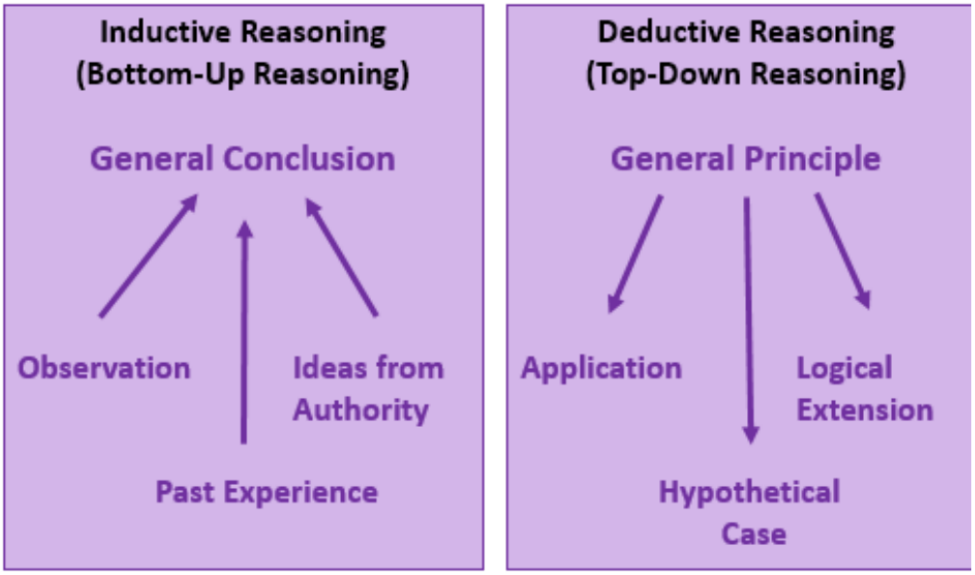



Figure 15.1.3.2. Inductive vs. deductive reasoning.

## Intuitive versus Analytic Thinking:

Cognitive psychologists often refer to intuitive and analytic thought as the **Dual-Process Model**, *the notion that humans have two distinct networks for processing information* (Albert & Steinberg, 2011). **Intuitive thought** *is automatic, unconscious, and fast* (Kahneman, 2011), *and it is more experiential and emotional*. In contrast, **analytic thought** *is deliberate, conscious, and rational*. While these systems interact, they are distinct (Kuhn, 2013). Intuitive thought is easier and more commonly used in everyday life. It is also more commonly used by children and teens than by adults (Klaczynski, 2001). The quickness of adolescent thought, along with the maturation of the limbic system, may make teens more prone to emotional intuitive thinking than adults.

This page titled 15.1.3: Cognitive Development in Adolescence is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Martha Lally & Suzanne Valentine-French via source content that was edited to the style and standards of the LibreTexts platform.

- 6.6: Cognitive Development in Adolescence by Martha Lally & Suzanne Valentine-French is licensed CC BY-NC-SA 4.0. Original source: http://dept.clcillinois.edu/psy/LifespanDevelopment.pdf.

# 15.1.4: Psychosocial Development in Adolescence

**Learning Objectives: Psychosocial Development in Adolescence**

- Describe the changes in self-concept and self-esteem in adolescence
- Summarize Erikson's fifth psychosocial task of identity versus role confusion
- Describe Marcia's four identity statuses
- Summarize the three stages of ethnic identity development
- Describe the parent-teen relationship
- Describe the role of peers
- Describe dating relationships

## Self-concept and Self-esteem in Adolescence

In adolescence, teens continue to develop their self-concept. Their ability to think of the possibilities and to reason more abstractly may explain the further differentiation of the self during adolescence. However, the teen's understanding of self is often full of contradictions. Young teens may see themselves as outgoing but also withdrawn, happy yet often moody, and both smart and completely clueless (Harter, 2012). These contradictions, along with the teen's growing recognition that their personality and behavior seem to change depending on who they are with or where they are, can lead the young teen to feel like a fraud. With their parents they may seem angrier and sullen, with their friends they are more outgoing and goofier, and at work they are quiet and cautious. "Which one is really me?" may be the refrain of the young teenager. Harter (2012) found that adolescents emphasize traits such as being friendly and considerate more than do children, highlighting their increasing concern about how others may see them. Harter also found that older teens add values and moral standards to their self-descriptions.

As self-concept differentiates, so too does self-esteem. In addition to the academic, social, appearance, and physical/athletic dimensions of self-esteem in middle and late childhood, teens also add perceptions of their competency in romantic relationships, on the job, and in close friendships (Harter, 2006). Self-esteem often drops when children transition from one school setting to another, such as shifting from elementary to middle school, or junior high to high school (Ryan et al., 2013). These drops are usually temporary, unless there are additional stressors such as parental conflict, or other family disruptions (De Wit et al., 2011). Self-esteem rises from mid- to late adolescence for most teenagers, especially if they feel competent in their peer relationships, their appearance, and athletic abilities (Birkeland et al., 2012).

## Erikson: Identity vs. Role Confusion

Erikson believed that the primary psychosocial task of adolescence was establishing an identity. Teens struggle with the question "Who am I?" This includes questions regarding their appearance, vocational choices and career aspirations, education, relationships, sexuality, political and social views, personality, and interests. Erikson saw this as a period of confusion and experimentation regarding identity and one's life path. During adolescence we experience **psychological moratorium**, *where teens put on hold commitment to an identity while exploring the options*. The culmination of this exploration is a more coherent view of oneself. Those who are unsuccessful at resolving this stage may either withdraw further into social isolation or become lost in the crowd. However, more recent research, suggests that few leave this age period with identity achievement, and that most identity formation occurs during young adulthood (Côtè, 2006).

Expanding on Erikson's theory, James Marcia (2010) identified four identity statuses that represent the four possible combinations of the dimension of commitment and exploration (see Table 15.1.4.1).

*Table* 15.1.4.1. *Marcia's Four Identity Statuses.*

| | | Exploration | |
|---|---|---|---|
| **Commitment to an Identity** | | **Absent** | **Present** |
| | **Absent** | Identity Diffusion | Identity Moratorium |

| | | Exploration | |
|---|---|---|---|
| | **Present** | Identity Foreclosure | Identity Achievement |

The least mature status, and one common in many children, is identity diffusion. **Identity diffusion** *is a status that characterizes those who have neither explored the options, nor made a commitment to an identity*. Those who persist in this identity may drift aimlessly with little connection to those around them or have little sense of purpose in life.

Those in **identity foreclosure** *have made a commitment to an identity without having explored the options*. Some parents may make these decisions for their children and do not grant the teen the opportunity to make choices. In other instances, teens may strongly identify with parents and others in their life and wish to follow in their footsteps.

**Identity moratorium** *is a status that describes those who are activity exploring in an attempt to establish an identity but have yet to have made any commitment*. This can be an anxious and emotionally tense time period as the adolescent experiments with different roles and explores various beliefs. Nothing is certain and there are many questions, but few answers.

**Identity achievement** *refers to those who, after exploration, have made a commitment*. This is a long process and is not often achieved by the end of adolescence.



Figure 15.1.4.1. Adolescents may try on different variations of identities to find one that fits their personal sense of self. Image source.

During high school and the college years, teens and young adults move from identity diffusion and foreclosure toward moratorium and achievement. The biggest gains in the development of identity are in college, as college students are exposed to a greater variety of career choices, lifestyles, and beliefs. This is likely to spur on questions regarding identity. A great deal of the identity work we do in adolescence and young adulthood is about values and goals, as we strive to articulate a personal vision or dream for what we hope to accomplish in the future (McAdams, 2013). Developmental psychologists have researched several different areas of identity development and some of the main areas include:

**Religious identity:** The religious views of teens are often similar to that of their families (Kim-Spoon et al., 2012). Most teens may question specific customs, practices, or ideas in the faith of their parents, but few completely reject the religion of their families.

**Political identity:** The political ideology of teens is also influenced by their parents' political beliefs. A new trend in the 21st century is a decrease in party affiliation among adults. Many adults do not align themselves with either the Democratic or Republican party but view themselves as more of an "independent". Their teenage children are often following suit or become more apolitical (Côté, 2006).

**Vocational identity:** While adolescents in earlier generations envisioned themselves as working in a particular job, and often worked as an apprentice or part-time in such occupations as teenagers, this is rarely the case today. Vocational identity takes longer to develop, as most of today's occupations require specific skills and knowledge that will require additional education or

are acquired on the job itself. In addition, many of the jobs held by teens are not in occupations that most teens will seek as adults.

**Gender identity:** Acquiring a gender identity is becoming an increasingly prolonged task as attitudes and norms regarding gender keep changing. The roles appropriate for males and females are evolving, and the lack of a gender binary allow adolescents more freedom to explore various aspects of gender. Some teens may foreclose on a gender identity as a way of dealing with this uncertainty, and they may adopt more stereotypic male or female roles (Sinclair & Carlsson, 2013).

**Sexual identity:** According to Carroll (2016), by age 14 most adolescents become interested in intimate relationships, and they may begin sexual experimentation. Many adolescent feel pressure to express interest in opposite-sex relationships, even if they are not ready to do so. This pressure can be especially stressful for those adolescents who are gay, lesbian, bisexual or questioning their sexual identity. Many non-heterosexual adolescents struggle with negative peer and family reactions during their exploration. A lack of parental acceptance, especially, can adversely affect the gay, lesbian or bisexual adolescent's emerging sexual identity and can result in feelings of depression. In contrast, adolescents whose familes support their sexual identity have better health outcomes.

**Ethnic identity** *refers to how people come to terms with who they are based on their ethnic or racial ancestry*. "The task of ethnic identity formation involves sorting out and resolving positive and negative feelings and attitudes about one's own ethnic group and about other groups and identifying one's place in relation to both" (Phinney, 2006, p. 119). When groups differ in status in a culture, those from the non-dominant group have to be cognizant of the customs and values of those from the dominant culture. The reverse is rarely the case. This makes ethnic identity far less salient for members of the dominant culture. In the United States, those of European ancestry engage in less exploration of ethnic identity, than do those of non-European ancestry (Phinney, 1989). However, according to the U.S. Census (2012) more than 40% of Americans under the age of 18 are from ethnic minorities. For many ethnic minority teens, discovering one's ethnic identity is an important part of identity formation.



Figure 15.1.4.2. Image source.

Phinney's model of ethnic identity formation is based on Erikson's and Marcia's model of identity formation (Phinney, 1990; Syed & Juang, 2014). Through the process of exploration and commitment, individuals come to understand and create an ethic identity. Phinney suggests three stages or statuses with regard to ethnic identity:

1. **Unexamined Ethnic Identity:** Adolescents and adults who have not been exposed to ethnic identity issues may be in the first stage, unexamined ethnic identity. This is often characterized with a preference for the dominant culture, or where the individual has given little thought to the question of their ethnic heritage. This is similar to diffusion in Marcia's model of identity. Included in this group are also those who have adopted the ethnicity of their parents and other family members with little thought about the issues themselves, similar to Marcia's foreclosure status (Phinney, 1990).
2. **Ethnic Identity Search:** Adolescents and adults who are exploring the customs, culture, and history of their ethnic group are in the ethnic identity search stage, similar to Marcia's moratorium status (Phinney, 1990). Often some event "awakens" a teen or adult to their ethnic group; either a personal experience with prejudice, a highly profiled case in the media, or even a more positive event that recognizes the contribution of someone from the individual's ethnic group. Teens and adults in this stage

will immerse themselves in their ethnic culture. For some, "it may lead to a rejection of the values of the dominant culture" (Phinney, 1990, p. 503).

3. **Achieved Ethnic Identity:** Those who have actively explored their culture are likely to have a deeper appreciation and understanding of their ethnic heritage, leading to progress toward an achieved ethnic identity (Phinney, 1990). An achieved ethnic identity does not necessarily imply that the individual is highly involved in the customs and values of their ethnic culture. One can be confident in their ethnic identity without wanting to maintain the language or other customs.

The development of ethnic identity takes time, with about 25% of tenth graders from ethnic minority backgrounds having explored and resolved the issues (Phinney, 1989). The more ethnically homogeneous the high school, the less identity exploration and achievement (Umana-Taylor, 2003). Moreover, even in more ethnically diverse high schools, teens tend to spend more time with their own group, reducing exposure to other ethnicities. This may explain why, for many, college becomes the time of ethnic identity exploration. "[The] transition to college may serve as a consciousness-raising experience that triggers exploration" (Syed & Azmitia, 2009, p. 618).

It is also important to note that those who do achieve ethnic identity may periodically reexamine the issues of ethnicity. This cycling between exploration and achievement is common not only for ethnic identity formation, but in other aspects of identity development (Grotevant, 1987) and is referred to as **MAMA cycling**, or *moving back and forth between moratorium and achievement*.

**Bicultural/Multiracial Identity:** Ethnic minorities must wrestle with the question of how, and to what extent, they will identify with the culture of the surrounding society and with the culture of their family. Phinney (2006) suggests that people may handle it in different ways. Some may keep the identities separate, others may combine them in some way, while others may reject some of them. **Bicultural identity** means *the individual sees himself or herself as part of both the ethnic minority group and the larger society*. Those who are **multiracial**, that is, *whose parents come from two or more ethnic or racial groups*, have a more challenging task. In some cases, their appearance may be ambiguous. This can lead to others constantly asking them to categorize themselves. Phinney (2006) notes that the process of identity formation may start earlier and take longer to accomplish in those who are not mono-racial.

**Negative Identity:** A **negative identity** is *the adoption of norms and values that are the opposite of one's family and culture*, and it is assumed to be one of the more problematic outcomes of identity development in young people (Hihara et al., 2019). Those with a negative identity hold dichotomous beliefs, and consequently divide the world into two categories (e.g., friend or foe, good or bad). Hihara et al. suggest that this may be because teens with a negative identity cannot integrate information and beliefs that exist in both their inner and outer world. In addition, those with a negative identity are generally hostile and cynical toward society, often because they do not trust the world around them. These beliefs may lead teens to engage in delinquent and criminal behavior and prevent them from engaging in more positive acts that could be beneficial to society.

This page titled 15.1.4: Psychosocial Development in Adolescence is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Martha Lally & Suzanne Valentine-French via source content that was edited to the style and standards of the LibreTexts platform.

- 6.10: Psychosocial Development in Adolescence by Martha Lally & Suzanne Valentine-French is licensed CC BY-NC-SA 4.0. Original source: http://dept.clcillinois.edu/psy/LifespanDevelopment.pdf.

# 15.1.R: Adolescence (References)


Albert, D., & Steinberg, L. (2011). Adolescent judgment and decision making. *Journal of Research on Adolescence, 21*, 211–224.

American Psychiatric Association. (2022). *Diagnostic and statistical manual of mental disorders* (5th ed., text rev.). Author.

Arcelus, J., Mitchell, A. J., Wales, J., & Nielsen, S. (2011). Mortality rates in patients with anorexia nervosa and other eating disorders. Archives of General Psychiatry, 68(7), 724-731.

Barber, C. (2021). Will COVID wipe out standardized college testing? https://fortune.com/2021/03/02/covid-sat-act-college-admissions-2021/.

Birkeland, M. S., Melkivik, O., Holsen, I., & Wold, B. (2012). Trajectories of global self-esteem during adolescence. *Journal of Adolescence, 35*, 43–54.

Bosson, J. K., Vandello, J., & Buckner, C. (2019). *The psychology of sex and gender*. Sage Publications.

Brass, N., McKellar, North, E., & Ryan, A. (2019). Early adolescents' adjustment at school: A fresh look at grade and gender differences. *Journal of Early Adolescence, 39* (5), 689–716.

Brown, B. B., & Larson, J. (2009). Peer relationships in adolescence. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (pp. 74–103). Wiley.

Carney, C., McGehee, D., Harland, K., Weiss, M., & Raby, M. (2015, March). *Using naturalistic driving data to assess the prevalence of environmental factors and driver behaviors in teen driver crashes*. AAA Foundation for Traffic Safety. https://www.aaafoundation.org/sites/default/files/2015TeenCrashCausationReport.pdf.

Carroll, J. L. (2016). *Sexuality now: Embracing diversity* (5th ed.). Cengage Learning.

Caspi, A., Lynam, D., Moffitt, T. E., & Silva, P. A. (1993). Unraveling girls' delinquency: Biological, dispositional, and contextual contributions to adolescent misbehavior. *Developmental Psychology, 29* (1), 19–30.

Center for Disease Control. (2004). *Trends in the prevalence of sexual behaviors, 1991–2003*. Author.

Center for Disease Control. (2016). *Birth rates (live births) per 1,000 females aged 15–19 years, by race and Hispanic ethnicity, select years*. https://www.cdc.gov/teenpregnancy/about/birth-rates-chart-2000-2011-text.htm.

Centers for Disease Control. (2018a). *Teen drivers: Get the facts*. https://www.cdc.gov/motorvehiclesafety/teen_drivers/teendrivers_factsheet.html.

Centers for Disease Control. (2018b). *Trends in the behaviors that contribute to unintentional injury: National Youth Risk Behavioral Survey*. https://www.cdc.gov/healthyyouth/data/yrbs/pdf/trends/2017_unintentional_injury_trend_yrbs.pdf.

Chein, J., Albert, D., O'Brien, L., Uckert, K., & Steinberg, L. (2011). Peers increase adolescent risk taking by enhancing activity in the brain's reward circuitry. *Developmental Science, 14* (2), F1–F10. doi: 10.1111/j.1467-7687.2010.01035.x.

Chen, B., Vansteenkiste, M., Beyers, W., Soensens, B., & Van Petegem, S. (2013). Autonomy in family decision making for Chinese adolescents: Disentangling the dual meaning of autonomy. *Journal of Cross-Cultural Psychology, 44*, 1184–1209.

Connolly, J., Craig, W., Goldberg, A., & Pepler, D. (2004). Mixed-gender groups, dating, and romantic relationships in early adolescence. *Journal of Research on Adolescence, 14*, 185–207.

Connolly, J., Furman, W., & Konarski, R. (2000). The role of peers in the emergence of heterosexual romantic relationships in adolescence. *Child Development, 71*, 1395–1408.

Costigan, C. L., Cauce, A. M., & Etchinson, K. (2007). Changes in African American mother-daughter relationships during adolescence: Conflict, autonomy, and warmth. In B. J. R. Leadbeater & N. Way (Eds.), *Urban girls revisited: Building strengths* (pp.

177–201). New York University Press.

Côtè, J. E. (2006). Emerging adulthood as an institutionalized moratorium: Risks and benefits to identity formation. In J. J. Arnett & J. T. Tanner (Eds.), *Emerging adults in America: Coming of age in the 21st century*, (pp. 85–116). American Psychological Association Press.

Crain, W. (2005). *Theories of development concepts and applications* (5th ed.). Pearson.

Crooks, K. L., & Baur, K. (2007). *Our sexuality* (10th ed.). Wadsworth.

Crosnoe, R., & Benner, A. D. (2015). Children at school. In M. H. Bornstein, T. Leventhal, & R. M. Lerner (Eds.). *Handbook of child psychology and developmental science: Ecological settings and processes* (pp. 268–304). John Wiley & Sons Inc.

De Marco, H. (2021, March 17). *Role reversal: Covid increases ranks of child caregivers*. Kaiser Health News. https://khn.org/news/article/role-reversal-covid-increases-ranks-of-child-caregivers/.

De Wit, D. J., Karioja, K., Rye, B. J., & Shain, M. (2011). Perceptions of declining classmate and teacher support following the transition to high school: Potential correlates of increasing student mental health difficulties. *Psychology in the Schools, 48*, 556–572.

Dishion, T. J., & Tipsord, J. M. (2011). Peer contagion in child and adolescent social and emotional development. *Annual Review of Psychology, 62*, 189–214.

Dobbs, D. (2012). Beautiful brains. *National Geographic, 220* (4), 36.

Dolgin, K. G. (2011). *The adolescent: Development, relationships, and culture* (13th ed.). Pearson.

Duchesne, S., Larose, S., & Feng, B. (2019). Achievement goals and engagement with academic work in early high school: Does seeking help from teachers matter? *Journal of Early Adolescence, 39* (2), 222–252.

Dudovitz, R.N., Chung, P.J., Elliott, M.N., Davies, S.L., Tortolero, S,... Baumler, E. (2015). Relationship of age for grade and pubertal stage to early initiation of substance use. *Preventing Chronic Disease, 12*, 150234. doi:10.5888/pcd12.150234.

Eccles, J. S., & Rosner, R. W. (2015). School and community influences on human development. In M. H. Bornstein & M. E. Lamb (Eds.), Developmental science (7th ed.). Psychology Press.

Elkind, D. (1967). Egocentrism in adolescence. *Child Development, 38*, 1025–1034.

Euling, S. Y., Herman-Giddens, M.E., Lee, P.A., Selevan, S. G., Juul, A., Sorensen, T. I., Dunkel, L., Himes, J.H., Teilmann, G., & Swan, S.H. (2008). Examination of US puberty-timing data from 1940 to 1994 for secular trends: panel findings. *Pediatrics, 121*, S172-91. doi: 10.1542/peds.2007-1813D.

Eveleth, P. & Tanner, J. (1990). *Worldwide variation in human growth* (2nd edition). Cambridge University Press.

Furman, W., & Shaffer, L. (2003). The role of romantic relationships in adolescent development. In P. Florsheim (Ed.), *Adolescent romantic relations and sexual behavior: Theory, research, and practical implications* (pp. 3–22). Erlbaum.

Garcia, A. R., Metraux, S., Chen, C., Park, J., Culhane, D., & Furstenberg, F. (2018). Patterns of multisystem service use and school dropout among seventh-, eighth-, and ninth-grade students. *Journal of Early Adolescence, 38* (8), 1041–1073.

Giedd, J. N. (2015). The amazing teen brain. *Scientific American, 312* (6), 32–37.

Goodman, G. (2006). Acne and acne scarring: The case for active and early intervention. *Australia Family Physicians, 35*, 503–504.

Graber, J. A. (2013). Pubertal timing and the development of psychopathology in adolescence and beyond. *Hormones and Behavior, 64*, 262–289.

Grotevant, H. (1987). Toward a process model of identity formation. *Journal of Adolescent Research, 2*, 203–222.

Harter, S. (2006). The self. In N. Eisenberg (Ed.), *Handbook of child psychology: Vol. 3: Social, emotional, and personality development* (6th ed., pp. 505–570). Wiley.

Harter, S. (2012). Emerging self-processes during childhood and adolescence. In M. R. Leary & J. P. Tangney, (Eds.), *Handbook of self and identity* (2nd ed., pp. 680–715). Guilford.

Hihara, S., Umemura, T., & Sigimura, K. (2019). Considering the negatively formed identity: Relationships between negative identity and problematic psychosocial beliefs. *Journal of Adolescence, 70*, 24-32.

Hudson, J. I., Hiripi, E., Pope, H. G., & Kessler, R. C. (2007). The prevalence and correlates of eating disorders in the National Comorbidity Survey Replication. *Biological Psychiatry, 61* (3), 348–358.

Insurance Institute for Highway Safety. (2017). *Fatality facts: Teenagers 2016*. http://www.iihs.org/iihs/topics/t/teenagers/fatalityfacts/teenagersExternal.

Kahneman, D. (2011). *Thinking, fast and slow*. New York NY: Farrar, Straus and Giroux.

Kim-Spoon, J., Longo, G.S., & McCullough, M.E. (2012). Parent-adolescent relationship quality as moderator for the influences of parents' religiousness on adolescents' religiousness and adjustment. *Journal or Youth & Adolescence, 41* (12), 1576–1578.

King's College London. (2019). *Genetic study reveals metabolic origins of anorexia*. http://www.sciencedaily.com/releases/2019/07/190715164655.htm.

Klaczynski, P. (2001). Analytic and heuristic processing influences on adolescent reasoning and decision-making. *Child Development, 72* (3), 844–861.

Klauer, S. G., Gun, F., Simons-Morton, B. G., Ouimet, M. C., Lee, S. E., & Dingus, T. A. (2014). Distracted driving a risk of road crashes among novice and experienced drivers. *New England Journal of Medicine, 370*, 54–59. doi: 10.1056/NEJMsa1204142.

Kuhn, D. (2013). Reasoning. In P.D. Zelazo (Ed.), *The Oxford handbook of developmental psychology* (Vol. 1, pp. 744–764). Oxford University Press.

Lee, J. C., & Staff, J. (2007). When work matters: The varying impact of work intensity on high school dropout. *Sociology of Education, 80* (2), 158–178.

Longest, K. C., & Shanahan, M. J. (2007). Adolescent work intensity and substance use: The mediational and moderational roles of parenting. *Journal of Family and Marriage, 69* (3), 703–720.

Luciano, M., & Collins, P. F. (2012). Incentive motivation, cognitive control, and the adolescent brain: Is it time for a paradigm shift? *Child Development Perspectives, 6* (4), 394–399.

March of Dimes. (2012). *Teenage pregnancy*. http://www.marchofdimes.org/materials/teenage-pregnancy.pdf.

Marcia, J. (2010). Life transitions and stress in the context of psychosocial development. In T.W. Miller (Ed.), *Handbook of stressful transitions across the lifespan* (Part 1, pp. 19–34). Springer Science & Business Media.

Marsh, H. W., & Kleitman, S. (2005). Consequences of employment during high school: Character building, subversion of academic goals, or a threshold? *American Educational Research Journal, 42*, 331–369.

McAdams, D. P. (2013). *Self and Identity.* In R. Biswas-Diener & E. Diener (Eds), Noba textbook series: Psychology. Champaign, IL: DEF publishers. http://nobaproject.com.

McClintock, M. & Herdt, G. (1996). Rethinking puberty: The development of sexual attraction. *Current Directions in Psychological Science, 5*, 178–183.

Meeus, W., Branje, S., & Overbeek, G. J. (2004). Parents and partners in crime: A six-year longitudinal study on changes in supportive relationships and delinquency in adolescence and young adulthood. *Journal of Child Psychology & Psychiatry, 45* (7), 1288–1298. doi:10.1111/j.1469-7610.2004.00312.x.

Mendle, J., Harden, K. P., Brooks-Gunn, J., & Graber, J. A. (2010). Development's tortoise and hare: Pubertal timing, pubertal tempo,

and depressive symptoms in boys and girls. *Developmental Psychology, 46*, 1341–1353. doi:10.1037/a0020205.

Mendle, J., Harden, K. P., Brooks-Gunn, J., & Graber, J. A. (2012). Peer relationships and depressive symptomatology in boys at puberty. *Developmental Psychology, 48* (2), 429–435. doi: 10.1037/a0026425.

Miller, B. C., Benson, B., & Galbraith, K. A. (2001). Family relationships and adolescent pregnancy risk: A research synthesis. *Developmental Review, 21* (1), 1–38. doi:10.1006/drev.2000.0513.

National Center for Health Statistics. (2014). *Leading causes of death*. http://webappa.cdc.gov/sasweb/ncipc/leadcaus10_us.html.

National Center for Statistics and Analysis. (2016, May). *Young drivers: 2014 data*. (Traffic Safety Facts. Report No. DOT HS 812 278). Washington, DC: National Highway Traffic Safety Administration. http://www.nrd.nhtsa.dot.gov/Pubs/812278.pdf.

National Eating Disorders Association. (2016). *Health consequences of eating disorders*. https://www.nationaleatingdisorders.org/health-consequences-eating-disorders.

National Institutes of Mental Health. (2016). *Eating disorders*. https://www.nimh.nih.gov/health/topics/eating-disorders/index.shtml.

National Sleep Foundation. (2016). *Teens and sleep*. https://sleepfoundation.org/sleep%20%20%20topics/teens-and-sleep.

Nelson, A., & Spears Brown, C. (2019). Too pretty for homework: Sexualized gender stereotypes predict academic attitudes for gener-typical early adolescent girls. *Journal of Early Adolescence, 39* (4), 603–617.

Office of Adolescent Health. (2018). *A day in the life*. https://www.hhs.gov/ash/oah/facts-and-stats/day-in-the-life/index.html.

Pew Research Center. (2015). *College-educated men taking their time becoming dads*. http://www.pewresearch.org/fact-tank/2015/06/19/college-educated-men-take-their-time-becoming-dads/.

Phinney, J. S. (1989). Stages of ethnic identity development in minority group adolescents. *Journal of Early Adolescence, 9*, 34–49.

Phinney, J. S. (1990). Ethnic identity in adolescents and adults: Review of research. *Psychological Bulletin, 108* (3), 499–514. doi:10.1037/0033-2909.108.3.499.

Phinney, J. S. (2006). Ethnic identity exploration. In J. J. Arnett & J. L. Tanner (Eds.). *Emerging adults in America: Coming of age in the 21st Century*. (pp. 117–134). American Psychological Association.

Rawatlal, N., Kliewer, W., & Pillay, B. J. (2015). Adolescent attachment, family functioning and depressive symptoms. *South African Journal of Psychiatry, 21* (3), 80–85. doi:10.7196/SAJP.8252.

Rosenbaum, J. (2006). Reborn a virgin: Adolescents' retracting of virginity pledges and sexual histories. *American Journal of Public Health, 96* (6), 1098–1103.

Ryan, A. M., Shim, S. S., & Makara, K. A. (2013). Changes in academic adjustment and relational self-worth across the transition to middle school. *Journal of Youth and Adolescence, 42*, 1372–1384.

Russell, S. T., Clarke, T. J., & Clary, J. (2009). Are teens "post-gay"? Contemporary adolescents' sexual identity labels. *Journal of Youth and Adolescence, 38*, 884–890.

Sadker, M. (2004). Gender equity in the classroom: The unfinished agenda. In M. Kimmel (Ed.), *The gendered society reader, 2nd edition*. Oxford University Press.

Schwartz, P. D., Maynard, A. M., & Uzelac, S. M. (2008). Adolescent egocentrism: A contemporary view. *Adolescence, 43*, 441–447.

Seifert, K. (2012). Educational psychology. http://cnx.org/content/col11302/1.2.

Shin, H., & Ryan, A. M. (2014). Early adolescent friendships and academic adjustment: Examining selection and influence processes with longitudinal social network analysis. *Developmental Psychology, 50* (11), 2462-2472.

Shomaker, L. B., & Furman, W. (2009). Parent-adolescent relationship qualities, internal working models, and attachment styles as

predictors of adolescents' interactions with friends. Journal or Social and Personal Relationships, 2, 579–603.

Sinclair, S., & Carlsson, R. (2013). What will I be when I grow up? The impact of gender identity threat on adolescents' occupational preferences. *Journal of Adolescence, 36* (3), 465–474.

Smetana, J. G. (2011). *Adolescents, families, and social development*. Wiley-Blackwell.

Soller, B. (2014). Caught in a bad romance: Adolescent romantic relationships and mental health. *Journal of Health and Social Behavior, 55* (1), 56–72.

Staff, J., Schulenberg, J. E., & Bachman, J. G. (2010). Adolescent work intensity, school performance, and academic engagement. *Sociology of Education, 83,* p. 183–200.

Staff, J., Van Eseltine, M., Woolnough, A., Silver, E., & Burrington, L. (2011). Adolescent work experiences and family formation behavior. *Journal of Research on Adolescence, 22* (1), 150–164. doi:10.1111/j.1532-7795.2011.00755.x.

Steinberg, L., Icenogle, G., Shulman, E.P., et al. (2018). Around the world, adolescence is a time of heightened sensation seeking and immature self-regulation. *Developmental Science, 21*, e12532. https://doi.org/10.1111/desc.12532.

Syed, M., & Azmitia, M. (2009). Longitudinal trajectories of ethnic identity during the college years. J*ournal of Research on Adolescence, 19*, 601-624. doi:10.1111/j.1532-7795.2009.00609.x.

Syed, M., & Juang, L. P. (2014). Ethnic identity, identity coherence, and psychological functioning: Testing basic assumptions of the developmental model. *Cultural Diversity and Ethnic Minority Psychology, 20* (2), 176–190. doi:10.1037/a0035330.

Tartamella, L., Herscher, E., & Woolston, C. (2004). *Generation extra large: Rescuing our children from the obesity epidemic*. Basic Books.

Taylor, J., Gilligan, C., & Sullivan, A. (1995). *Between voice and silence: Women and girls, race and relationship*. Harvard University Press.

Thomas, R. M. (1979). *Comparing theories of child development*. Wadsworth.

Troxel, W. M., Rodriquez, A., Seelam, R., Tucker, J. Shih, R., & D'Amico. (2019). Associations of longitudinal sleep trajectories with risky sexual behavior during late adolescence. *Health Psychology*. https://psycnet.apa.org/doiLanding?doi=10.1037%2Fhea0000753.

Umana-Taylor, A. (2003). Ethnic identity and self-esteem. Examining the roles of social context. *Journal of Adolescence, 27*, 139–146.

United States Census. (2012). 2000–2010 Intercensal estimates. https://www.census.gov/popest/data/index.html.

United States Department of Education. (2018). *Trends in high school dropout and completion rates in the United Stases: 2018*. https://nces.ed.gov/pubs2019/2019117.pdf.

United States Department of Labor, Bureau of Labor Statistics (2016). *Employment projections*. http://www.bls.gov/emp/ep_chart_001.htm.

United States Department of Labor, Office of Disability Employment Policy. (2019). *School based preparatory experiences*. https://www.dol.gov/odep/categories/youth/school.htm.

University of California at Los Angeles Medical Center. (2000). *Acne*. http://www.mednet.ucla.edu.

Vaillancourt, M. C., Paiva, A. O., Véronneau, M., & Dishion, T. (2019). How do individual predispositions and family dynamics contribute to academic adjustment through the middle school years? The mediating role of friends' characteristics. *Journal of Early Adolescence, 39* (4), 576–602.

Van Beusekom, M. (2021). *Teens' mental health claims skyrocket in pandemic*. Center for Infectious Disease Research and Policy. https://www.cidrap.umn.edu/news-perspective/2021/03/teens-mental-health-claims-skyrocket-pandemic.

Wade, T. D., Keski-Rahkonen, A., & Hudson, J. I. (2011). Epidemiology of eating disorders. *Textbook of Psychiatric Epidemiology, Third Edition*, 343–360.

Weintraub, K. (2016). Young and sleep deprived. *Monitor on Psychology, 47* (2), 46–50.

Weir, K. (2015). Marijuana and the developing brain. *Monitor on Psychology, 46* (10), 49–52.

Weir, K. (2016). The risks of earlier puberty. *Monitor on Psychology, 47* (3), 41–44.

Yau, J. C., & Reich, S. M. (2018). "It's just a lot of work": Adolescents' self-presentation norms and practices on Facebook and Instagram. *Journal of Research on Adolescence, 29* (1), 196–209.

This page titled 15.1.R: Adolescence (References) is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Martha Lally & Suzanne Valentine-French via source content that was edited to the style and standards of the LibreTexts platform.

- 6.R: Adolescence (References) by Martha Lally & Suzanne Valentine-French is licensed CC BY-NC-SA 4.0. Original source: http://dept.clcillinois.edu/psy/LifespanDevelopment.pdf.

# 15.2: ADOLESCENCE

15.2.1: Why It Matters- Adolescence
15.2.2: Introduction to Physical Growth and Development in Adolescence
15.2.3: Physical Development during Adolescence
15.2.4: Brain Development During Adolescence
15.2.5: Introduction to Cognitive Development in Adolescence
15.2.6: Cognitive Development during Adolescence
15.2.7: Introduction to Emotional and Social Development in Adolescence
15.2.8: Social Development during Adolescence
15.2.9: Putting It Together- Adolescence
15.2.10: Discussion- Adolescence
15.2.11: Assignment- Build an Interactive
15.2.12: Discussion- Adolescence Interview Assignment

This page titled 15.2: Adolescence is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 7: Adolescence by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.2.1: Why It Matters- Adolescence

## Why understand the physical, cognitive, emotional, and social changes that occur during adolescence?




Adolescence is a socially constructed concept. In pre-industrial society, children were considered adults when they reached physical maturity; however, today we have an extended time between childhood and adulthood known as adolescence. Adolescence is the period of development that begins at puberty and ends at early adulthood or emerging adulthood; the typical age range is from 12 to 18 years, and this stage of development has some predictable milestones.

Media portrayals of adolescents often seem to emphasize the problems that can be a part of adolescence. Gang violence, school shootings, alcohol-related accidents, drug abuse, and suicides involving teens are all too frequently reflected in newspaper headlines and movie plots.[1] In the professional literature, too, adolescence is frequently portrayed as a negative stage of life—a period of storm and stress to be survived or endured (Arnett, 1999). [2] Adolescents are often characterized as impulsive, reckless and emotionally unstable. This tends to be attributed to “raging hormones” or what is now known as the “teen brain.”

With all of the attention given to negative images of adolescents, the positive aspects of adolescence can be overlooked (APA, 2000). Most adolescents in fact succeed in school, are attached to their families and their communities, and emerge from their teen years without experiencing serious problems such as substance abuse or involvement with violence. Recent research suggests that it may be time to lay the stereotype of the “wild teenage brain” to rest. This research posits that brain deficits do not make teens do risky things; lack of experience and a drive to explore the world are the real factors. Evidence supports that risky behavior during adolescence is a normal part of development and reflects a biologically driven need for exploration – a process aimed at acquiring experience and preparing teens for the complex decisions they will need to make as adults (Romer, Reyna, & Satterthwaite, 2017). [3] Furthermore, McNeely & Blanchard (2009) described the adolescent years as a “time of opportunity, not turmoil.”[4]

Second only to infant development, adolescents experience rapid development in a short period of time. During adolescence, children gain 50% of their adult body weight, experience puberty and become capable of reproducing, and experience an astounding transformation in their brains. All of these changes occur in the context of rapidly expanding social spheres. Adolescents begin to learn about adult responsibilities and adult relationships. The details of growing bodies and the rational and irrational thinking of adolescents are covered in this module. As you will learn, although the physical development of adolescents is often completed by age 18, the brain requires many more years to reach maturity. Understanding these changes developmentally can help both adults and adolescents enjoy this second decade of life.

This module will outline changes that occur during adolescence in three domains: physical, cognitive, and psychosocial. Physical changes associated with puberty are triggered by hormones. Cognitive changes include improvements in complex and abstract thought, as well as development that happens at different rates in distinct parts of the brain and increases adolescents' propensity for risky behavior because increases in sensation-seeking and reward motivation precede increases in cognitive control. Within the psychosocial domain, changes in relationships with parents, peers, and romantic partners will be considered. Adolescents' relationships with parents go through a period of redefinition in which adolescents become more autonomous, and aspects of parenting, such as distal monitoring and psychological control, become more salient. Peer relationships are important sources of support and companionship during adolescence yet can also promote problem behaviors. Same-sex peer groups evolve into mixed-sex peer groups, and adolescents' romantic relationships tend to emerge from these groups. Identity formation occurs as adolescents explore and commit to different roles and ideological positions.

No adolescent can truly be understood in separate parts—an adolescent is a "package deal." Change in one area of development typically leads to, or occurs in conjunction with, changes in other areas. Furthermore, no adolescent can be fully understood outside the context of his or her family, neighborhood, school, workplace, or community or without considering such factors as gender, race, sexual orientation, disability or chronic illness, and religious beliefs (APA, 2002).[5]

---


1. American Psychological Association (2002). Developing adolescent: A reference for professionals. Retrieved from https://www.apa.org/pubs/info/brochures/developmailto:/Sandboxes/lhrli@ucdavis.edu
2. Arnett, J. (1999). Adolescent storm and stress, reconsidered. American Psychologist, 54(5), 317-326. mailto:/Sandboxes/lhrli@ucdavis.edu
3. Romer, D., Reyna, R.F., & Satterthwaite, T.D. (2017). Beyond stereotypes of adolescent risk taking: Placing the adolescent brain in developmental context. Developmental Cognitive Neuroscience, 27, 19-34. mailto:/Sandboxes/lhrli@ucdavis.edu
4. McNeely, Clea and Jayne Blanchard. A Guide to Healthy Adolescent Development. Johns Hopkins Bloomberg School of Public Health. Retrieved from https://www.jhsph.edu/research/centers-and-institutes/center-for-adolescent-health/_docs/TTYE-Guide.pdf. mailto:/Sandboxes/lhrli@ucdavis.edu
5. American Psychological Association (2002). Developing adolescent: A reference for professionals. mailto:/Sandboxes/lhrli@ucdavis.edu


## Contributors and Attributions

CC licensed content, Original

- Modification, adaptation, and original content. **Authored by**: Tera Jones for Lumen Learning. **Provided by**: Lumen Learning. **License**: *CC BY-NC-SA: Attribution-NonCommercial-ShareAlike*

CC licensed content, Shared previously

- Adolescent Development outline of changes. **Authored by**: Jennifer Lansford . **Provided by**: Duke University. **Located at**: http://nobaproject.com/modules/adolescent-development?r=LDE2MjU3. **Project**: The Noba Project. **License**: *CC BY-NC-SA: Attribution-NonCommercial-ShareAlike*
- Introduction to adolescence. **Provided by**: Boundless. **Located at**: https://courses.lumenlearning.com/boundless-psychology/chapter/adolescence/. **License**: *CC BY-SA: Attribution-ShareAlike*
- teenage girls. **Provided by**: Pxhere. **Located at**: https://pxhere.com/en/photo/901991. **License**: *CC0: No Rights Reserved*

---


This page titled 15.2.1: Why It Matters- Adolescence is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 7.1: Why It Matters- Adolescence by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.2.2: Introduction to Physical Growth and Development in Adolescence

## What you'll learn to do: describe the physical changes that occur during puberty and adolescence



Physical changes of puberty mark the onset of adolescence (Lerner & Steinberg, 2009). For both boys and girls, these changes include a growth spurt in height, growth of pubic and underarm hair, and skin changes (e.g., pimples). Boys also experience growth in facial hair and a deepening of their voice. Girls experience breast development and begin menstruating. These pubertal changes are driven by hormones, particularly an increase in testosterone for boys and estrogen for girls. The physical changes that occur during adolescence are greater than those of any other time of life, with the exception of infancy. In some ways, however, the changes in adolescence are more dramatic than those that occur in infancy—unlike infants, adolescents are aware of the changes that are taking place and of what the changes mean. In this section, you will learn about the pubertal changes in body size, proportions, and sexual maturity, the social and emotional attitudes and reactions toward puberty, and some of the health concerns during adolescence, including eating disorders.

## Contributors and Attributions

CC licensed content, Original

- Introduction to Physical Growth and Development in Adolescence, modification and adaptation. **Authored by**: Tera Jones for Lumen Learning. **Provided by**: Lumen Learning. **License**: *CC BY-NC-SA: Attribution-NonCommercial-ShareAlike*

CC licensed content, Shared previously

- Skateboard park. **Authored by**: Keith Johnston. **Provided by**: pxhere. **Located at**: https://pxhere.com/en/photo/949357. **License**: *CC0: No Rights Reserved*
- Adolescent Development. **Authored by**: Jennifer Lansford . **Provided by**: Duke University. **Located at**: http://nobaproject.com/modules/adolescent-development?r=LDE2MjU3. **Project**: The Noba Project. **License**: *CC BY-NC-SA: Attribution-NonCommercial-ShareAlike*

This page titled 15.2.2: Introduction to Physical Growth and Development in Adolescence is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 7.2: Introduction to Physical Growth and Development in Adolescence by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.2.3: Physical Development during Adolescence

**Learning Outcomes**

- Describe pubertal changes in body size, proportions, and sexual maturity
- Explain social and emotional attitudes and reactions toward puberty, including sex differences

## Puberty Begins

**Puberty** is the period of rapid growth and sexual development that begins in adolescence and starts at some point between ages 8 and 14. While the sequence of physical changes in puberty is predictable, the onset and pace of puberty vary widely. Every person's individual timetable for puberty is different and is primarily influenced by heredity; however environmental factors—such as diet and exercise—also exert some influence.

Adolescence has evolved historically, with evidence indicating that this stage is lengthening as individuals start puberty earlier and transition to adulthood later than in the past. Puberty today begins, on average, at age 10–11 years for girls and 11–12 years for boys. This average age of onset has decreased gradually over time since the 19th century by 3–4 months per decade, which has been attributed to a range of factors including better nutrition, obesity, increased father absence, and other environmental factors (Steinberg, 2013). [1] Completion of formal education, financial independence from parents, marriage, and parenthood have all been markers of the end of adolescence and beginning of adulthood, and all of these transitions happen, on average, later now than in the past. In fact, the prolonging of adolescence has prompted the introduction of a new developmental period called emerging adulthood that captures these developmental changes out of adolescence and into adulthood, occurring from approximately ages 18 to 29 (Arnett, 2000). [2] We'll learn more about this phase in the next module on early adulthood.

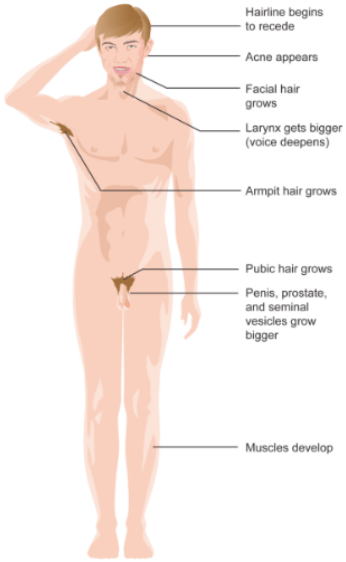



Figure 1. Major physical changes in males during puberty.

## Hormonal Changes

Puberty involves distinctive physiological changes in an individual's height, weight, body composition, and circulatory and respiratory systems, and during this time, both the adrenal glands and sex glands mature. These changes are largely influenced by hormonal activity. Many hormones contribute to the beginning of puberty, but most notably a major rush of **estrogen** for girls and **testosterone** for boys. Hormones play an *organizational role* (priming the body to behave in a certain way once puberty begins) and an *activational role* (triggering certain behavioral and physical changes). During puberty, the adolescent's hormonal balance

shifts strongly towards an adult state; the process is triggered by the pituitary gland, which secretes a surge of hormonal agents into the blood stream and initiates a chain reaction.

Puberty occurs over two distinct phases, and the first phase, **adrenarche**, begins at 6 to 8 years of age and involves increased production of adrenal androgens that contribute to a number of pubertal changes—such as skeletal growth. The second phase of puberty, **gonadarche**, begins several years later and involves increased production of hormones governing physical and sexual maturation.

## Sexual Maturation

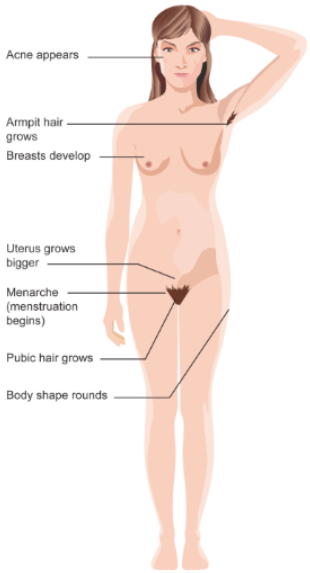



Figure 2. Major physical changes in females during puberty.

During puberty, primary and secondary sex characteristics develop and mature. **Primary sex characteristics** are organs specifically needed for reproduction—the uterus and ovaries in females and testes in males. **Secondary sex characteristics** are physical signs of sexual maturation that do not directly involve sex organs, such as development of breasts and hips in girls, and development of facial hair and a deepened voice in boys. Both sexes experience development of pubic and underarm hair, as well as increased development of sweat glands.

The male and female **gonads** are activated by the surge of the hormones discussed earlier, which puts them into a state of rapid growth and development. The testes primarily release testosterone and the ovaries release estrogen; the production of these hormones increases gradually until sexual maturation is met.

For girls, observable changes begin with nipple growth and pubic hair. Then the body increases in height while fat forms particularly on the breasts and hips. The first menstrual period (**menarche**) is followed by more growth, which is usually completed by four years after the first menstrual period began. Girls experience menarche usually around 12–13 years old. For boys, the usual sequence is growth of the testes, initial pubic-hair growth, growth of the penis, first ejaculation of seminal fluid (**spermarche**), appearance of facial hair, a peak growth spurt, deepening of the voice, and final pubic-hair growth. (Herman-Giddens et al, 2012).[3] Boys experience spermarche, the first ejaculation, around 13–14 years old.

Try It

https://assessments.lumenlearning.co...essments/16607

https://assessments.lumenlearning.co...essments/16608

## Physical Growth: The Growth Spurt

During puberty, both sexes experience a rapid increase in height and weight (referred to as a **growth spurt**) over about 2-3 years resulting from the simultaneous release of growth hormones, thyroid hormones, and androgens. Males experience their growth spurt about two years later than females. For girls the growth spurt begins between 8 and 13 years old (average 10-11), with adult height reached between 10 and 16 years old. Boys begin their growth spurt slightly later, usually between 10 and 16 years old (average 12-13), and reach their adult height between 13 and 17 years old. Both nature (i.e., genes) and nurture (e.g., nutrition, medications, and medical conditions) can influence both height and weight.

Before puberty, there are nearly no differences between males and females in the distribution of fat and muscle. During puberty, males grow muscle much faster than females, and females experience a higher increase in body fat and bones become harder and more brittle. An adolescent's heart and lungs increase in both size and capacity during puberty; these changes contribute to increased strength and tolerance for exercise.

### Watch It

Watch this video to see a summary of the main biological changes that occur during puberty.




A YouTube element has been excluded from this version of the text. You can view it online here: http://pb.libretexts.org/lsdm/?p=268

You can view the transcript for "Physical development in adolescence | Behavior | MCAT | Khan Academy" here (opens in new window).

### Try It

A link to an interactive elements can be found at the bottom of this page.

## Reactions Toward Puberty and Physical Development

The accelerated growth in different body parts happens at different times, but for all adolescents it has a fairly regular sequence. The first places to grow are the extremities (head, hands, and feet), followed by the arms and legs, and later the torso and shoulders. This non-uniform growth is one reason why an adolescent body may seem out of proportion. Additionally, because rates of physical development vary widely among teenagers, puberty can be a source of pride or embarrassment.

Most adolescents want nothing more than to fit in and not be distinguished from their peers in any way, shape or form (Mendle,

2015).[4] So when a child develops earlier or later than his or her peers, there can be long-lasting effects on mental health. Simply put, beginning puberty earlier than peers presents great challenges, particularly for girls. The picture for early-developing boys isn't as clear, but evidence suggests that they, too, eventually might suffer ill effects from maturing ahead of their peers. The biggest challenges for boys, however, seem to be more related to late development.

As mentioned in the Khan Academy video about physical development, early maturing boys tend to be stronger, taller, and more athletic than their later maturing peers. They are usually more popular, confident, and independent, but they are also at a greater risk for substance abuse and early sexual activity (Flannery, Rowe, & Gulley, 1993; Kaltiala-Heino, Rimpela, Rissanen, & Rantanen, 2001). Additionally, more recent research found that while early-maturing boys initially had lower levels of depression than later-maturing boys, over time they showed signs of increased anxiety, negative self-image and interpersonal stress. (Rudolph, Troop-Gordon, Lambert, & Natsuaki, 2014).[5]

Early maturing girls may be teased or overtly admired, which can cause them to feel self-conscious about their developing bodies. These girls are at increased risk of a range of psychosocial problems including depression, substance use and early sexual behavior (Graber, 2013).[6] These girls are also at a higher risk for eating disorders, which we will discuss in more detail later in this module (Ge, Conger, & Elder, 2001; Graber, Lewinsohn, Seeley, & Brooks-Gunn, 1997; Striegel-Moore & Cachelin, 1999).

Late blooming boys and girls (i.e., they develop more slowly than their peers) may feel self-conscious about their lack of physical development. Negative feelings are particularly a problem for late maturing boys, who are at a higher risk for depression and conflict with parents (Graber et al., 1997) and more likely to be bullied (Pollack & Shuster, 2000).

## Try It

https://assessments.lumenlearning.co...essments/16609

## Glossary

*adolescent growth spurt available at the end of this section.*

*adrenarche available at the end of this section.*

*estrogen available at the end of this section.*

*gonad available at the end of this section.*

*gonadarche available at the end of this section.*

*menarche available at the end of this section.*

*primary sex characteristics available at the end of this section.*

*puberty available at the end of this section.*

*secondary sex characteristics available at the end of this section.*

*spermarche available at the end of this section.*

*testosterone available at the end of this section.*


1. Steinberg, L. (2013). Adolescence (10th ed.). New York, NY: McGraw-Hill. mailto:/Sandboxes/lhrli@ucdavis.edu
2. Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. American Psychologist, 55, 469–480. mailto:/Sandboxes/lhrli@ucdavis.edu
3. Herman-Giddens, M.E., Steffes, J., Harris, D., Slora, E., Hussey, M., Dowshen, S.A, & Reiter, E.O. (2012). Secondary sexual characteristics in boys: Data from the pediatric research in office settings network. Pediatrics, 130(5), 1058-1068.

mailto:/Sandboxes/lhrli@ucdavis.edu
4. Mendle, J., Moore, S. R., Briley, D. A., & Harden, K. P. (2015). Puberty, socioeconomic status, and depression in girls: Evidence for gene x environment interactions. Clinical Psychological Science. Advance online publication. mailto:/Sandboxes/lhrli@ucdavis.edu
5. Rudolph, K. D., Troop-Gordon, W., Lambert, S. F., & Natsuaki, M. N. (2014). Long-term consequences of pubertal timing for youth depression: Identifying personal and contextual pathways of risk. Development and Psychopathology, 26, 1423–1444. mailto:/Sandboxes/lhrli@ucdavis.edu
6. Graber, J. A. (2013). Pubertal timing and the development of psychopathology in adolescence and beyond. Hormones and Behavior, 64, 262–269. mailto:/Sandboxes/lhrli@ucdavis.edu

# Contributors and Attributions

CC licensed content, Shared previously

- Stages of Development. **Provided by**: OpenStax College. **Located at**: http://cnx.org/contents/4abf04bf-93a0-45c3-9cbc-2cefd46e68cc@4.100:1/Psychology. **License**: *CC BY: Attribution*. **License Terms**: Download for free at http://cnx.org/content/col11629/latest/.
- Adolescence. **Provided by**: Boundless. **Located at**: https://courses.lumenlearning.com/boundless-psychology/chapter/adolescence/. **License**: *CC BY-SA: Attribution-ShareAlike*
- Sexual Maturation images. **Provided by**: CK-12. **Located at**: https://www.ck12.org/book/Human-Biology-Your-Changing-Body/section/4.1/. **License**: *CC BY-NC: Attribution-NonCommercial*

All rights reserved content

- Physical development in adolescence | Behavior | MCAT. **Provided by**: Khan Academy. **Located at**: https://www.youtube.com/watch?v=DWKWjpVsGng. **License**: *Other*. **License Terms**: Standard YouTube License

## Answers

**Glossary**
rapid increase in the individual's height and weight during puberty resulting from simultaneous release of growth hormones, thyroid hormones, and androgens. Males experience their growth spurt about two years later, on average, than females

**Glossary**
an increase in the production of androgens by the adrenal cortex that usually occurs during the eighth or ninth year of life and typically peaks at around 10 to 14 years of age and is eventually involved in the development of pubic hair, body odor, skin oiliness, and acne

**Glossary**
primary female sex hormone that is responsible for the development and regulation of the female reproductive system and secondary sex characteristics

**Glossary**
a sex organ that produces gametes; specifically, a testicle or ovary

**Glossary**
refers to the earliest gonadal changes of puberty. In response to pituitary gonadotropins, the ovaries in girls and the testes in boys begin to grow and increase the production of the sex steroids, especially estradiol and testosterone

**Glossary**
a girl's first menstrual period, signaling that she has begun ovulation. Pregnancy is biologically possible, but ovulation and menstruation are often irregular for years after menarche

**Glossary**
the parts of the body that are directly involved in reproduction, including the vagina, uterus, ovaries, testicles, and penis

**Glossary**
the period of rapid growth and sexual development that begins in adolescence

**Glossary**
physical traits that are not directly involved in reproduction but that indicate sexual maturity, such as a man's beard or a woman's breasts

**Glossary**
a boy's first ejaculation of sperm. Erections can occur as early as infancy, but ejaculation signals sperm production. Spermarche may occur during sleep (nocturnal emission or "wet dream") or via direct stimulation

**Glossary**
the primary male sex hormone that plays a key role in the development of male reproductive tissues such as testes and prostate, as well as promoting secondary sexual characteristics such as increased muscle and bone mass, and the growth of body hair. Females also produce testosterone, but at lower level than males

This page titled 15.2.3: Physical Development during Adolescence is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 7.3: Physical Development during Adolescence by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.2.4: Brain Development During Adolescence

## Learning Outcomes

- Describe brain development during adolescence

The human brain is not fully developed by the time a person reaches puberty. Between the ages of 10 and 25, the brain undergoes changes that have important implications for behavior. The brain reaches 90% of its adult size by the time a person is six or seven years of age. Thus, the brain does not grow in size much during adolescence. However, the creases in the brain continue to become more complex until the late teens. The biggest changes in the folds of the brain during this time occur in the parts of the cortex that process cognitive and emotional information.

Up until puberty, brain cells continue to bloom in the frontal region. Some of the most developmentally significant changes in the brain occur in the **prefrontal cortex**, which is involved in decision making and cognitive control, as well as other higher cognitive functions. During adolescence, **myelination** and **synaptic pruning** in the prefrontal cortex increases, improving the efficiency of information processing, and neural connections between the prefrontal cortex and other regions of the brain are strengthened. However, this growth takes time and the growth is uneven.

## The Teen Brain: 6 Things to Know

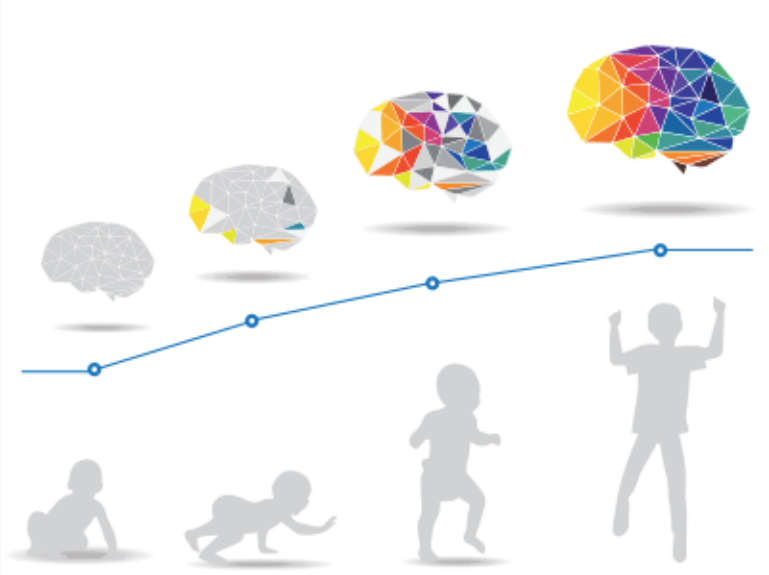


Figure 1. The brain reaches its largest size in the early teen years, but continues to mature well into the 20s.

As you learn about brain development during adolescence, consider these six facts from the The National Institute of Mental Health:

### Your brain does not keep getting bigger as you get older

For girls, the brain reaches its largest physical size around 11 years old and for boys, the brain reaches its largest physical size around age 14. Of course, this difference in age does not mean either boys or girls are smarter than one another!

### But that doesn't mean your brain is done maturing

For both boys and girls, although your brain may be as large as it will ever be, your brain doesn't finish developing and maturing until your mid- to late-20s. The front part of the brain, called the prefrontal cortex, is one of the last brain regions to mature. It is

the area responsible for planning, prioritizing and controlling impulses.

## The teen brain is ready to learn and adapt

In a digital world that is constantly changing, the adolescent brain is well prepared to adapt to new technology—and is shaped in return by experience.

## Many mental disorders appear during adolescence

All the big changes the brain is experiencing may explain why adolescence is the time when many mental disorders—such as schizophrenia, anxiety, depression, bipolar disorder, and eating disorders—emerge.

## The teen brain is resilient

Although adolescence is a vulnerable time for the brain and for teenagers in general, most teens go on to become healthy adults. Some changes in the brain during this important phase of development actually may help protect against long-term mental disorders.

## Teens need more sleep than children and adults

Although it may seem like teens are lazy, science shows that melatonin levels (or the "sleep hormone" levels) in the blood naturally rise later at night and fall later in the morning than in most children and adults. This may explain why many teens stay up late and struggle with getting up in the morning. Teens should get about 9-10 hours of sleep a night, but most teens don't get enough sleep. A lack of sleep makes paying attention hard, increases impulsivity and may also increase irritability and depression.

The **limbic system** develops years ahead of the prefrontal cortex. Development in the limbic system plays an important role in determining rewards and punishments and processing emotional experience and social information. Pubertal hormones target the **amygdala** directly and powerful sensations become compelling (Romeo, 2013). [1] Brain scans confirm that cognitive control, revealed by fMRI studies, is not fully developed until adulthood because the prefrontal cortex is limited in connections and engagement (Hartley & Somerville, 2015). [2] Recall that this area is responsible for judgment, impulse control, and planning, and it is still maturing into early adulthood (Casey, Tottenham, Liston, & Durston, 2005).

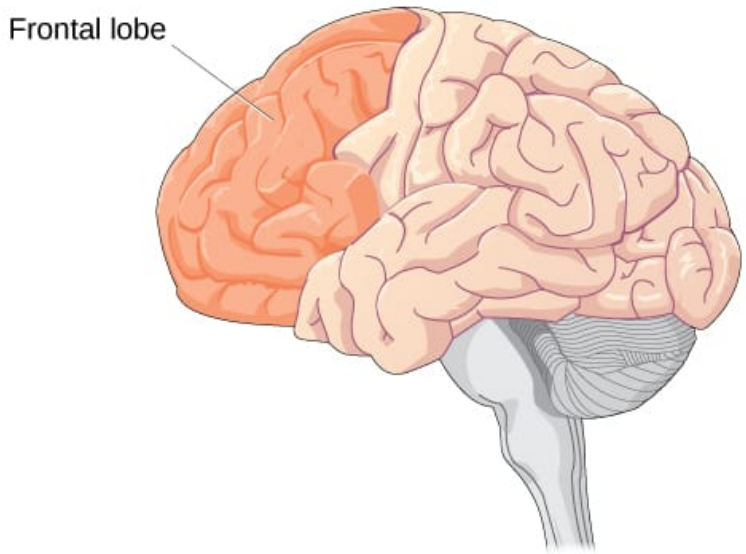



Figure 2. Brain development continues into the early 20s. The development of the frontal lobe, in particular, is important during this stage.

Additionally, changes in both the levels of the neurotransmitters **dopamine** and **serotonin** in the limbic system make adolescents more emotional and more responsive to rewards and stress. Dopamine is a neurotransmitter in the brain associated with pleasure and attuning to the environment during decision-making. During adolescence, dopamine levels in the limbic system increase and

input of dopamine to the prefrontal cortex increases. The increased dopamine activity in adolescence may have implications for adolescent risk-taking and vulnerability to boredom. Serotonin is involved in the regulation of mood and behavior. It affects the brain in a different way. Known as the "calming chemical," serotonin eases tension and stress. Serotonin also puts a brake on the excitement and sometimes recklessness that dopamine can produce. If there is a defect in the serotonin processing in the brain, impulsive or violent behavior can result.

When the overall brain chemical system is working well, it seems that these chemicals interact to balance out extreme behaviors. But when stress, arousal or sensations become extreme, the adolescent brain is flooded with impulses that overwhelm the prefrontal cortex, and as a result, adolescents engage in increased risk-taking behaviors and emotional outbursts possibly because the frontal lobes of their brains are still developing.

Later in adolescence, the brain's cognitive control centers in the prefrontal cortex develop, increasing adolescents' self-regulation and future orientation. The difference in timing of the development of these different regions of the brain contributes to more risk taking during middle adolescence because adolescents are motivated to seek thrills that sometimes come from risky behavior, such as reckless driving, smoking, or drinking, and have not yet developed the cognitive control to resist impulses or focus equally on the potential risks (Steinberg, 2008). [3] One of the world's leading experts on adolescent development, Laurence Steinberg, likens this to engaging a powerful engine before the braking system is in place. The result is that adolescents are more prone to risky behaviors than are children or adults.

### Watch IT

This video further explains and highlights some of the key developments in the brain during adolescence.

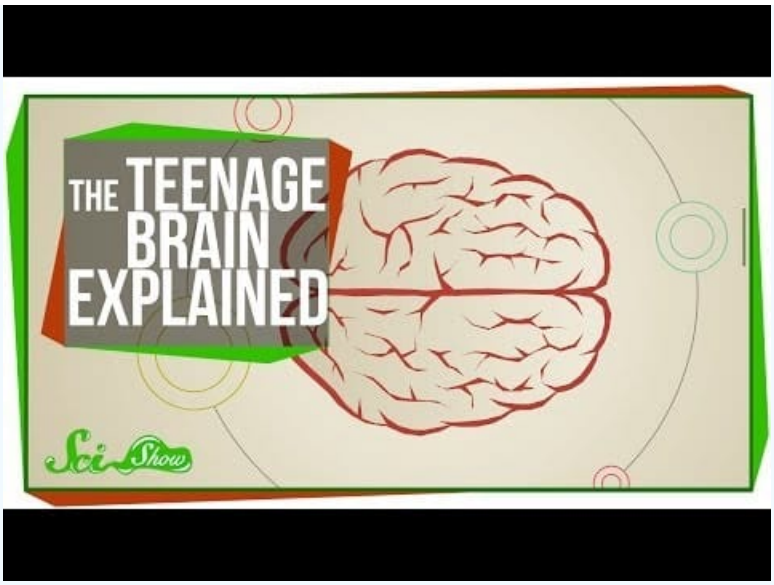
A link to an interactive elements can be found at the bottom of this page.

You can view the transcript for "Brain changes during adolescence | Behavior | MCAT | Khan Academy" here (opens in new window).

As mentioned in the introduction to adolescence, too many who have read the research on the teenage brain come to quick conclusions about adolescents as irrational loose cannons. However, adolescents are actually making choices influenced by a very different set of chemical influences than their adult counterparts—a hopped up reward system that can drown out warning signals about risk. Adolescent decisions are not always defined by impulsivity because of lack of brakes, but because of planned and enjoyable pressure to the accelerator. It is helpful to put all of these brain processes in developmental context. Young people need to somewhat enjoy the thrill of risk taking in order to complete the incredibly overwhelming task of growing up.

### Watch It

Watch the selected portion of this video to learn more about research related to brain changes and behavior during adolescence.




A YouTube element has been excluded from this version of the text. You can view it online here: http://pb.libretexts.org/lsdm/?p=270

You can view the transcript for "The Teenage Brain Explained" here (opens in new window).

To learn more, watch this TED talk by Sarah-Jayne Blakemore: The mysterious workings of the adolescent brain about the latest adolescent brain research and more about how these changes in brain development also result in behavioral changes.

### Key Takeaways

In sum, the adolescent years are a time of intense brain changes. Interestingly, two of the primary brain functions develop at different rates. Brain research indicates that the part of the brain that perceives rewards from risk, the limbic system, kicks into high gear in early adolescence. The part of the brain that controls impulses and engages in longer-term perspective, the frontal lobes, matures later. This may explain why teens in mid-adolescence take more risks than older teens. As the frontal lobes become more developed, two things happen. First, self-control develops as teens are better able to assess cause and effect. Second, more areas of the brain become involved in processing emotions, and teens become better at accurately interpreting others' emotions.[4]

### Try It

https://assessments.lumenlearning.co...essments/16610

## Sleep

Brain development even affects the way teens sleep. Adolescents' normal sleep patterns are different from those of children and adults. Teens are often drowsy upon waking, tired during the day, and wakeful at night. Although it may seem like teens are lazy, science shows that **melatonin** levels (or the "sleep hormone" levels) in the blood naturally rise later at night and fall later in the morning in teens than in most children and adults. This may explain why many teens stay up late and struggle with getting up in the morning. Teens should get about 9-10 hours of sleep a night, but most teens don't get enough sleep. A lack of sleep makes paying attention hard, increases impulsivity, and may also increase irritability and depression.[5]

## Link to Learning: School Start Times

As research reveals the importance of sleep for teenagers, many people advocate for later high school start times. Read about some of the research at the National Sleep Foundation on school start times or watch this TED talk by Wendy Troxel: "Why Schools Should Start Later for Teens".

## glossary

*amygdala available at the end of this section.*

*dopamine available at the end of this section.*

*frontal lobes available at the end of this section.*

*limbic system available at the end of this section.*

*melatonin available at the end of this section.*

*myelination available at the end of this section.*

*prefrontal cortex available at the end of this section.*

*serotonin available at the end of this section.*

*synaptic pruning available at the end of this section.*


1. Romeo, R.D. (2013). The teenage brain: The stress response and the adolescent brain. Current Directions in Psychological Science, 22 (2), 140-145. mailto:/Sandboxes/lhrli@ucdavis.edu
2. Hartley, C.A. & Somerville, L.H. (2015). The neuroscience of adolescent decision-making. Current Opinion in Behavioral Sciences, 5, 108-115. mailto:/Sandboxes/lhrli@ucdavis.edu
3. Steinberg, L. (2013). Adolescence (10th ed.). New York, NY: McGraw-Hill. mailto:/Sandboxes/lhrli@ucdavis.edu
4. Steinberg, L. (2008) A social neuroscience perspective on adolescent risk-taking. Developmental Review, 28:78-106. mailto:/Sandboxes/lhrli@ucdavis.edu
5. National Institute of Mental Health. The Teen Brain: 6 Things to Know. Retrieved from https://www.nimh.nih.gov/health/publ...dex.shtml#pub6. mailto:/Sandboxes/lhrli@ucdavis.edu


# Contributors and Attributions


CC licensed content, Original

- Brain Development During Adolescence modification, adaptation, and original content. **Authored by**: Tera Jones for Lumen Learning. **Provided by**: Lumen Learning. **License**: *CC BY-SA: Attribution-ShareAlike*

CC licensed content, Shared previously

- Adolescence. **Provided by**: Wikipedia. **Located at**: https://en.Wikipedia.org/wiki/Adolescence. **License**: *CC BY-SA: Attribution-ShareAlike*
- Stages of Development. **Provided by**: OpenStax College. **Located at**: http://cnx.org/contents/4abf04bf-93a0-45c3-9cbc-2cefd46e68cc@4.100:1/Psychology. **License**: *CC BY: Attribution*. **License Terms**: Download for free at http://cnx.org/contents/02040312-72c...9333f3e1d@10.1.
- Adolescent Development. **Authored by**: Jennifer Lansford . **Provided by**: Duke University. **Located at**: http://nobaproject.com/modules/adolescent-development?r=LDE2MjU3. **Project**: The Noba Project. **License**: *CC BY-NC-SA: Attribution-NonCommercial-ShareAlike*

All rights reserved content

- The Teenage Brain Explained. **Provided by**: SciShow. **Located at**: https://www.youtube.com/watch?v=hiduiTq1ei8&feature=youtu.be. **License**: *Other*. **License Terms**: Standard YouTube License
- Brain changes during adolescence | Behavior | MCAT. **Provided by**: Khan Academy. **Located at**: https://www.youtube.com/watch?v=5Fa8U6BkhNo&feature=youtu.be. **License**: *Other*. **License Terms**: Standard YouTube License

Public domain content

- The Teen Brain: 6 Things to Know. **Provided by**: National Institute of Mental Health. **Located at**: https://www.nimh.nih.gov/health/publications/the-teen-brain-6-things-to-know/index.shtml#pub4. **License**: *Public Domain: No Known Copyright*

## Answers

**glossary**
part of the limbic system in the brain, which is involved with emotions and emotional responses and is particularly active during puberty

**glossary**
a neurotransmitter in the brain that plays a role in pleasure and the reward system; increases in the limbic system and later in the prefrontal cortex during adolescence

**glossary**
the parts of the brain involved in impulse control, planning, and higher order thinking; still developing in adolescence

**glossary**
structures in the brain (including the amygdala) that involve processing emotional experience and social information and determining rewards and punishments; develops years before the prefrontal cortex

**glossary**
sleep hormone whose levels rise later at night and decrease later in the morning for teens, compared to children and adults

**glossary**
insulation of neurons' axons with fatty substance (myelin sheath) that helps speed up the processing of information; myelination starts to increase in the prefrontal cortex during adolescence

**glossary**
part of the frontal lobes, involved with decision making, cognitive control, and other higher order functions; prefrontal cortex develops further during adolescence

**glossary**
"calming chemical," a neurotransmitter in the brain involved with the regulation of mood and behavior; serotonin levels increase in the limbic system during adolescence

**glossary**
connections in the brain that are not used much are lost so that other connections can be strengthened; this pruning happens with prefrontal cortex connections in adolescence

This page titled 15.2.4: Brain Development During Adolescence is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 7.4: Brain Development During Adolescence by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.2.5: Introduction to Cognitive Development in Adolescence

## What you'll learn to do: describe changes in cognitive development and moral reasoning during adolescence



Here we learn about adolescent cognitive development. In adolescence, changes in the brain interact with experience, knowledge, and social demands and produce rapid cognitive growth. The changes in how adolescents think, reason, and understand can be even more dramatic than their obvious physical changes. This stage of cognitive development, termed by Piaget as the formal operational stage, marks a movement from the ability to think and reason logically only about concrete, visible events to an ability to also think logically about abstract concepts.

Adolescents are now able to analyze situations logically in terms of cause and effect and to entertain hypothetical situations and entertain what-if possibilities about the world. This higher-level thinking allows them to think about the future, evaluate alternatives, and set personal goals. Although there are marked individual differences in cognitive development among teens, these new capacities allow adolescents to engage in the kind of introspection and mature decision making that was previously beyond their cognitive capacity.

## Contributors and Attributions

CC licensed content, Original

- Introduction to Cognitive Development in Adolescence. **Authored by**: Tera Jones for Lumen Learning. **Provided by**: Lumen Learning. **License**: *CC BY: Attribution*

CC licensed content, Shared previously

- In Their Shoes. **Authored by**: Louis Briscese. **Provided by**: U.S. Department of Defense. **Located at**: https://dod.defense.gov/Photos/Photo-Gallery/igphoto/2001716400/. **License**: *CC BY-NC: Attribution-NonCommercial*

This page titled 15.2.5: Introduction to Cognitive Development in Adolescence is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 7.6: Introduction to Cognitive Development in Adolescence by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.2.6: Cognitive Development during Adolescence

**Learning Outcomes**

- Explain Piaget's theory on formal operational thought
- Describe cognitive abilities and changes during adolescence



Figure 1. Adolescents practice their developing abstract and hypothetical thinking skills, coming up with alternative interpretations of information.

Adolescence is a time of rapid cognitive development. Biological changes in brain structure and connectivity in the brain interact with increased experience, knowledge, and changing social demands to produce rapid cognitive growth. These changes generally begin at puberty or shortly thereafter, and some skills continue to develop as an adolescent ages. Development of executive functions, or cognitive skills that enable the control and coordination of thoughts and behavior, are generally associated with the prefrontal cortex area of the brain. The thoughts, ideas, and concepts developed at this period of life greatly influence one's future life and play a major role in character and personality formation.

## Perspectives and Advancements in Adolescent Thinking

There are two perspectives on adolescent thinking: constructivist and information-processing. The ***constructivist perspective***, based on the work of Piaget, takes a quantitative, stage-theory approach. This view hypothesizes that adolescents' cognitive improvement is relatively sudden and drastic. The ***information-processing perspective*** derives from the study of artificial intelligence and explains cognitive development in terms of the growth of specific components of the overall process of thinking.

Improvements in basic thinking abilities generally occur in five areas during adolescence:

- *Attention*. Improvements are seen in **selective attention** (the process by which one focuses on one stimulus while tuning out another), as well as **divided attention** (the ability to pay attention to two or more stimuli at the same time).
- *Memory*. Improvements are seen in working memory and long-term memory.
- *Processing Speed*. Adolescents think more quickly than children. Processing speed improves sharply between age five and middle adolescence, levels off around age 15, and does not appear to change between late adolescence and adulthood.
- *Organization*. Adolescents are more aware of their own thought processes and can use **mnemonic devices** and other strategies to think and remember information more efficiently.
- *Metacognition*. Adolescents can think about thinking itself. This often involves monitoring one's own cognitive activity during the thinking process. **Metacognition** provides the ability to plan ahead, see the future consequences of an action, and

provide alternative explanations of events.

## Formal Operational Thought

In the last of the Piagetian stages, a child becomes able to reason not only about tangible objects and events, but also about hypothetical or abstract ones. Hence it has the name formal operational stage—the period when the individual can "operate" on "forms" or representations. This allows an individual to think and reason with a wider perspective. This stage of cognitive development, termed by Piaget as **formal operational thought**, marks a movement from an ability to think and reason from concrete visible events to an ability to think hypothetically and entertain what-if possibilities about the world. An individual can solve problems through abstract concepts and utilize hypothetical and deductive reasoning. Adolescents use trial and error to solve problems, and the ability to systematically solve a problem in a logical and methodical way emerges.

### Watch It

This video explains some of the cognitive development consistent with formal operational thought.

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

You can view the transcript for "Formal operational stage – Intro to Psychology" here (opens in new window).

### Formal Operational Thinking in the Classroom

School is a main contributor in guiding students towards formal operational thought. With students at this level, the teacher can pose hypothetical (or contrary-to-fact) problems: "What *if* the world had never discovered oil?" or "What *if* the first European explorers had settled first in California instead of on the East Coast of the United States?" To answer such questions, students must use hypothetical reasoning**,** meaning that they must manipulate ideas that vary in several ways at once, and do so entirely in their minds.

The hypothetical reasoning that concerned Piaget primarily involved scientific problems. His studies of formal operational thinking therefore often look like problems that middle or high school teachers pose in science classes. In one problem, for example, a young person is presented with a simple pendulum, to which different amounts of weight can be hung (Inhelder & Piaget, 1958). The experimenter asks: "What determines how fast the pendulum swings: the length of the string holding it, the weight attached to it, or the distance that it is pulled to the side?" The young person is not allowed to solve this problem by trial-and-error with the materials themselves, but must reason a way to the solution mentally. To do so systematically, he or she must imagine varying each factor separately, while also imagining the other factors that are held constant. This kind of thinking requires facility at manipulating mental representations of the relevant objects and actions—precisely the skill that defines formal operations.

As you might suspect, students with an ability to think hypothetically have an advantage in many kinds of school work: by definition, they require relatively few "props" to solve problems. In this sense they can in principle be more self-directed than students who rely only on concrete operations—certainly a desirable quality in the opinion of most teachers. Note, though, that formal operational thinking is desirable but not *sufficient* for school success, and that it is far from being the only way that students achieve educational success. Formal thinking skills do not insure that a student is motivated or well-behaved, for example, nor does it guarantee other desirable skills. The fourth stage in Piaget's theory is really about a particular kind of formal thinking, the kind needed to solve scientific problems and devise scientific experiments. Since many people do not normally deal with such problems in the normal course of their lives, it should be no surprise that research finds that many people never achieve or use formal thinking fully or consistently, or that they use it only in selected areas with which they are very familiar (Case & Okomato, 1996). For teachers, the limitations of Piaget's ideas suggest a need for additional theories about development—ones that focus more directly on the social and interpersonal issues of childhood and adolescence.

## Hypothetical and abstract thinking

One of the major premises of formal operational thought is the capacity to think of possibility, not just reality. Adolescents' thinking is less bound to concrete events than that of children; they can contemplate possibilities outside the realm of what currently exists. One manifestation of the adolescent's increased facility with thinking about possibilities is the improvement of skill in **deductive reasoning (also called top-down reasoning),** which leads to the development of **hypothetical thinking**. This provides the ability to plan ahead, see the future consequences of an action and to provide alternative explanations of events. It also makes adolescents more skilled debaters, as they can reason against a friend's or parent's assumptions. Adolescents also develop a more sophisticated understanding of probability.

This appearance of more systematic, abstract thinking allows adolescents to comprehend the sorts of higher-order abstract logic inherent in puns, proverbs, metaphors, and analogies. Their increased facility permits them to appreciate the ways in which language can be used to convey multiple messages, such as satire, metaphor, and sarcasm. (Children younger than age nine often cannot comprehend sarcasm at all). This also permits the application of advanced reasoning and logical processes to social and ideological matters such as interpersonal relationships, politics, philosophy, religion, morality, friendship, faith, fairness, and honesty.

## Metacognition

Metacognition refers to "thinking about thinking." It is relevant in social cognition as it results in increased introspection, self-consciousness, and intellectualization. Adolescents are much better able to understand that people do not have complete control over their mental activity. Being able to introspect may lead to forms of egocentrism, or self-focus, in adolescence. **Adolescent egocentrism** is a term that David Elkind used to describe the phenomenon of adolescents' inability to distinguish between their perception of what others think about them and what people actually think in reality. Elkind's theory on adolescent egocentrism is drawn from Piaget's theory on cognitive developmental stages, which argues that formal operations enable adolescents to construct imaginary situations and abstract thinking.

Accordingly, adolescents are able to conceptualize their own thoughts and conceive of other people's thoughts. However, Elkind pointed out that adolescents tend to focus mostly on their own perceptions, especially on their behaviors and appearance, because of the "physiological metamorphosis" they experience during this period. This leads to adolescents' belief that other people are as attentive to their behaviors and appearance as they are of themselves. According to Elkind, adolescent egocentrism results in two distinct problems in thinking: the imaginary audience and the personal fable**.** These likely peak at age fifteen, along with self-consciousness in general.

**Imaginary audience** is a term that Elkind used to describe the phenomenon that an adolescent anticipates the reactions of other people to him/herself in actual or impending social situations. Elkind argued that this kind of anticipation could be explained by the adolescent's preoccupation that others are as admiring or as critical of them as they are of themselves. As a result, an audience is created, as the adolescent believes that they will be the focus of attention.

However, more often than not the audience is imaginary because in actual social situations individuals are not usually the sole focus of public attention. Elkind believed that the construction of imaginary audiences would partially account for a wide variety of typical adolescent behaviors and experiences; and imaginary audiences played a role in the self-consciousness that emerges in early adolescence. However, since the audience is usually the adolescent's own construction, it is privy to his or her own knowledge of him/herself. According to Elkind, the notion of imaginary audience helps to explain why adolescents usually seek privacy and feel reluctant to reveal themselves–it is a reaction to the feeling that one is always on stage and constantly under the critical scrutiny of others.

Elkind also addressed that adolescents have a complex set of beliefs that their own feelings are unique and they are special and immortal. **Personal fable** is the term Elkind created to describe this notion, which is the complement of the construction of imaginary audience. Since an adolescent usually fails to differentiate their own perceptions and those of others, they tend to believe that they are of importance to so many people (the imaginary audiences) that they come to regard their feelings as something special and unique. They may feel that only they have experienced strong and diverse emotions, and therefore others could never understand how they feel. This uniqueness in one's emotional experiences reinforces the adolescent's belief of invincibility, especially to death.

This adolescent belief in personal uniqueness and invincibility becomes an illusion that they can be above some of the rules, disciplines and laws that apply to other people; even consequences such as death (called the **invincibility fable**)**.** This belief that one is invincible removes any impulse to control one's behavior (Lin, 2016). [1] Therefore, adolescents will engage in risky

behaviors, such as drinking and driving or unprotected sex, and feel they will not suffer any negative consequences.

Try It

https://assessments.lumenlearning.co...essments/16613

https://assessments.lumenlearning.co...essments/16614

## Intuitive and Analytic Thinking

Piaget emphasized the sequence of thought throughout four stages. Others suggest that thinking does not develop in sequence, but instead, that advanced logic in adolescence may be influenced by intuition. Cognitive psychologists often refer to intuitive and analytic thought as the **dual-process model**; the notion that humans have two distinct networks for processing information (Kuhn, 2013.) [2] **Intuitive thought** is automatic, unconscious, and fast, and it is more experiential and emotional.

In contrast, **a nalytic thought** is deliberate, conscious, and rational (logical). While these systems interact, they are distinct (Kuhn, 2013). Intuitive thought is easier, quicker, and more commonly used in everyday life. As discussed in the adolescent brain development section earlier in this module, the discrepancy between the maturation of the limbic system and the prefrontal cortex, may make teens more prone to emotional intuitive thinking than adults. As adolescents develop, they gain in logic/analytic thinking ability and sometimes regress, with social context, education, and experiences becoming major influences. Simply put, being “smarter” as measured by an intelligence test does not advance cognition as much as having more experience, in school and in life (Klaczynski & Felmban, 2014). [3]

## Risk-taking

Because most injuries sustained by adolescents are related to risky behavior (alcohol consumption and drug use, reckless or distracted driving, and unprotected sex), a great deal of research has been done on the cognitive and emotional processes underlying adolescent risk-taking. In addressing this question, it is important to distinguish whether adolescents are more likely to engage in risky behaviors (prevalence), whether they make risk-related decisions similarly or differently than adults (cognitive processing perspective), or whether they use the same processes but value different things and thus arrive at different conclusions. The **behavioral decision-making theory** proposes that adolescents and adults both weigh the potential rewards and consequences of an action. However, research has shown that adolescents seem to give more weight to rewards, particularly social rewards, than do adults. Adolescents value social warmth and friendship, and their hormones and brains are more attuned to those values than to long-term consequences (Crone & Dahl, 2012). [4]



Figure 2. Teenage thinking is characterized by the ability to reason logically and solve hypothetical problems such as how to design, plan, and build a structure. (credit: U.S. Army RDECOM)

Some have argued that there may be evolutionary benefits to an increased propensity for risk-taking in adolescence. For example, without a willingness to take risks, teenagers would not have the motivation or confidence necessary to leave their family of origin. In addition, from a population perspective, there is an advantage to having a group of individuals willing to take more risks and

try new methods, counterbalancing the more conservative elements more typical of the received knowledge held by older adults.

## Relativistic Thinking

Adolescents are more likely to engage in **relativistic thinking**—in other words, they are more likely to question others' assertions and less likely to accept information as absolute truth. Through experience outside the family circle, they learn that rules they were taught as absolute are actually relativistic. They begin to differentiate between rules crafted from common sense (don't touch a hot stove) and those that are based on culturally relative standards (codes of etiquette). This can lead to a period of questioning authority in all domains.

As we continue through this module, we will discuss how this influences moral reasoning, as well as psychosocial and emotional development. These more abstract developmental dimensions (cognitive, moral, emotional, and social dimensions) are not only more subtle and difficult to measure, but these developmental areas are also difficult to tease apart from one another due to the inter-relationships among them. For instance, our cognitive maturity will influence the way we understand a particular event or circumstance, which will in turn influence our moral judgments about it, and our emotional responses to it. Similarly, our moral code and emotional maturity influence the quality of our social relationships with others.

### Glossary

*adolescent egocentrism available at the end of this section.*

*analytic thought available at the end of this section.*

*behavioral decision-making theory available at the end of this section.*

*constructivist perspective available at the end of this section.*

*deductive reasoning available at the end of this section.*

*divided attention available at the end of this section.*

*dual process model/dual processing available at the end of this section.*

*formal operational thought available at the end of this section.*

*hypothetical thought available at the end of this section.*

*imaginary audience available at the end of this section.*

*information-processing perspective available at the end of this section.*

*intuitive thought available at the end of this section.*

*invincibility fable available at the end of this section.*

*metacognition available at the end of this section.*

*mnemonic devices available at the end of this section.*

*personal fable available at the end of this section.*

*relativistic thinking available at the end of this section.*

*selective attention available at the end of this section.*

---

1. Linn, P. (2016). Risky behaviors: Integrating adolescent egocentrism with the theory of planned behavior. Review of General Psychology, 20 (4), 392-398. mailto:/Sandboxes/lhrli@ucdavis.edu

2. Kuhn, D. (2013). Reasoning. In Philip D. Zelazo (Ed.), The Oxford handbook of developmental psychology (Vol. 1, pp. 744-764). New York: NY: Oxford University Press. mailto:/Sandboxes/lhrli@ucdavis.edu
3. Klaczynski, P.A. & Felmban, W.S. (2014). Heuristics and biases during adolescence: Developmental reversals and individual differences. In Henry Markovitz (Ed.), The developmental psychology of reasoning and decision making (pp. 84-111). New York, NY: Psychology Press. mailto:/Sandboxes/lhrli@ucdavis.edu
4. Crone, E.A., & Dahl, R.E. (2012). Understanding adolescence as a period of social-affective engagement and goal flexibility. Nature Reviews Neuroscience, 13 (9), 636-650. mailto:/Sandboxes/lhrli@ucdavis.edu

# Contributors and Attributions

CC licensed content, Shared previously

- Adolescent development; cognitive development. **Authored by**: Jennifer Lansford. **Provided by**: Duke University. **Located at**: http://nobaproject.com/modules/adolescent-development?r=LDE2MjU3. **Project**: The Noba Project. **License**: *CC BY-NC-SA: Attribution-NonCommercial-ShareAlike*
- Stages of Development. **Authored by**: OpenStax College. **Located at**: http://cnx.org/contents/4abf04bf-93a0-45c3-9cbc-2cefd46e68cc@4.100:1/Psychology. **License**: *CC BY: Attribution*. **License Terms**: Download for free at http://cnx.org/content/col11629/latest/.
- Adolescence. **Provided by**: Boundless. **Located at**: https://courses.lumenlearning.com/boundless-psychology/chapter/adolescence/. **License**: *CC BY-SA: Attribution-ShareAlike*
- Adolescent egocentrism. **Located at**: https://en.Wikipedia.org/wiki/Adolescent_egocentrism#cite_note-Elkindeia-1. **License**: *CC BY-SA: Attribution-ShareAlike*
- adolescent boys. **Authored by**: An Min. **Provided by**: Pxhere. **Located at**: https://pxhere.com/en/photo/1515959. **License**: *CC0: No Rights Reserved*
- Adolescence. **Provided by**: Wikipedia. **Located at**: https://en.Wikipedia.org/wiki/Adolescence. **License**: *CC BY-SA: Attribution-ShareAlike*
- Educational Psychology. **Authored by**: Kelvin Seifert. **Provided by**: OpenStax. **Located at**: https://cnx.org/contents/zmxetoTT@2.1:9u2dcFad@2/Cognitive-development-the-theory-of-Jean-Piaget. **License**: *CC BY: Attribution*. **License Terms**: Download for free at http://cnx.org/contents/ce6c5eb6-84d...059b75221e@2.1.

All rights reserved content

- Formal operational stage - Intro to Psychology. **Provided by**: Udacity. **Located at**: https://www.youtube.com/watch?v=hvq7tq2fx1Y. **License**: *Other*. **License Terms**: Standard YouTube License

## Answers

**Glossary**

a characteristic of adolescent thinking that leads young people (ages 10-13) to focus on themselves to the exclusion of others (according to David Elkind)

**Glossary**

thought that results from analysis, such as a systematic ranking of pros and cons, risks and consequences, possibilities and facts. Analytic thought depends on logic and rationality

**Glossary**

proposes that adolescents and adults both weigh the potential rewards and consequences of an action. However, research has shown that adolescents seem to give more weight to rewards, particularly social rewards, than do adults

**Glossary**

based on the work of Piaget, a quantitative, stage-theory approach. This view hypothesizes that adolescents' cognitive improvement is relatively sudden and drastic, as adolescents learn by acting on their environment and they actively construct knowledge

**Glossary**

reasoning from a general statement, premise, or principle, though logical steps to figure out (deduce) specifics. Also called top-down processing

**Glossary**

the ability to pay attention to two or more stimuli at the same time; this ability improves during adolescence

**Glossary**

the notion that two networks exist within the human brain, one for emotional processing of stimuli and one for analytic reasoning

**Glossary**

the fourth and final stage of Piaget's theory of cognitive development, characterized by more systematic logical thinking and by the ability to understand and systematically manipulate abstract concepts

**Glossary**

reasoning that includes propositions and possibilities that may not reflect reality

**Glossary**

the other people who, in an adolescent's egocentric belief, are watching and taking note of his or her appearance, ideas, and behavior. This belief makes many adolescents very self-conscious

**Glossary**

derives from the study of artificial intelligence and explains cognitive development in terms of the growth of specific components of the overall process of thinking

**Glossary**

thoughts that arises from an emotion or a hunch, beyond rational explanation, and is influenced by past experiences and cultural assumptions

**Glossary**

an adolescent's egocentric conviction that he or she cannot be overcome or even harmed by anything that might defeat a normal mortal, such as unprotected sex, drug abuse, or high-speed driving

**Glossary**

refers to "thinking about thinking" and it is relevant in social cognition and results in increased introspection, self-consciousness, and intellectualization during adolescence

**Glossary**

mental strategies to help learn and remember information more efficiently; improves during adolescence

**Glossary**

an aspect of adolescent egocentrism characterized by an adolescent's belief that his or her thoughts, feelings, and experiences are unique, more wonderful, or more awful than anyone else's

**Glossary**

thinking that understands the relative, or situational, nature of circumstances

**Glossary**

the process by which one focuses on one stimulus while tuning out another; this ability improves during adolescence

This page titled 15.2.6: Cognitive Development during Adolescence is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 7.7: Cognitive Development during Adolescence by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.2.7: Introduction to Emotional and Social Development in Adolescence

## What you'll learn to do: describe adolescent identity development and social influences on development



Adolescence is a period of personal and social identity formation, in which different roles, behaviors, and ideologies are explored. In the United States, adolescence is seen as a time to develop independence from parents while remaining connected to them. Some key points related to social development during adolescence include the following:

- Adolescence is the period of life known for the formation of personal and social identity.
- Adolescents must explore, test limits, become autonomous, and commit to an identity, or sense of self.
- Erik Erikson referred to the task of the adolescent as one of identity versus role confusion. Thus, in Erikson's view, an adolescent's main questions are "Who am I?" and "Who do I want to be?"
- Early in adolescence, cognitive developments result in greater self-awareness, the ability to think about abstract, future possibilities, and the ability to consider multiple possibilities and identities at once.
- Changes in the levels of certain neurotransmitters (such as dopamine and serotonin) influence the way in which adolescents experience emotions, typically making them more emotional and more sensitive to stress.
- When adolescents have advanced cognitive development and maturity, they tend to resolve identity issues more easily than peers who are less cognitively developed.
- As adolescents work to form their identities, they pull away from their parents, and the peer group becomes very important; despite this, relationships with parents still play a significant role in identity formation.

## Contributors and Attributions

CC licensed content, Shared previously

- Laptop. **Authored by**: Sasin Tipchai. **Located at**: https://pixabay.com/images/id-1822678/. **License**: *CC0: No Rights Reserved*
- Key points of socioemotional development during adolescence. **Provided by**: Boundless. **Located at**: https://courses.lumenlearning.com/boundless-psychology/chapter/adolescence/. **License**: *CC BY-SA: Attribution-ShareAlike*
- Introduction to Emotional and Social Development in Adolescence. **Authored by**: Modification, adaptation, and original content. **Provided by**: Tera Jones for Lumen Learning. **Located at**: http://Lumen%20Learning. **License**: *CC BY-SA: Attribution-ShareAlike*

This page titled 15.2.7: Introduction to Emotional and Social Development in Adolescence is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 7.10: Introduction to Emotional and Social Development in Adolescence by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.2.8: Social Development during Adolescence

**Learning Outcomes**

- Examine changes in family relationships during adolescence
- Describe adolescent friendships and dating relationships as they apply to development

## Social Changes

### Parents

It appears that most teens do not experience adolescent "storm and stress" to the degree once famously suggested by G. Stanley Hall, a pioneer in the study of adolescent development. Only small numbers of teens have major conflicts with their parents (Steinberg & Morris, 2001), and most disagreements are minor. For example, in a study of over 1,800 parents of adolescents from various cultural and ethnic groups, Barber (1994) found that conflicts occurred over day-to-day issues such as homework, money, curfews, clothing, chores, and friends. These disputes occur because an adolescent's drive for independence and autonomy conflicts with the parent's supervision and control. These types of arguments tend to decrease as teens develop (Galambos & Almeida, 1992).

As adolescents work to form their identities, they pull away from their parents, and the peer group becomes very important (Shanahan, McHale, Osgood, & Crouter, 2007). Despite spending less time with their parents, most teens report positive feelings toward them (Moore, Guzman, Hair, Lippman, & Garrett, 2004). Warm and healthy parent-child relationships have been associated with positive child outcomes, such as better grades and fewer school behavior problems, in the United States as well as in other countries (Hair et al., 2005).

Although peers take on greater importance during adolescence, family relationships remain important too. One of the key changes during adolescence involves a renegotiation of parent–child relationships. As adolescents strive for more independence and autonomy during this time, different aspects of parenting become more salient. For example, parents' distal supervision and monitoring become more important as adolescents spend more time away from parents and in the presence of peers. Parental monitoring encompasses a wide range of behaviors such as parents' attempts to set rules and know their adolescents' friends, activities, and whereabouts, in addition to adolescents' willingness to disclose information to their parents. (Stattin & Kerr, 2000)[1] Psychological control, which involves manipulation and intrusion into adolescents' emotional and cognitive world through invalidating adolescents' feelings and pressuring them to think in particular ways is another aspect of parenting that becomes more salient during adolescence and is related to more problematic adolescent adjustment.[2]

**Try It**

https://assessments.lumenlearning.co...essments/16620

## Peers



Figure 1. Crowds refer to different collections of people, like the “theater kids” or the “environmentalists.” In a way, they are kind of like clothing brands that label the people associated with that crowd. [Image: Garry Knight]

As children become adolescents, they usually begin spending more time with their peers and less time with their families, and these peer interactions are increasingly unsupervised by adults. Children’s notions of friendship often focus on shared activities, whereas adolescents’ notions of friendship increasingly focus on intimate exchanges of thoughts and feelings.

During adolescence, peer groups evolve from primarily single-sex to mixed-sex. Adolescents within a peer group tend to be similar to one another in behavior and attitudes, which has been explained as being a function of **homophily** (adolescents who are similar to one another choose to spend time together in a “birds of a feather flock together” way) and influence (adolescents who spend time together shape each other’s behavior and attitudes). **Peer pressure** is usually depicted as peers pushing a teenager to do something that adults disapprove of, such as breaking laws or using drugs. One of the most widely studied aspects of adolescent peer influence is known as **deviant peer contagion** (Dishion & Tipsord, 2011)[3], which is the process by which peers reinforce problem behavior by laughing or showing other signs of approval that then increase the likelihood of future problem behavior. Although deviant peer contagion is more extreme, regular peer pressure is not always harmful. Peers can serve both positive and negative functions during adolescence. Negative peer pressure can lead adolescents to make riskier decisions or engage in more problematic behavior than they would alone or in the presence of their family. For example, adolescents are much more likely to drink alcohol, use drugs, and commit crimes when they are with their friends than when they are alone or with their family. However, peers also serve as an important source of social support and companionship during adolescence, and adolescents with positive peer relationships are happier and better adjusted than those who are socially isolated or who have conflictual peer relationships.

**Crowds** are an emerging level of peer relationships in adolescence. In contrast to friendships (which are reciprocal dyadic relationships) and **cliques** (which refer to groups of individuals who interact frequently), crowds are characterized more by shared reputations or images than actual interactions (Brown & Larson, 2009)[4] These crowds reflect different prototypic identities (such as jocks or brains) and are often linked with adolescents’ social status and peers’ perceptions of their values or behaviors.

### Link to Learning: Gender Roles

It is interesting to note that even in today’s progressive social climate and with advances in gender equality, there are still considerable differences in the ways teenage boys and girls spend their time, as shown in 2019 research by the Pew Research Center. During the school year, teenage boys spend an average of 24 minutes a day helping around the house and 12 minutes preparing food, while teenage girls spend an average of 38 minutes a day helping around the house and 29 minutes preparing food. Both boys and girls spend more equal amounts of time on maintenance chores and lawn care. Girls

also spend an average of 23 more minutes on grooming each day, which is perhaps explained by the fact that 35% of girls say they feel pressure to look good (compared with 23% of boys).[5] Read the article "The Way U.S. Teens Spend Their Time is Changing, but Differences Between Boys and Girls Persist" to learn more.

## Romantic relationships

Adolescence is the developmental period during which romantic relationships typically first emerge. Initially, same-sex peer groups that were common during childhood expand into mixed-sex peer groups that are more characteristic of adolescence. Romantic relationships often form in the context of these mixed-sex peer groups (Connolly, Furman, & Konarski, 2000)[6] Although romantic relationships during adolescence are often short-lived rather than long-term committed partnerships, their importance should not be minimized. Adolescents spend a great deal of time focused on romantic relationships, and their positive and negative emotions are more tied to romantic relationships (or lack thereof) than to friendships, family relationships, or school (Furman & Shaffer, 2003)[7] Romantic relationships contribute to adolescents' identity formation, changes in family and peer relationships, and adolescents' emotional and behavioral adjustment.

Furthermore, romantic relationships are centrally connected to adolescents' emerging sexuality. Parents, policymakers, and researchers have devoted a great deal of attention to adolescents' sexuality, in large part because of concerns related to sexual intercourse, contraception, and preventing teen pregnancies. However, sexuality involves more than this narrow focus. **Sexual orientation** refers to whether a person is sexually and romantically attracted to others of the same sex, the opposite sex, or both sexes. For example, adolescence is often when individuals who are lesbian, gay, bisexual, or transgender come to perceive themselves as such (Russell, Clarke, & Clary, 2009)[8] Thus, romantic relationships are a domain in which adolescents experiment with new behaviors and identities.

Many adolescents may choose to come out during this period of their life once an identity has been formed; many others may go through a period of questioning or denial, which can include experimentation with both homosexual and heterosexual experiences. A study of 194 lesbian, gay, and bisexual youths under the age of 21 found that having an awareness of one's sexual orientation occurred, on average, around age 10, but the process of coming out to peers and adults occurred around age 16 and 17, respectively. Coming to terms with and creating a positive LGBT identity can be difficult for some youth for a variety of reasons. Peer pressure is a large factor when youth who are questioning their sexuality or gender identity are surrounded by heteronormative peers and can cause great distress due to a feeling of being different from everyone else. While coming out can also foster better psychological adjustment, the risks associated are real. Indeed, coming out in the midst of a heteronormative peer environment often comes with the risk of ostracism, hurtful jokes, and even violence. Because of this, statistically the suicide rate amongst LGBT adolescents is up to four times higher than that of their heterosexual peers due to bullying and rejection from peers or family members.

# Diversity

Adolescent development does not necessarily follow the same pathway for all individuals. Certain features of adolescence, particularly with respect to biological changes associated with puberty and cognitive changes associated with brain development, are relatively universal. But other features of adolescence depend largely on circumstances that are more environmentally variable. For example, adolescents growing up in one country might have different opportunities for risk taking than adolescents in another country, and supports and sanctions for different behaviors in adolescence depend on laws and values that might be specific to where adolescents live. Likewise, different cultural norms regarding family and peer relationships shape adolescents' experiences in these domains. For example, in some countries, adolescents' parents are expected to retain control over major decisions, whereas in other countries, adolescents are expected to begin sharing in or taking control of decision making.

Even within the same country, adolescents' gender, ethnicity, immigrant status, religion, sexual orientation, socioeconomic status, and personality can shape both how adolescents behave and how others respond to them, creating diverse developmental contexts for different adolescents. For example, early puberty (that occurs before most other peers have experienced puberty) appears to be associated with worse outcomes for girls than boys, likely in part because girls who enter puberty early tend to associate with older boys, which in turn is associated with early sexual behavior and substance use. For adolescents who are ethnic or sexual minorities, discrimination sometimes presents a set of challenges that non-minorities do not face.

Finally, genetic variations contribute an additional source of diversity in adolescence. Current approaches emphasize gene X environment interactions, which often follow a *differential susceptibility* model (Belsky & Pluess, 2009)[9] That is, particular

genetic variations are considered riskier than others, but genetic variations also can make adolescents more or less susceptible to environmental factors. For example, the association between the CHRM2 genotype and adolescent externalizing behavior (aggression and delinquency) has been found in adolescents whose parents are low in monitoring behaviors (Dick et al., 2011)[10] Thus, it is important to bear in mind that individual differences play an important role in adolescent development.

**Try It**

https://assessments.lumenlearning.co...essments/16621

**Glossary**

*clique available at the end of this section.*

*crowds available at the end of this section.*

*homophily available at the end of this section.*

*deviant peer contagion available at the end of this section.*

*peer pressure available at the end of this section.*

*sexual orientation available at the end of this section.*


1. Stattin, H., & Kerr, M. (2000). Parental monitoring: A reinterpretation. Child Development, 71, 1072–1085. mailto:/Sandboxes/lhrli@ucdavis.edu
2. Barber, B. K. (1996). Parental psychological control: Revisiting a neglected construct. Child Development, 67, 3296–3319. mailto:/Sandboxes/lhrli@ucdavis.edu
3. Dishion, T. J., & Tipsord, J. M. (2011). Peer contagion in child and adolescent social and emotional development. Annual Review of Psychology, 62, 189–214. mailto:/Sandboxes/lhrli@ucdavis.edu
4. Brown, B. B., & Larson, J. (2009). Peer relationships in adolescence. In R. M. Lerner & L. Steinberg (Eds.), Handbook of adolescent psychology (pp. 74–103). New York, NY: Wiley. mailto:/Sandboxes/lhrli@ucdavis.edu
5. Livingston, Gretchen (February 2018). The way U.S. teens spend their time is changing, but differences between boys and girls persist. Pew Research Center. mailto:/Sandboxes/lhrli@ucdavis.edu
6. Connolly, J., Furman, W., & Konarski, R. (2000). The role of peers in the emergence of heterosexual romantic relationships in adolescence. Child Development, 71, 1395–1408. mailto:/Sandboxes/lhrli@ucdavis.edu
7. Furman, W., & Shaffer, L. (2003). The role of romantic relationships in adolescent development. In P. Florsheim (Ed.), Adolescent romantic relations and sexual behavior: Theory, research, and practical implications (pp. 3–22). Mahwah, NJ: Erlbaum. mailto:/Sandboxes/lhrli@ucdavis.edu
8. Russell, S. T., Clarke, T. J., & Clary, J. (2009). Are teens “post-gay”? Contemporary adolescents’ sexual identity labels. Journal of Youth and Adolescence, 38, 884–890. mailto:/Sandboxes/lhrli@ucdavis.edu
9. Belsky, J., & Pluess, M. (2009). Beyond diathesis-stress: Differential susceptibility to environmental influences. Psychological Bulletin, 135, 885–908. mailto:/Sandboxes/lhrli@ucdavis.edu
10. Dick, D. M., Meyers, J. L., Latendresse, S. J., Creemers, H. E., Lansford, J. E., ... Huizink, A. C. (2011). CHRM2, parental monitoring, and adolescent externalizing behavior: Evidence for gene-environment interaction. Psychological Science, 22, 481–489. mailto:/Sandboxes/lhrli@ucdavis.edu


## Contributors and Attributions


CC licensed content, Shared previously

- Modification, adaptation, and original content. **Authored by**: Tera Jones for Lumen Learning. **Provided by**: Lumen Learning. **License**: *CC BY-SA: Attribution-ShareAlike*
- Adolescent Development . **Authored by**: Jennifer Lansford. **Located at**: http://nobaproject.com/modules/adolescent-development?r=LDE2MjU3. **Project**: The Noba Project. **License**: *CC BY-NC-SA: Attribution-NonCommercial-ShareAlike*

- Adolescence. **Provided by**: Wikipedia. **Located at**: https://en.Wikipedia.org/wiki/Adolescence. **License**: *CC BY-SA: Attribution-ShareAlike*

## Answers

**Glossary**

used to describe a group of persons who interact with each other more regularly and intensely than others in the same setting. Cliques are distinguished from “crowds” in that their members interact with one another

**Glossary**

large groups of adolescents defined by their shared image and reputation

**Glossary**

a tendency of individuals to form links disproportionately with others like themselves

**Glossary**

process by which peers reinforce problem behavior by laughing or showing other signs of approval that then increase the likelihood of future problem behavior

**Glossary**

encouragement to conform to one’s friends or contemporaries in behavior, dress, and attitude; usually considered a negative force, as when adolescent peers encourage one another to defy adult authority

**Glossary**

a term that refers to whether a person is sexually and romantically attracted to others of the same sex, the opposite sex, or both sexes

This page titled 15.2.8: Social Development during Adolescence is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 7.12: Social Development during Adolescence by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.2.9: Putting It Together- Adolescence



Adolescent development is characterized by significant biological, cognitive, and pyschosocial changes. Physical changes associated with puberty are triggered by hormones and changes in the brain in which reward-processing centers develop more rapidly than cognitive control systems, making adolescents more sensitive to rewards than to possible negative consequences. Cognitive changes include improvements in complex and abstract thought and moral reasoning. Psychos ocial changes are particularly notable as adolescents become more autonomous from their parents, spend more time with peers, and begin exploring romantic relationships and sexuality.

Adjustment during adolescence is reflected in identity formation, which often involves a period of exploration followed by commitments to particular identities. Adolescents' relationships with parents go through a period of redefinition in which adolescents become more autonomous, and aspects of parenting, such as monitoring and psychological control, become more salient. Peer relationships are important sources of support and companionship during adolescence, yet can also promote problem behaviors. Same-sex peer groups evolve into mixed-sex peer groups, and adolescents' romantic relationships tend to emerge from these groups. Identity formation occurs as adolescents explore and commit to different roles and ideological positions. Despite these generalizations, factors such as country of residence, gender, ethnicity, and sexual orientation shape development in ways that lead to diversity of experiences across adolescence.

## Contributors and Attributions

CC licensed content, Original

- Modification, adaptation, and original content. **Authored by**: Tera Jones for Lumen Learning. **Provided by**: Lumen Learning. **License**: *CC BY-NC-SA: Attribution-NonCommercial-ShareAlike*

CC licensed content, Shared previously

- Sunrise. **Authored by**: Phan Minh Cuong An. **Located at**: https://pixabay.com/images/id-3614311/. **License**: *CC0: No Rights Reserved*
- Adolescent Development . **Authored by**: Jennifer Lansford. **Located at**: http://nobaproject.com/modules/adolescent-development?r=LDE2MjU3. **Project**: The Noba Project. **License**: *CC BY-NC-SA: Attribution-NonCommercial-ShareAlike*

This page titled 15.2.9: Putting It Together- Adolescence is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 7.14: Putting It Together- Adolescence by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.2.10: Discussion- Adolescence

**DISCUSSION**: In this discussion, reflect upon and discuss ONE of the following questions:

- Q1: Which of Marcia's four identity stages do you believe that you are in at this point in your life? Explain your reasoning.
- Q2: Give an example of adolescent egocentrism that you have experienced in your own life. Explain.

**STEP 1**: First, write a response with at least EIGHT substantial sentences, integrating concepts you learned from the reading and other materials (include links with necessary). Show that you can think critically on the topic by integrating your own thoughts, analysis, or experiences.

**STEP 2**: Return to the discussion to comment on at least TWO classmates' posts (in at least FIVE sentences). Expand on a classmate's comments in a value-adding, topic-related way. Promote a collaborative, supportive community, and advance the dialogue through follow-up questions. Reply posts cannot be one-liners, off-topic posts, vague statements, unsupported opinions, inadequate explanations or simply say, "I agree" or "good job."

## Contributors and Attributions

CC licensed content, Original

- Discussion: Adolescence. **Authored by**: Julie Lazzara for Lumen Learning. **Provided by**: Lumen Learning. **License**: *CC BY: Attribution*

This page titled 15.2.10: Discussion- Adolescence is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 7.15: Discussion- Adolescence by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.2.11: Assignment- Build an Interactive

For this assignment, you will pick a topic from the course and create an interactive, or a short learning activity, about it—similar to others you've encountered throughout the course. The purpose of the interactive is to provide yourself and others the opportunity to better understand concepts from the content in order to make it more approachable and interesting. The best interactives may be eligible to be incorporated into the course for future students! Here's one example:

A link to an interactive elements can be found at the bottom of this page.

You will make these interactives using H5P, using the **course presentation** tool. The presentation should have a minimum of 4 slides and a maximum of 10. The course presentation feature in H5P works like this:

- H5P Course presentation

The other types of H5P tools you'll likely to include within the H5P presentation are:

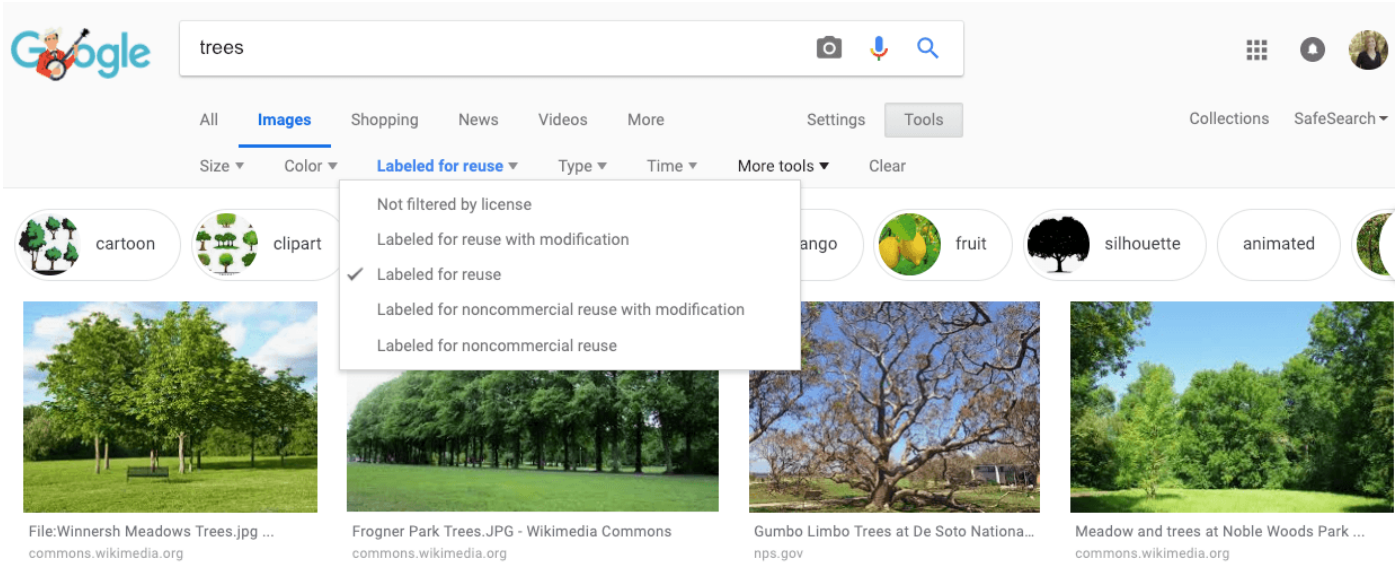
- H5P Image Sequencing
- H5P Drag the words (this is best for matching)
- H5P Fill in the blanks
- H5P Multiple choice

The goal is not to simply duplicate the multiple choice practice questions that you already see in course, but to create an activity that provides a deeper review or an opportunity to elaborate upon important concepts. You could also pull in current research or other engaging articles to expound upon a topic.

**STEP 1**: Pick a topic from the course that you found to be interesting, difficult, or in need of further explanation. Maybe it's something related to research, one of the developmental theories, genetics, pregnancy, sleep, language development, attachment, Piaget's stages, Erikson's stages, parenting styles, moral reasoning, school, cognitive development, puberty, identify formation, etc. You can also select topics that will be covered in later modules, such as marriage, divorce, aging, attitudes towards death. Try to hone in on something that is a focused topic, such as the example above on reliability and validity.

**STEP 2**: Research the topic. Read more about it in general terms, but also review current research and journal articles related to the topic. You are required to **include *at least one* reference to an outside source in the interactive**. Any and all content you use inside of the interactive needs to be written in your own words and appropriately cited OR it needs to be openly licensed, and appropriately attributed.

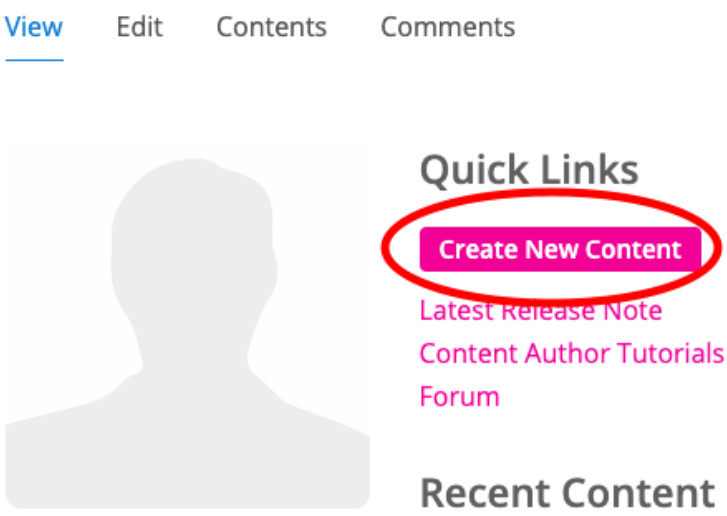
Similarly, any images used should be openly licensed or in the public domain (CC0, CC-BY, or CC-BY-SA). You can search for openly licensed images within Flickr or other platforms, but google also offers search tools to help you find images that allow for reuse. You can click "tools", then the dropdown menu will come down and allow you to select "labeled for reuse," as shown below.



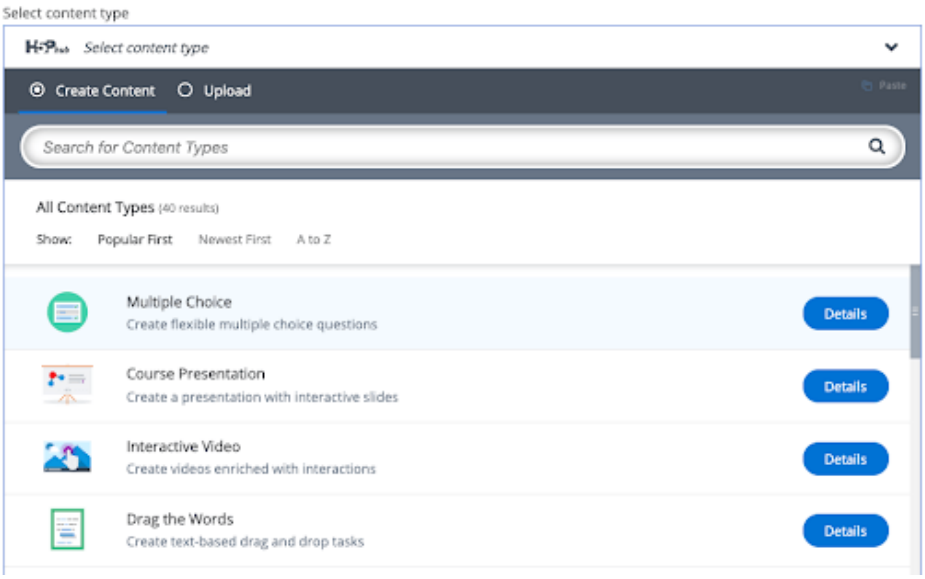

**STEP 3**: Write our your plan for the interactive. It works well to storyboard it first on a document so you know what you'll want to include on each slide. For example:

- Slide 1: Introductory paragraph on topic. Introduce example.
- Slide 2: Multiple choice question about the example, with feedback.
- Slide 3: Introductory text. Picture.
- Slide 4: Matching activity.
- Slide 5: Conclusion.

**STEP 4**: Go to H5P.org and create a free account. Click "Create New Content."




Read through the tutorial on creating a course presentation. Select the type of content you want to create, and get started.




**STEP 5**: Create your interactive! Read through this brief tutorial on adding attributions or use the guides within H5P to help you create the type of content you need.

**STEP 6**: Copy and paste the URL of your interactive into the discussion forum, along with a short description of why you made it and where you think it best fits into the course content.

## Rubric

*Sample Grading Rubric*

| Criteria | Exceeds Expectations | Meets Expectations |
|---|---|---|
| Interactive is an informative and engaging h5p presentation | The interactive is an interesting h5p presentation between 4 and 10 slides. It covers a relevant topic within lifespan development. It is easy to follow, and informative. Critical analysis and application are demonstrated. | The interactive is an h5p presentation between 4 and 10 slides. It covers a relevant topic within lifespan development. It is engaging, easy to follow, and informative. |
| Includes at least one outside source with proper citations and attributions | Content is original work unless where specifically indicated. The presentation includes at least one outside reference, with proper citations, and attributions if using OER. | Content is original work unless where specifically indicated. The presentation includes at least one outside reference, with proper citations, and attributions if using OER. |
| Writing Mechanics & Grammar | Well-organized and clearly written slides provide enhancement on the topic. Clearly written; excellent writing style. | Organized presentation; clearly written. |
| | | |

## Contributors and Attributions

CC licensed content, Original

- Assignment: Make an Interactive. **Provided by**: Lumen Learning. **License**: *CC BY: Attribution*

This page titled 15.2.11: Assignment- Build an Interactive is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 7.16: Assignment- Build an Interactive by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.2.12: Discussion- Adolescence Interview Assignment

In this assignment, you will interview an adult and adolescent, then compare their answers. If your interviewees are willing to be recorded for the interview (and they understand their videos will be shared), you *may* include the video or audio recording, although this step is not required.

**STEP 1**: Interview an adult, at least above age 25, about an adolescent. Ask this person to reflect on their adolescent years and to describe a typical day in detail. What did they do? Who were they with? Was there something else they wished they could be doing? What was expected of them? What were their dreams for the future? Prompt the person to describe what is/was going on in their culture around the time of their adolescence.

- Interviewee's first name (or pseudonym):
- Sex:
- Age:
- Education status:
- Occupation:
- Marital status:
- Number and ages of children, if applicable:

Answer yes or no to the following questions:

1. Adolescents should spend more time in school. _____. Additional notes, if any:
2. Adolescents should have to work for their extra money. _____. Additional notes, if any:
3. Adolescents should be required to do volunteer community service. _____. Additional notes, if any:
4. Adolescents should spend two years in the military before they go to college or begin working. _____. Additional notes, if any:
5. Most adolescents are sexually active. _____. Additional notes, if any:
6. Adolescents should be given birth control to prevent unwanted pregnancies. _____. Additional notes, if any:
7. Adolescents account for most of the crime in my community. _____. Additional notes, if any:
8. Most adolescents waste a lot of time. _____. Additional notes, if any:
9. Most adolescents are careless drivers. _____. Additional notes, if any:
10. I remember adolescence as the best time of my life. _____. Additional notes, if any:
11. Many adolescents use drugs. _____. Additional notes, if any:
12. Adolescents just delay growing up by going to college. _____. Additional notes, if any:

Ask the following questions:

1. At what age do you think adolescents should be allowed to drink alcoholic beverages? Why?
2. Do you think that adolescence is harder or easier than when you were that age?
3. What advice would you give to your 16-year old self?

**STEP 2**: Interview an adolescent or teenager between the ages of 13-19, with permission from them (and their parent or guardian if younger than 18).

Interviewee's first name (or pseudonym):
Sex:
Age:
Grade/education level:

Answer yes or no to the following questions:

1. Should teens have to work for the things they want? _____. Additional notes, if any:
2. Should teens be required to do volunteer community service? _____. Additional notes, if any:
3. Have you ever been bullied? _____. Additional notes, if any:
4. What is an appropriate age to become sexually active? _____. Additional notes, if any:
5. Should teens have free access to birth control? _____. Additional notes, if any:

6. Do you think that teens account for most of the crime in your community? _____. Additional notes, if any:
7. Do you think most teens are careless drivers? _____. Additional notes, if any:
8. Do you feel this is the best time of your life? _____. Additional notes, if any:
9. Have you ever skipped class? _____. Additional notes, if any:
10. Have you ever used drugs? _____. Additional notes, if any:
11. Have you ever snuck out of the house? _____. Additional notes, if any:

Ask the following questions:

1. Whom do you turn to for advice?
2. What law is your peer group most likely to break?
3. What goals do you have for your education?
4. At what age do you think people should be allowed to drink alcoholic beverages? Why?
5. Do you think that adolescence is harder or easier than when your parents were your age? Why?

**STEP 3**: Post these two interviews to the class discussion.

**STEP 4**: After looking at your two interviews and the others posted, write a post between 250 and 500 words discussing what you've learned from these interviews. Were there any answers that surprised you? Do you notice any trends? Do you think there are major generational differences in the adolescent experience? How do the experiences from those interviewed compare with your own experiences? How do these tie in with or confirm the things you learned about in this module?

**STEP 5**: Return to the discussion to comment on at least ONE other post (in at least FIVE sentences). Expand on a classmate's post in a value-adding, topic-related way. Promote a collaborative, supportive community, and advance the dialogue through follow-up questions. Reply posts cannot be one-liners, off-topic posts, vague statements, unsupported opinions, inadequate explanations or simply say, "I agree" or "good job."

*Sample Grading Rubric*

| Criteria | Proficient | Developing | Not Evident | Points |
|---|---|---|---|---|
| Presents a coherent post between 250-500 words | Writes in clear, descriptive sentences with no or few grammatical errors. The post is well organized and complete, and addresses observations and trends from the interviews. | Does not provide enough detail in the post about connections and observations from the interview, or post contains several grammatical errors. | Incomplete post or difficult to understand. | __/10 |
| Shares complete interview of the adolescent | Copies and pastes the entire interview in the discussion board. | Includes a partial interview. | Does not include interview. | __/4 |
| Shares complete interview of the adult | Copies and pastes the entire interview in the discussion board. | Includes a partial interview. | Does not include interview. | __/4 |
| Posts at least one reply to the discussion | Posts a value-adding and related comment that contributes to discussion about adolescence. | Includes a weak or off-topic comment on another post. | Does not post a value-adding and related comment that contributes to discussion about adolescence. | __/2 |
| | | | **Total:** | __/20 |

## Contributors and Attributions

CC licensed content, Original

- Adolescence Interview. **Authored by**: Nancee Ott. **License**: *CC BY: Attribution*
- Modification, adaptation, and original content. **Provided by**: Lumen Learning. **License**: *CC BY: Attribution*

This page titled 15.2.12: Discussion- Adolescence Interview Assignment is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 7.17: Discussion- Adolescence Interview Assignment by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.3: ADOLESCENCE

15.3.1: Introduction to Adolescence
15.3.2: Physical Development
15.3.3: Cognitive Development
15.3.4: Social Development
15.3.5: Adolescence
15.3.6: Adolescence

This page titled 15.3: Adolescence is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Laura Overstreet via source content that was edited to the style and standards of the LibreTexts platform.

- 7: Adolescence by Laura Overstreet is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/lifespandevelopment2.

# 15.3.1: Introduction to Adolescence

Adolescence is a period that begins with puberty and ends with the transition to adulthood (approximately ages 10–20). Physical changes associated with puberty are triggered by hormones. Cognitive changes include improvements in complex and abstract thought, as well as development that happens at different rates in distinct parts of the brain and increases adolescents' propensity for risky behavior because increases in sensation-seeking and reward motivation precede increases in cognitive control. Adolescents' relationships with parents go through a period of redefinition in which adolescents become more autonomous, and aspects of parenting, such as distal monitoring and psychological control, become more salient. Peer relationships are important sources of support and companionship during adolescence yet can also promote problem behaviors. Same-sex peer groups evolve into mixed-sex peer groups, and adolescents' romantic relationships tend to emerge from these groups. Identity formation occurs as adolescents explore and commit to different roles and ideological positions. Nationality, gender, ethnicity, socioeconomic status, religious background, sexual orientation, and genetic factors shape how adolescents behave and how others respond to them, and are sources of diversity in adolescence.

## Adolescence Defined

Adolescence is a developmental stage that has been defined as starting with puberty and ending with the transition to adulthood (approximately ages 10–20). Adolescence has evolved historically, with evidence indicating that this stage is lengthening as individuals start puberty earlier and transition to adulthood later than in the past. Puberty today begins, on average, at age 10–11 years for girls and 11–12 years for boys. This average age of onset has decreased gradually over time since the 19th century by 3–4 months per decade, which has been attributed to a range of factors including better nutrition, obesity, increased father absence, and other environmental factors (Steinberg, 2013[1]). Completion of formal education, financial independence from parents, marriage, and parenthood have all been markers of the end of adolescence and beginning of adulthood, and all of these transitions happen, on average, later now than in the past. In fact, the prolonging of adolescence has prompted the introduction of a new developmental period called *emerging adulthood* that captures these developmental changes out of adolescence and into adulthood, occurring from approximately ages 18 to 29 (Arnett, 2000[2]).




*Adolescence is often characterized as a period of transformation, primarily, in terms of physical, cognitive, and social-relational change. [Image: Lorenia]*

## REFERENCES

1. Steinberg, L. (2013). Adolescence (10th ed.). New York, NY: McGraw-Hill. ↵
2. Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. American

Psychologist, 55, 469–480. ↵

## Contributors

This page titled 15.3.1: Introduction to Adolescence is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Laura Overstreet via source content that was edited to the style and standards of the LibreTexts platform.

- 7.1: Introduction to Adolescence by Laura Overstreet is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/lifespandevelopment2.

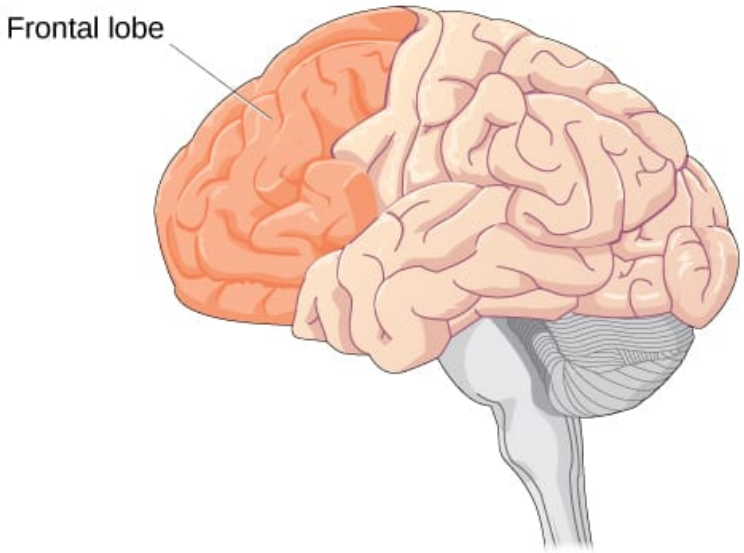
# 15.3.2: Physical Development

Adolescence begins with puberty. While the sequence of physical changes in puberty is predictable, the onset and pace of puberty vary widely. Several physical changes occur during puberty, such as adrenarche and gonadarche, the maturing of the adrenal glands and sex glands, respectively. Also during this time, primary and secondary sexual characteristics develop and mature. Primary sexual characteristics are organs specifically needed for reproduction, like the uterus and ovaries in females and testes in males. Secondary sexual characteristics are physical signs of sexual maturation that do not directly involve sex organs, such as development of breasts and hips in girls, and development of facial hair and a deepened voice in boys. Girls experience menarche, the beginning of menstrual periods, usually around 12–13 years old, and boys experience spermarche, the first ejaculation, around 13–14 years old.

During puberty, both sexes experience a rapid increase in height (i.e., growth spurt). For girls this begins between 8 and 13 years old, with adult height reached between 10 and 16 years old. Boys begin their growth spurt slightly later, usually between 10 and 16 years old, and reach their adult height between 13 and 17 years old. Both nature (i.e., genes) and nurture (e.g., nutrition, medications, and medical conditions) can influence height.

Because rates of physical development vary so widely among teenagers, puberty can be a source of pride or embarrassment. Early maturing boys tend to be stronger, taller, and more athletic than their later maturing peers. They are usually more popular, confident, and independent, but they are also at a greater risk for substance abuse and early sexual activity (Flannery, Rowe, & Gulley, 1993; Kaltiala-Heino, Rimpela, Rissanen, & Rantanen, 2001). Early maturing girls may be teased or overtly admired, which can cause them to feel self-conscious about their developing bodies. These girls are at a higher risk for depression, substance abuse, and eating disorders (Ge, Conger, & Elder, 2001; Graber, Lewinsohn, Seeley, & Brooks-Gunn, 1997; Striegel-Moore & Cachelin, 1999). Late blooming boys and girls (i.e., they develop more slowly than their peers) may feel self-conscious about their lack of physical development. Negative feelings are particularly a problem for late maturing boys, who are at a higher risk for depression and conflict with parents (Graber et al., 1997) and more likely to be bullied (Pollack & Shuster, 2000).

The adolescent brain also remains under development. Up until puberty, brain cells continue to bloom in the frontal region. Adolescents engage in increased risk-taking behaviors and emotional outbursts possibly because the frontal lobes of their brains are still developing. Recall that this area is responsible for judgment, impulse control, and planning, and it is still maturing into early adulthood (Casey, Tottenham, Liston, & Durston, 2005).




*Brain growth continues into the early 20s. The development of the frontal lobe, in particular, is important during this stage.*

Note

According to neuroscientist Jay Giedd in the Frontline video “Inside the Teenage Brain” (2013), “It’s sort of unfair to expect [teens] to have adult levels of organizational skills or decision-making before their brains are finished being built.” Watch this segment on “The Wiring of the Adolescent Brain” to find out more about the developing brain during adolescence.

This page titled 15.3.2: Physical Development is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Laura Overstreet via source content that was edited to the style and standards of the LibreTexts platform.

- 7.2: Physical Development by Laura Overstreet is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/lifespandevelopment2.

# 15.3.3: Cognitive Development

More complex thinking abilities emerge during adolescence. Some researchers suggest this is due to increases in processing speed and efficiency rather than as the result of an increase in mental capacity—in other words, due to improvements in existing skills rather than development of new ones (Bjorkland, 1987; Case, 1985). During adolescence, teenagers move beyond concrete thinking and become capable of abstract thought. Recall that Piaget refers to this stage as formal operational thought. Teen thinking is also characterized by the ability to consider multiple points of view, imagine hypothetical situations, debate ideas and opinions (e.g., politics, religion, and justice), and form new ideas. In addition, it's not uncommon for adolescents to question authority or challenge established societal norms.

Early in adolescence, changes in the brain's dopaminergic system contribute to increases in adolescents' sensation-seeking and reward motivation. Later in adolescence, the brain's cognitive control centers in the prefrontal cortex develop, increasing adolescents' self-regulation and future orientation. The difference in timing of the development of these different regions of the brain contributes to more risk taking during middle adolescence because adolescents are motivated to seek thrills that sometimes come from risky behavior, such as reckless driving, smoking, or drinking, and have not yet developed the cognitive control to resist impulses or focus equally on the potential risks (Steinberg, 2008[1]). One of the world's leading experts on adolescent development, Laurence Steinberg, likens this to engaging a powerful engine before the braking system is in place. The result is that adolescents are more prone to risky behaviors than are children or adults.

Cognitive empathy, also known as theory-of-mind (which we discussed earlier with regard to egocentrism), relates to the ability to take the perspective of others and feel concern for others (Shamay-Tsoory, Tomer, & Aharon-Peretz, 2005). Cognitive empathy begins to increase in adolescence and is an important component of social problem solving and conflict avoidance. According to one longitudinal study, levels of cognitive empathy begin rising in girls around 13 years old, and around 15 years old in boys (Van der Graaff et al., 2013). Teens who reported having supportive fathers with whom they could discuss their worries were found to be better able to take the perspective of others (Miklikowska, Duriez, & Soenens, 2011).



*Teenage thinking is characterized by the ability to reason logically and solve hypothetical problems such as how to design, plan, and build a structure. (credit: U.S. Army RDECOM)*

## REFERENCES


1. Steinberg, L. (2013). Adolescence (10th ed.). New York, NY: McGraw-Hill. ↩



This page titled 15.3.3: Cognitive Development is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Laura Overstreet via source content that was edited to the style and standards of the LibreTexts platform.

- 7.3: Cognitive Development by Laura Overstreet is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/lifespandevelopment2.

# 15.3.4: Social Development

## Psychosocial Development

Adolescents continue to refine their sense of self as they relate to others. Erikson referred to the task of the adolescent as one of identity versus role confusion. Thus, in Erikson's view, an adolescent's main questions are "Who am I?" and "Who do I want to be?" Some adolescents adopt the values and roles that their parents expect for them. Other teens develop identities that are in opposition to their parents but align with a peer group. This is common as peer relationships become a central focus in adolescents' lives.

As adolescents work to form their identities, they pull away from their parents, and the peer group becomes very important (Shanahan, McHale, Osgood, & Crouter, 2007). Despite spending less time with their parents, most teens report positive feelings toward them (Moore, Guzman, Hair, Lippman, & Garrett, 2004). Warm and healthy parent-child relationships have been associated with positive child outcomes, such as better grades and fewer school behavior problems, in the United States as well as in other countries (Hair et al., 2005).

It appears that most teens don't experience adolescent storm and stress to the degree once famously suggested by G. Stanley Hall, a pioneer in the study of adolescent development. Only small numbers of teens have major conflicts with their parents (Steinberg & Morris, 2001), and most disagreements are minor. For example, in a study of over 1,800 parents of adolescents from various cultural and ethnic groups, Barber (1994) found that conflicts occurred over day-to-day issues such as homework, money, curfews, clothing, chores, and friends. These types of arguments tend to decrease as teens develop (Galambos & Almeida, 1992).

## Social Changes

Parents. Although peers take on greater importance during adolescence, family relationships remain important too. One of the key changes during adolescence involves a renegotiation of parent–child relationships. As adolescents strive for more independence and autonomy during this time, different aspects of parenting become more salient. For example, parents' distal supervision and monitoring become more important as adolescents spend more time away from parents and in the presence of peers. Parental monitoring encompasses a wide range of behaviors such as parents' attempts to set rules and know their adolescents' friends, activities, and whereabouts, in addition to adolescents' willingness to disclose information to their parents (Stattin & Kerr, 2000[1]). *Psychological control*, which involves manipulation and intrusion into adolescents' emotional and cognitive world through invalidating adolescents' feelings and pressuring them to think in particular ways (Barber, 1996[2]), is another aspect of parenting that becomes more salient during adolescence and is related to more problematic adolescent adjustment.

## Peers

As children become adolescents, they usually begin spending more time with their peers and less time with their families, and these peer interactions are increasingly unsupervised by adults. Children's notions of friendship often focus on shared activities, whereas adolescents' notions of friendship increasingly focus on intimate exchanges of thoughts and feelings. During adolescence, peer groups evolve from primarily single-sex to mixed-sex. Adolescents within a peer group tend to be similar to one another in behavior and attitudes, which has been explained as being a function of *homophily* (adolescents who are similar to one another choose to spend time together in a "birds of a feather flock together" way) and influence (adolescents who spend time together shape each other's behavior and attitudes). One of the most widely studied aspects of adolescent peer influence is known as *deviant peer contagion* (Dishion & Tipsord, 2011[3]), which is the process by which peers reinforce problem behavior by laughing or showing other signs of approval that then increase the likelihood of future problem behavior.

Peers can serve both positive and negative functions during adolescence. Negative peer pressure can lead adolescents to make riskier decisions or engage in more problematic behavior than they would alone or in the presence of their family. For example, adolescents are much more likely to drink alcohol, use drugs, and commit crimes when they are with their friends than when they are alone or with their family. However, peers also serve as an important source of social support and companionship during adolescence, and adolescents with positive peer relationships are happier and better adjusted than those who are socially isolated or have conflictual peer relationships.



*Crowds refer to different collections of people, like the "theater kids" or the "environmentalists." In a way, they are kind of like clothing brands that label the people associated with that crowd. [Image: Garry Knight]*

*Crowds* are an emerging level of peer relationships in adolescence. In contrast to friendships (which are reciprocal dyadic relationships) and cliques (which refer to groups of individuals who interact frequently), crowds are characterized more by shared reputations or images than actual interactions (Brown & Larson, 2009[4]). These crowds reflect different prototypic identities (such as jocks or brains) and are often linked with adolescents' social status and peers' perceptions of their values or behaviors.

## Romantic Relationships

Adolescence is the developmental period during which romantic relationships typically first emerge. Initially, same-sex peer groups that were common during childhood expand into mixed-sex peer groups that are more characteristic of adolescence. Romantic relationships often form in the context of these mixed-sex peer groups (Connolly, Furman, & Konarski, 2000[5]). Although romantic relationships during adolescence are often short-lived rather than long-term committed partnerships, their importance should not be minimized. Adolescents spend a great deal of time focused on romantic relationships, and their positive and negative emotions are more tied to romantic relationships (or lack thereof) than to friendships, family relationships, or school (Furman & Shaffer, 2003[6]). Romantic relationships contribute to adolescents' identity formation, changes in family and peer relationships, and adolescents' emotional and behavioral adjustment.

Furthermore, romantic relationships are centrally connected to adolescents' emerging sexuality. Parents, policymakers, and researchers have devoted a great deal of attention to adolescents' sexuality, in large part because of concerns related to sexual intercourse, contraception, and preventing teen pregnancies. However, sexuality involves more than this narrow focus. For example, adolescence is often when individuals who are lesbian, gay, bisexual, or transgender come to perceive themselves as such (Russell, Clarke, & Clary, 2009[7]). Thus, romantic relationships are a domain in which adolescents experiment with new behaviors and identities.

## Behavioral And Psychological Adjustment

### Identity Formation

Theories of adolescent development often focus on identity formation as a central issue. For example, in Erikson's (1968[8]) classic theory of developmental stages, identity formation was highlighted as the primary indicator of successful development during adolescence (in contrast to role confusion, which would be an indicator of not successfully meeting the task of adolescence). Marcia (1966[9]) described identify formation during adolescence as involving both decision points and commitments with respect to ideologies (e.g., religion, politics) and occupations. He described four identity statuses: foreclosure,

identity diffusion, moratorium, and identity achievement. *Foreclosure* occurs when an individual commits to an identity without exploring options. *Identity diffusion* occurs when adolescents neither explore nor commit to any identities. *Moratorium* is a state in which adolescents are actively exploring options but have not yet made commitments. *Identity achievement* occurs when individuals have explored different options and then made identity commitments. Building on this work, other researchers have investigated more specific aspects of identity. For example, Phinney (1989[10]) proposed a model of ethnic identity development that included stages of unexplored ethnic identity, ethnic identity search, and achieved ethnic identity.

## Aggression and Antisocial Behavior

Several major theories of the development of antisocial behavior treat adolescence as an important period. Patterson's (1982[11]) early versus late starter model of the development of aggressive and antisocial behavior distinguishes youths whose antisocial behavior begins during childhood (early starters) versus adolescence (late starters). According to the theory, early starters are at greater risk for long-term antisocial behavior that extends into adulthood than are late starters. Late starters who become antisocial during adolescence are theorized to experience poor parental monitoring and supervision, aspects of parenting that become more salient during adolescence. Poor monitoring and lack of supervision contribute to increasing involvement with deviant peers, which in turn promotes adolescents' own antisocial behavior. Late starters desist from antisocial behavior when changes in the environment make other options more appealing. Similarly, Moffitt's (1993[12]) life-course persistent versus adolescent-limited model distinguishes between antisocial behavior that begins in childhood versus adolescence. Moffitt regards adolescent-limited antisocial behavior as resulting from a "maturity gap" between adolescents' dependence on and control by adults and their desire to demonstrate their freedom from adult constraint. However, as they continue to develop, and legitimate adult roles and privileges become available to them, there are fewer incentives to engage in antisocial behavior, leading to desistance in these antisocial behaviors.



*Early, antisocial behavior leads to befriending others who also engage in antisocial behavior, which only perpetuates the downward cycle of aggression and wrongful acts. [Image: Philippe Put]*

## Anxiety and Depression

Developmental models of anxiety and depression also treat adolescence as an important period, especially in terms of the emergence of gender differences in prevalence rates that persist through adulthood (Rudolph, 2009[13]). Starting in early adolescence, compared with males, females have rates of anxiety that are about twice as high and rates of depression that are 1.5 to 3 times as high (American Psychiatric Association, 2013[14]). Although the rates vary across specific anxiety and depression diagnoses, rates for some disorders are markedly higher in adolescence than in childhood or adulthood. For example, prevalence rates for specific phobias are about 5% in children and 3%–5% in adults but 16% in adolescents. Anxiety and depression are particularly concerning because suicide is one of the leading causes of death during adolescence. Developmental models focus on interpersonal contexts in both childhood and adolescence that foster depression and anxiety (e.g., Rudolph,

2009[15]). Family adversity, such as abuse and parental psychopathology, during childhood sets the stage for social and behavioral problems during adolescence. Adolescents with such problems generate stress in their relationships (e.g., by resolving conflict poorly and excessively seeking reassurance) and select into more maladaptive social contexts (e.g., "misery loves company" scenarios in which depressed youths select other depressed youths as friends and then frequently co-ruminate as they discuss their problems, exacerbating negative affect and stress). These processes are intensified for girls compared with boys because girls have more relationship-oriented goals related to intimacy and social approval, leaving them more vulnerable to disruption in these relationships. Anxiety and depression then exacerbate problems in social relationships, which in turn contribute to the stability of anxiety and depression over time.

### Academic Achievement

Adolescents spend more waking time in school than in any other context (Eccles & Roeser, 2011[16]). Academic achievement during adolescence is predicted by interpersonal (e.g., parental engagement in adolescents' education), intrapersonal (e.g., intrinsic motivation), and institutional (e.g., school quality) factors. Academic achievement is important in its own right as a marker of positive adjustment during adolescence but also because academic achievement sets the stage for future educational and occupational opportunities. The most serious consequence of school failure, particularly dropping out of school, is the high risk of unemployment or underemployment in adulthood that follows. High achievement can set the stage for college or future vocational training and opportunities.

## Diversity

Adolescent development does not necessarily follow the same pathway for all individuals. Certain features of adolescence, particularly with respect to biological changes associated with puberty and cognitive changes associated with brain development, are relatively universal. But other features of adolescence depend largely on circumstances that are more environmentally variable. For example, adolescents growing up in one country might have different opportunities for risk taking than adolescents in a different country, and supports and sanctions for different behaviors in adolescence depend on laws and values that might be specific to where adolescents live. Likewise, different cultural norms regarding family and peer relationships shape adolescents' experiences in these domains. For example, in some countries, adolescents' parents are expected to retain control over major decisions, whereas in other countries, adolescents are expected to begin sharing in or taking control of decision making.

Even within the same country, adolescents' gender, ethnicity, immigrant status, religion, sexual orientation, socioeconomic status, and personality can shape both how adolescents behave and how others respond to them, creating diverse developmental contexts for different adolescents. For example, early puberty (that occurs before most other peers have experienced puberty) appears to be associated with worse outcomes for girls than boys, likely in part because girls who enter puberty early tend to associate with older boys, which in turn is associated with early sexual behavior and substance use. For adolescents who are ethnic or sexual minorities, discrimination sometimes presents a set of challenges that nonminorities do not face.

Finally, genetic variations contribute an additional source of diversity in adolescence. Current approaches emphasize gene X environment interactions, which often follow a *differential susceptibility* model (Belsky & Pluess, 2009[17]). That is, particular genetic variations are considered riskier than others, but genetic variations also can make adolescents more or less susceptible to environmental factors. For example, the association between the CHRM2genotype and adolescent externalizing behavior (aggression and delinquency)has been found in adolescents whose parents are low in monitoring behaviors (Dick et al., 2011[18]). Thus, it is important to bear in mind that individual differences play an important role in adolescent development.

# Conclusions

Adolescent development is characterized by biological, cognitive, and social changes. Social changes are particularly notable as adolescents become more autonomous from their parents, spend more time with peers, and begin exploring romantic relationships and sexuality. Adjustment during adolescence is reflected in identity formation, which often involves a period of exploration followed by commitments to particular identities. Adolescence is characterized by risky behavior, which is made more likely by changes in the brain in which reward-processing centers develop more rapidly than cognitive control systems, making adolescents more sensitive to rewards than to possible negative consequences. Despite these generalizations, factors such as country of residence, gender, ethnicity, and sexual orientation shape development in ways that lead to diversity of experiences across adolescence.

## Outside Resources

1. **Podcasts**: Society for Research on Adolescence website with links to podcasts on a variety of topics related to adolescent development
2. **Study:** Add Health website on one of the biggest longitudinal studies of adolescence to date
3. **Video:** A selection of TED talks on adolescent brain development
4. **Web:** UNICEF website on adolescents around the world

### DISCUSSION QUESTIONS

1. What can parents do to promote their adolescents' positive adjustment?
2. In what ways do changes in brain development and cognition make adolescents particularly susceptible to peer influence?
3. How could interventions designed to prevent or reduce adolescents' problem behavior be developed to take advantage of what we know about adolescent development?
4. Reflecting on your own adolescence, provide examples of times when you think your experience was different from those of your peers as a function of something unique about you.
5. In what ways was your experience of adolescence different from your parents' experience of adolescence? How do you think adolescence may be different 20 years from now?

## REFERENCES


1. Stattin, H., & Kerr, M. (2000). Parental monitoring: A reinterpretation. Child Development, 71, 1072–1085. ↩
2. Barber, B. K. (1996). Parental psychological control: Revisiting a neglected construct. Child Development, 67, 3296–3319. ↩
3. Dishion, T. J., & Tipsord, J. M. (2011). Peer contagion in child and adolescent social and emotional development. Annual Review of Psychology, 62, 189–214. ↩
4. Brown, B. B., & Larson, J. (2009). Peer relationships in adolescence. In R. M. Lerner & L. Steinberg (Eds.), Handbook of adolescent psychology (pp. 74–103). New York, NY: Wiley. ↩
5. Connolly, J., Furman, W., & Konarski, R. (2000). The role of peers in the emergence of heterosexual romantic relationships in adolescence. Child Development, 71, 1395–1408. ↩
6. Furman, W., & Shaffer, L. (2003). The role of romantic relationships in adolescent development. In P. Florsheim (Ed.), Adolescent romantic relations and sexual behavior: Theory, research, and practical implications (pp. 3–22). Mahwah, NJ: Erlbaum. ↩
7. Russell, S. T., Clarke, T. J., & Clary, J. (2009). Are teens "post-gay"? Contemporary adolescents' sexual identity labels. Journal of Youth and Adolescence, 38, 884–890. ↩
8. Erikson, E. H. (1968). Identity, youth, and crisis. New York, NY: Norton. ↩
9. Marcia, J. E. (1966). Development and validation of ego identity status. Journal of Personality and Social Psychology, 3, 551–558. ↩
10. Phinney, J. (1989). Stages of ethnic identity in minority group adolescents. Journal of Early Adolescence, 9, 34–49. ↩
11. Patterson, G. R. (1982). Coercive family process. Eugene, OR: Castalia Press. ↩
12. Moffitt, T. E. (1993). Adolescence-limited and life course persistent antisocial behavior: Developmental taxonomy. Psychological Review, 100, 674–701. ↩
13. Rudolph, K. D. (2009). The interpersonal context of adolescent depression. In S. Nolen-Hoeksema & L. M. Hilt (Eds.), Handbook of depression in adolescents (pp. 377–418). New York, NY: Taylor and Francis. ↩
14. American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.). Arlington, VA: American Psychiatric Publishing. ↩
15. Rudolph, K. D. (2009). The interpersonal context of adolescent depression. In S. Nolen-Hoeksema & L. M. Hilt (Eds.), Handbook of depression in adolescents (pp. 377–418). New York, NY: Taylor and Francis. ↩
16. Eccles, J. S., & Roeser, R. W. (2011). Schools as developmental contexts during adolescence. Journal of Research on Adolescence, 21, 225–241. ↩
17. Belsky, J., & Pluess, M. (2009). Beyond diathesis-stress: Differential susceptibility to environmental influences. Psychological Bulletin, 135, 885–908. ↩
18. Dick, D. M., Meyers, J. L., Latendresse, S. J., Creemers, H. E., Lansford, J. E., ... Huizink, A. C. (2011). CHRM2, parental monitoring, and adolescent externalizing behavior: Evidence for gene-environment interaction. Psychological Science, 22, 481–489. ↩

## Contributors

This page titled 15.3.4: Social Development is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Laura Overstreet via source content that was edited to the style and standards of the LibreTexts platform.

- 7.4: Social Development by Laura Overstreet is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/lifespandevelopment2.

# 15.3.5: Adolescence

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

## Lecture Transcript

Adolescence is a period of transition from childhood to adulthood. It includes many physical, cognitive, and psychosocial changes. We first explore physical development.

Puberty is a period of rapid physical growth and sexual maturation that occurs during adolescence. These changes begin somewhere between ages 8 and 14. Girls begin puberty at around 10 years of age. Boys begin about a year and a half later. These changes take around 3 to 4 years for completion.

Adolescents experience an overall physical growth spurt. The growth proceeds from the extremities toward the torso. This is referred to as distal-proximal development. In other words, you may see the hands grow, then the arms, and finally the torso. The overall physical growth spurt means increases of about 10-11 inches in height and 50 to 75 pounds in weight. The head begins to grow sometime after the feet have gone through their period of growth. Growth of the head is preceded by growth of the ears, nose, and lips, however. As the torso grows, so does the internal organs. The heart and lungs experience dramatic growth during this period. Sweat, odor, and oil glands become more active. Teenagers in the United States spend a lot of money on deodorants and acne medications as a result.

The brain also undergoes dramatic change during adolescence. The prefrontal cortex, located behind the forehead, is a part of the brain that helps with judgment, planning, and strategizing. This grows in early adolescence. The cerebellum also grows during adolescence. Watch the film assigned in this lesson, Inside the Teenage Brain, for more detail.

Sexual maturation is another change we undergo during adolescence. Changes are divided into two categories: primary sex characteristics are changes in the reproductive organs. For males, primary characteristics include growth of the testes, penis, scrotum, and the first ejaculation of semen or spermarche. This occurs between 11-15 years of age.

Secondary characteristics are those not directly linked to reproduction but changes that signal that a male is becoming sexually mature. Shoulders become broader, the areola or area around the nipples become larger. There is some temporary breast development due to hormonal changes in many boys, typically around 14 years of age. The voice becomes lower as the larynx grows. Hair becomes more coarse and darker. And hair in the pubic area, under the arms, and on the face develops.

In females, primary characteristics include growth of the uterus and the first menstrual period or menarche. Stress and higher percentage of body fat can bring menstruation at younger ages.

Many of the secondary characteristics are the same for boys and girls. Breast development begins at around age 10 and full development takes several years. Hips broaden and legs get larger. The voice becomes lower as the larynx grows, just as it does in males. Although, it is often less noticeable in females. Hair becomes darker and coarser. Pubic and underarm hair develops as well.

There is currently a lot of attention placed on physical appearance in the United States. This can be difficult for teens. Most teens just want to fit in with their peers and those who do not may feel uncomfortable. Teens that are overweight or obese may be ridiculed or teased. Physical changes may be easier for boys than girls because while boys are moving toward the cultural ideal of getting larger, girls are moving away from the cultural ideal of remaining thin. Early maturing females may feel uncomfortable with puberty, particularly because they may be thought of as much older than they are and may be thought of sexually active and

mature, even though they are not. Late maturing females may feel that others do not respect them as having grown up. Early maturing males may be popular in school and thought of as more mature than they are. They may also be recruited into gangs or for other violent activity because of their physique if they live in neighborhoods or communities where this type of activity occurs. Late maturing males may overcompensate for their slight build by trying to act as if they are older than they are.

The growth spurt is accompanied by a need for more calories. Most teens in the United States take in enough calories, but do not eat healthy foods. High fat, sugar, and salty foods combined with a sedentary life style leave many teens struggling with being overweight or obese. Such teens experience health risks such as sleep apnea, high blood pressure, and type II diabetes.

Teens may also experience eating disorders. Teenage girls are especially vulnerable to eating disorders in cultures obsessed with thinness. Anorexia nervosa is overall starvation that is life threatening. A person with anorexia sees fat where there is none and may become obsessed with thinness, excessive dieting, and exercise. Anorexia is difficult to treat but can lead to cardiac arrest.

Bulimia is another eating disorder in which a person eats in binging episodes and then purges through self-induced vomiting or using laxatives or enemas. Repeated exposure of the teeth to corrosive stomach acid can break down the enamel. Blood blisters may develop on the roof of the mouth, the index finger may become discolored, and the esophagus damaged by repeatedly vomiting.

With adolescence comes a potential escalation in situations of abuse. Physical abuse becomes more violent as a parent has altercations with a much bigger child in adolescence. Sexual abuse increases with puberty and the impact of such abuse can include feeling stigmatized, having a distorted sense of sexuality, feeling powerless, and distrust. The myth of mutuality is the myth that the victim of sexual abuse is somehow responsible for its occurrence. This myth makes it very difficult for a person who has been sexually abused to overcome the negative feelings associated with the abuse. Recognizing that this is a myth is an important step toward healing.

A majority of youth become sexually active in their late teens. The use of contraception has increased and teen pregnancy rates, though still high, have decreased. Most teens engage in sexual activity with a steady partner.

In the United States, the decline in teenagers using tobacco has stopped. Over-the-counter medications are still cause for concern as many teens use these for recreation. Marijuana is now the most commonly used drug. It has surpassed smoking tobacco. The perceived risk of marijuana use has been declining.

Some drugs are considered gateway drugs which means that the use of these drugs can often lead to use of stronger drugs. Drug use often interferes with healthy nutrition and sleep so important for teens. And many dangerous decisions can be made while under the influence. Examples include engaging in risky sexual behavior or driving while high or intoxicated.

Let's turn our attention to some global concerns about youth. Youth make up 30 percent of the population in some developing countries. We've seen an increase in the amount of schooling children receive. But often the quality of instruction is poor and teachers and educational materials are hard to obtain. Drought, war, and other circumstances often disrupt schooling. The number of youth participating in the labor force has decreased in many parts of the world. This allows children to participate in formal education.

HIV/AIDS is the leading cause of death in sub-Saharan Africa. This is due to low condom use and widespread coercive sex. Tobacco use has been increasing in developing countries. And child brides or marriage to girls under 18 has decreased. These are just a few concerns about youth in the developing world.

Let's explore cognitive development in adolescence.

Piaget believed that many adolescents reach formal operational thought. This is marked by the ability to think abstractly or to use systems of abstract thought or logic more readily. An adolescent may now be able to understand symbolic meanings such as those found in religion. Adolescents may also thing about "what if" situations or hypothetical situations more easily. And the adolescent may become conscious of their thoughts and enjoy the game of thinking or introspection.

Psychologist David Elkind offers some insights into the unique qualities of adolescent thought.

Adolescent egocentrism is the feeling a teenager may have that no one can understand what they are going through. A consoling adult may be told, "You don't understand! Nobody understands!"

The imaginary audience refers to the feeling of self-consciousness that many adolescents feel. Even when alone, the teenager may be imagining how others would see them. Those who feel particularly uneasy or awkward may try to make the discomfort by

being sarcastic or by posturing in public.

The personal fable is the notion that fame and fortune lie ahead. This belief comes as the adolescent is able to see possibilities, but not yet understand probabilities. I had a student once who raised her hand during our class discussion of the personal fable. I called on her and she said, “Oh my gosh! I did this! I kept a list of all of my teacher’s names so that I could personally thank them when I became famous!”

What was your personal fable? You may have given up on it once you found out how unlikely it was.

The invincibility fable is the mistaken idea that one is indestructible. Teenagers may think they may never get hurt when engaging in risky behavior. Look for examples of the invincibility fable in the film you view for this lesson.

In youth, conformity is emphasized. Many young teenagers, especially, pressure one another to act, speak, dress, and think alike.

Formal operational thought can be accompanied by the ability to see possibilities never before considered. Youth are often idealistic as a result. However, what is possible is not the same as what is likely.

Some current concerns in education in the United States include reducing the rate of students who drop out of school before completing their high school diplomas, the impersonal nature of large, bureaucratic high schools, and the issue of where to group students by age in school. Should sixth graders be included in elementary school or should they be part of a junior high? Should ninth graders be at the top of their school in a junior high or should they attend school with seniors? What would be the advantages and disadvantages of each?

We now turn our attention to relationships and psychosocial development in adolescence.

The beginning of our modern idea of adolescence as a time of storm and stress can be traced to G. Stanley Hall. Hall wrote a 3 volume work documenting the lives of youth in 1909. As people relocated to large industrial cities in the U. S., youth became more visible and gained the attention of social workers and others concerned with development. Hall believed that the storm and stress of adolescence is created by the biological changes associated with puberty. But for many teens, adolescence is not a period of storm and stress. It seems to be a more stressful time for those who are also experiencing other stressors, perhaps at school or at home. Consider your adolescence. Would you like to return to that period in your life? Why or why not?

Anna Freud wrote about adolescence and saw it as a period of temporary disruption as the id, ego, and superego are out of balance. Hopefully, the overactive id is brought under control by the ego or through the use of reason and by being realistic. The later years of adolescence are less volatile than early adolescence.

Erikson believed that the primary concern of adolescence is that of establishing identity. The teen struggles with the question, “Who am I?” Who am I physically, sexually, socially, vocationally, spiritually, academically, and so on? Hopefully, the teen postpones making any decisions that will lock him or her in prematurely. The teen needs to wait or go through a period of exploration, called a psychosocial moratorium, before making any long term decisions. Foreclosure occurs when others take that decision-making away from the teen. Having a criminal record or becoming a parent are examples of foreclosure. The teen that goes through adolescence without establishing an identity may be apathetic about the future. This is referred to as identity confusion.

Here is a list of what some teens reported that they wanted from their parents.

- They wanted reasonable freedoms and privileges.
- The wanted their parents to show faith in the decisions they made.
- They wanted their parents to approve of them as people; not that they had to like everything the teen did or said.
- They wanted their parents to be willing to listen to them.
- The wanted their parents to show concern for them and to support them in their interests.

---

This page titled 15.3.5: Adolescence is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Laura Overstreet via source content that was edited to the style and standards of the LibreTexts platform.

- 7.5: Adolescence by Laura Overstreet is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/lifespandevelopment2.

# 15.3.6: Adolescence

Interactive Content

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this Interactive Content online

**Lifespan Development: Adolescence Powerpoint** from **Lumen Learning**

This page titled 15.3.6: Adolescence is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Laura Overstreet via source content that was edited to the style and standards of the LibreTexts platform.

# 15.4: ADOLESCENCE

15.4.1: Introduction to Adolescense
15.4.2: Physical Development
15.4.3: Cognitive Development
15.4.4: Social Development
15.4.5: Lecture- Adolescence

This page titled 15.4: Adolescence is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 11: Adolescence by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/atd-hostos-child-development-education.

# 15.4.1: Introduction to Adolescense

Adolescence is a period that begins with puberty and ends with the transition to adulthood (approximately ages 10–20). Physical changes associated with puberty are triggered by hormones. Cognitive changes include improvements in complex and abstract thought, as well as development that happens at different rates in distinct parts of the brain and increases adolescents' propensity for risky behavior because increases in sensation-seeking and reward motivation precede increases in cognitive control. Adolescents' relationships with parents go through a period of redefinition in which adolescents become more autonomous, and aspects of parenting, such as distal monitoring and psychological control, become more salient. Peer relationships are important sources of support and companionship during adolescence yet can also promote problem behaviors. Same-sex peer groups evolve into mixed-sex peer groups, and adolescents' romantic relationships tend to emerge from these groups. Identity formation occurs as adolescents explore and commit to different roles and ideological positions. Nationality, gender, ethnicity, socioeconomic status, religious background, sexual orientation, and genetic factors shape how adolescents behave and how others respond to them, and are sources of diversity in adolescence.

## Adolescence Defined

Adolescence is a developmental stage that has been defined as starting with puberty and ending with the transition to adulthood (approximately ages 10–20). Adolescence has evolved historically, with evidence indicating that this stage is lengthening as individuals start puberty earlier and transition to adulthood later than in the past. Puberty today begins, on average, at age 10–11 years for girls and 11–12 years for boys. This average age of onset has decreased gradually over time since the 19th century by 3–4 months per decade, which has been attributed to a range of factors including better nutrition, obesity, increased father absence, and other environmental factors (Steinberg, 2013[1]). Completion of formal education, financial independence from parents, marriage, and parenthood have all been markers of the end of adolescence and beginning of adulthood, and all of these transitions happen, on average, later now than in the past. In fact, the prolonging of adolescence has prompted the introduction of a new developmental period called *emerging adulthood* that captures these developmental changes out of adolescence and into adulthood, occurring from approximately ages 18 to 29 (Arnett, 2000[2]).




Adolescence is often characterized as a period of transformation, primarily, in terms of physical, cognitive, and social-relational change. [Image: Lorenia]

1. Steinberg, L. (2013). Adolescence (10th ed.). New York, NY: McGraw-Hill. ↵
2. Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. American Psychologist, 55, 469–480. ↵

This page titled 15.4.1: Introduction to Adolescense is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 11.1: Introduction to Adolescense by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/atd-hostos-child-development-education.

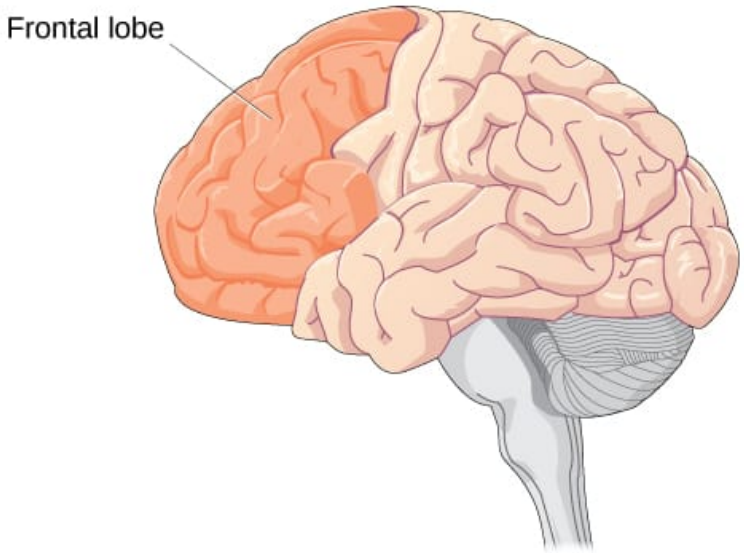
# 15.4.2: Physical Development

Adolescence begins with puberty. While the sequence of physical changes in puberty is predictable, the onset and pace of puberty vary widely. Several physical changes occur during puberty, such as adrenarche and gonadarche, the maturing of the adrenal glands and sex glands, respectively. Also during this time, primary and secondary sexual characteristics develop and mature. Primary sexual characteristics are organs specifically needed for reproduction, like the uterus and ovaries in females and testes in males. Secondary sexual characteristics are physical signs of sexual maturation that do not directly involve sex organs, such as development of breasts and hips in girls, and development of facial hair and a deepened voice in boys. Girls experience menarche, the beginning of menstrual periods, usually around 12–13 years old, and boys experience spermarche, the first ejaculation, around 13–14 years old.

During puberty, both sexes experience a rapid increase in height (i.e., growth spurt). For girls this begins between 8 and 13 years old, with adult height reached between 10 and 16 years old. Boys begin their growth spurt slightly later, usually between 10 and 16 years old, and reach their adult height between 13 and 17 years old. Both nature (i.e., genes) and nurture (e.g., nutrition, medications, and medical conditions) can influence height.

Because rates of physical development vary so widely among teenagers, puberty can be a source of pride or embarrassment. Early maturing boys tend to be stronger, taller, and more athletic than their later maturing peers. They are usually more popular, confident, and independent, but they are also at a greater risk for substance abuse and early sexual activity (Flannery, Rowe, & Gulley, 1993; Kaltiala-Heino, Rimpela, Rissanen, & Rantanen, 2001). Early maturing girls may be teased or overtly admired, which can cause them to feel self-conscious about their developing bodies. These girls are at a higher risk for depression, substance abuse, and eating disorders (Ge, Conger, & Elder, 2001; Graber, Lewinsohn, Seeley, & Brooks-Gunn, 1997; Striegel-Moore & Cachelin, 1999). Late blooming boys and girls (i.e., they develop more slowly than their peers) may feel self-conscious about their lack of physical development. Negative feelings are particularly a problem for late maturing boys, who are at a higher risk for depression and conflict with parents (Graber et al., 1997) and more likely to be bullied (Pollack & Shuster, 2000).

The adolescent brain also remains under development. Up until puberty, brain cells continue to bloom in the frontal region. Adolescents engage in increased risk-taking behaviors and emotional outbursts possibly because the frontal lobes of their brains are still developing. Recall that this area is responsible for judgment, impulse control, and planning, and it is still maturing into early adulthood (Casey, Tottenham, Liston, & Durston, 2005).




Brain growth continues into the early 20s. The development of the frontal lobe, in particular, is important during this stage.

## Link to Learning

According to neuroscientist Jay Giedd in the Frontline video “Inside the Teenage Brain” (2013), “It’s sort of unfair to expect [teens] to have adult levels of organizational skills or decision-making before their brains are finished being built.” Watch this segment on “The Wiring of the Adolescent Brain” to find out more about the developing brain during adolescence.

This page titled 15.4.2: Physical Development is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 11.2: Physical Development by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/atd-hostos-child-development-education.

# 15.4.3: Cognitive Development

More complex thinking abilities emerge during adolescence. Some researchers suggest this is due to increases in processing speed and efficiency rather than as the result of an increase in mental capacity—in other words, due to improvements in existing skills rather than development of new ones (Bjorkland, 1987; Case, 1985). During adolescence, teenagers move beyond concrete thinking and become capable of abstract thought. Recall that Piaget refers to this stage as formal operational thought. Teen thinking is also characterized by the ability to consider multiple points of view, imagine hypothetical situations, debate ideas and opinions (e.g., politics, religion, and justice), and form new ideas. In addition, it's not uncommon for adolescents to question authority or challenge established societal norms.

Early in adolescence, changes in the brain's dopaminergic system contribute to increases in adolescents' sensation-seeking and reward motivation. Later in adolescence, the brain's cognitive control centers in the prefrontal cortex develop, increasing adolescents' self-regulation and future orientation. The difference in timing of the development of these different regions of the brain contributes to more risk taking during middle adolescence because adolescents are motivated to seek thrills that sometimes come from risky behavior, such as reckless driving, smoking, or drinking, and have not yet developed the cognitive control to resist impulses or focus equally on the potential risks (Steinberg, 2008[1]). One of the world's leading experts on adolescent development, Laurence Steinberg, likens this to engaging a powerful engine before the braking system is in place. The result is that adolescents are more prone to risky behaviors than are children or adults.

Cognitive empathy, also known as theory-of-mind (which we discussed earlier with regard to egocentrism), relates to the ability to take the perspective of others and feel concern for others (Shamay-Tsoory, Tomer, & Aharon-Peretz, 2005). Cognitive empathy begins to increase in adolescence and is an important component of social problem solving and conflict avoidance. According to one longitudinal study, levels of cognitive empathy begin rising in girls around 13 years old, and around 15 years old in boys (Van der Graaff et al., 2013). Teens who reported having supportive fathers with whom they could discuss their worries were found to be better able to take the perspective of others (Miklikowska, Duriez, & Soenens, 2011).



Teenage thinking is characterized by the ability to reason logically and solve hypothetical problems such as how to design, plan, and build a structure. (credit: U.S. Army RDECOM)

1. Steinberg, L. (2013). Adolescence (10th ed.). New York, NY: McGraw-Hill. ↩

This page titled 15.4.3: Cognitive Development is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 11.3: Cognitive Development by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/atd-hostos-child-development-education.

# 15.4.4: Social Development

## Psychosocial Development

Adolescents continue to refine their sense of self as they relate to others. Erikson referred to the task of the adolescent as one of identity versus role confusion. Thus, in Erikson's view, an adolescent's main questions are "Who am I?" and "Who do I want to be?" Some adolescents adopt the values and roles that their parents expect for them. Other teens develop identities that are in opposition to their parents but align with a peer group. This is common as peer relationships become a central focus in adolescents' lives.

As adolescents work to form their identities, they pull away from their parents, and the peer group becomes very important (Shanahan, McHale, Osgood, & Crouter, 2007). Despite spending less time with their parents, most teens report positive feelings toward them (Moore, Guzman, Hair, Lippman, & Garrett, 2004). Warm and healthy parent-child relationships have been associated with positive child outcomes, such as better grades and fewer school behavior problems, in the United States as well as in other countries (Hair et al., 2005).

It appears that most teens don't experience adolescent storm and stress to the degree once famously suggested by G. Stanley Hall, a pioneer in the study of adolescent development. Only small numbers of teens have major conflicts with their parents (Steinberg & Morris, 2001), and most disagreements are minor. For example, in a study of over 1,800 parents of adolescents from various cultural and ethnic groups, Barber (1994) found that conflicts occurred over day-to-day issues such as homework, money, curfews, clothing, chores, and friends. These types of arguments tend to decrease as teens develop (Galambos & Almeida, 1992).

## Social Changes

Parents. Although peers take on greater importance during adolescence, family relationships remain important too. One of the key changes during adolescence involves a renegotiation of parent–child relationships. As adolescents strive for more independence and autonomy during this time, different aspects of parenting become more salient. For example, parents' distal supervision and monitoring become more important as adolescents spend more time away from parents and in the presence of peers. Parental monitoring encompasses a wide range of behaviors such as parents' attempts to set rules and know their adolescents' friends, activities, and whereabouts, in addition to adolescents' willingness to disclose information to their parents (Stattin & Kerr, 2000[1]). *Psychological control*, which involves manipulation and intrusion into adolescents' emotional and cognitive world through invalidating adolescents' feelings and pressuring them to think in particular ways (Barber, 1996[2]), is another aspect of parenting that becomes more salient during adolescence and is related to more problematic adolescent adjustment.

## Peers

As children become adolescents, they usually begin spending more time with their peers and less time with their families, and these peer interactions are increasingly unsupervised by adults. Children's notions of friendship often focus on shared activities, whereas adolescents' notions of friendship increasingly focus on intimate exchanges of thoughts and feelings. During adolescence, peer groups evolve from primarily single-sex to mixed-sex. Adolescents within a peer group tend to be similar to one another in behavior and attitudes, which has been explained as being a function of *homophily* (adolescents who are similar to one another choose to spend time together in a "birds of a feather flock together" way) and influence (adolescents who spend time together shape each other's behavior and attitudes). One of the most widely studied aspects of adolescent peer influence is known as *deviant peer contagion* (Dishion & Tipsord, 2011[3]), which is the process by which peers reinforce problem behavior by laughing or showing other signs of approval that then increase the likelihood of future problem behavior.

Peers can serve both positive and negative functions during adolescence. Negative peer pressure can lead adolescents to make riskier decisions or engage in more problematic behavior than they would alone or in the presence of their family. For example, adolescents are much more likely to drink alcohol, use drugs, and commit crimes when they are with their friends than when they are alone or with their family. However, peers also serve as an important source of social support and companionship during adolescence, and adolescents with positive peer relationships are happier and better adjusted than those who are socially isolated or have conflictual peer relationships.



Crowds refer to different collections of people, like the “theater kids” or the “environmentalists.” In a way, they are kind of like clothing brands that label the people associated with that crowd. [Image: Garry Knight]

*Crowds* are an emerging level of peer relationships in adolescence. In contrast to friendships (which are reciprocal dyadic relationships) and cliques (which refer to groups of individuals who interact frequently), crowds are characterized more by shared reputations or images than actual interactions (Brown & Larson, 2009[4]). These crowds reflect different prototypic identities (such as jocks or brains) and are often linked with adolescents’ social status and peers’ perceptions of their values or behaviors.

## Romantic relationships

Adolescence is the developmental period during which romantic relationships typically first emerge. Initially, same-sex peer groups that were common during childhood expand into mixed-sex peer groups that are more characteristic of adolescence. Romantic relationships often form in the context of these mixed-sex peer groups (Connolly, Furman, & Konarski, 2000[5]). Although romantic relationships during adolescence are often short-lived rather than long-term committed partnerships, their importance should not be minimized. Adolescents spend a great deal of time focused on romantic relationships, and their positive and negative emotions are more tied to romantic relationships (or lack thereof) than to friendships, family relationships, or school (Furman & Shaffer, 2003[6]). Romantic relationships contribute to adolescents’ identity formation, changes in family and peer relationships, and adolescents’ emotional and behavioral adjustment.

Furthermore, romantic relationships are centrally connected to adolescents’ emerging sexuality. Parents, policymakers, and researchers have devoted a great deal of attention to adolescents’ sexuality, in large part because of concerns related to sexual intercourse, contraception, and preventing teen pregnancies. However, sexuality involves more than this narrow focus. For example, adolescence is often when individuals who are lesbian, gay, bisexual, or transgender come to perceive themselves as such (Russell, Clarke, & Clary, 2009[7]). Thus, romantic relationships are a domain in which adolescents experiment with new behaviors and identities.

# Behavioral and Psychological Adjustment

## Identity formation

Theories of adolescent development often focus on identity formation as a central issue. For example, in Erikson’s (1968[8]) classic theory of developmental stages, identity formation was highlighted as the primary indicator of successful development during adolescence (in contrast to role confusion, which would be an indicator of not successfully meeting the task of adolescence). Marcia (1966[9]) described identify formation during adolescence as involving both decision points and commitments with respect to ideologies (e.g., religion, politics) and occupations. He described four identity statuses: foreclosure, identity diffusion, moratorium, and identity achievement. *Foreclosure* occurs when an individual commits to an identity without

exploring options. *Identity diffusion* occurs when adolescents neither explore nor commit to any identities. *Moratorium* is a state in which adolescents are actively exploring options but have not yet made commitments. *Identity achievement* occurs when individuals have explored different options and then made identity commitments. Building on this work, other researchers have investigated more specific aspects of identity. For example, Phinney (1989[10]) proposed a model of ethnic identity development that included stages of unexplored ethnic identity, ethnic identity search, and achieved ethnic identity.

## Aggression and antisocial behavior



Early, antisocial behavior leads to befriending others who also engage in antisocial behavior, which only perpetuates the downward cycle of aggression and wrongful acts. [Image: Philippe Put]

Several major theories of the development of antisocial behavior treat adolescence as an important period. Patterson's (1982[11]) early versus late starter model of the development of aggressive and antisocial behavior distinguishes youths whose antisocial behavior begins during childhood (early starters) versus adolescence (late starters). According to the theory, early starters are at greater risk for long-term antisocial behavior that extends into adulthood than are late starters. Late starters who become antisocial during adolescence are theorized to experience poor parental monitoring and supervision, aspects of parenting that become more salient during adolescence. Poor monitoring and lack of supervision contribute to increasing involvement with deviant peers, which in turn promotes adolescents' own antisocial behavior. Late starters desist from antisocial behavior when changes in the environment make other options more appealing. Similarly, Moffitt's (1993[12]) life-course persistent versus adolescent-limited model distinguishes between antisocial behavior that begins in childhood versus adolescence. Moffitt regards adolescent-limited antisocial behavior as resulting from a "maturity gap" between adolescents' dependence on and control by adults and their desire to demonstrate their freedom from adult constraint. However, as they continue to develop, and legitimate adult roles and privileges become available to them, there are fewer incentives to engage in antisocial behavior, leading to desistance in these antisocial behaviors.

## Anxiety and depression

Developmental models of anxiety and depression also treat adolescence as an important period, especially in terms of the emergence of gender differences in prevalence rates that persist through adulthood (Rudolph, 2009[13]). Starting in early adolescence, compared with males, females have rates of anxiety that are about twice as high and rates of depression that are 1.5 to 3 times as high (American Psychiatric Association, 2013[14]). Although the rates vary across specific anxiety and depression diagnoses, rates for some disorders are markedly higher in adolescence than in childhood or adulthood. For example, prevalence rates for specific phobias are about 5% in children and 3%–5% in adults but 16% in adolescents. Anxiety and depression are particularly concerning because suicide is one of the leading causes of death during adolescence. Developmental models focus on interpersonal contexts in both childhood and adolescence that foster depression and anxiety (e.g., Rudolph, 2009[15]). Family adversity, such as abuse and parental psychopathology, during childhood sets the stage for social and behavioral problems during adolescence. Adolescents with such problems generate stress in their relationships (e.g., by resolving conflict

poorly and excessively seeking reassurance) and select into more maladaptive social contexts (e.g., “misery loves company” scenarios in which depressed youths select other depressed youths as friends and then frequently co-ruminate as they discuss their problems, exacerbating negative affect and stress). These processes are intensified for girls compared with boys because girls have more relationship-oriented goals related to intimacy and social approval, leaving them more vulnerable to disruption in these relationships. Anxiety and depression then exacerbate problems in social relationships, which in turn contribute to the stability of anxiety and depression over time.

## Academic achievement

Adolescents spend more waking time in school than in any other context (Eccles & Roeser, 2011[16]). Academic achievement during adolescence is predicted by interpersonal (e.g., parental engagement in adolescents’ education), intrapersonal (e.g., intrinsic motivation), and institutional (e.g., school quality) factors. Academic achievement is important in its own right as a marker of positive adjustment during adolescence but also because academic achievement sets the stage for future educational and occupational opportunities. The most serious consequence of school failure, particularly dropping out of school, is the high risk of unemployment or underemployment in adulthood that follows. High achievement can set the stage for college or future vocational training and opportunities.

## Diversity

Adolescent development does not necessarily follow the same pathway for all individuals. Certain features of adolescence, particularly with respect to biological changes associated with puberty and cognitive changes associated with brain development, are relatively universal. But other features of adolescence depend largely on circumstances that are more environmentally variable. For example, adolescents growing up in one country might have different opportunities for risk taking than adolescents in a different country, and supports and sanctions for different behaviors in adolescence depend on laws and values that might be specific to where adolescents live. Likewise, different cultural norms regarding family and peer relationships shape adolescents’ experiences in these domains. For example, in some countries, adolescents’ parents are expected to retain control over major decisions, whereas in other countries, adolescents are expected to begin sharing in or taking control of decision making.

Even within the same country, adolescents’ gender, ethnicity, immigrant status, religion, sexual orientation, socioeconomic status, and personality can shape both how adolescents behave and how others respond to them, creating diverse developmental contexts for different adolescents. For example, early puberty (that occurs before most other peers have experienced puberty) appears to be associated with worse outcomes for girls than boys, likely in part because girls who enter puberty early tend to associate with older boys, which in turn is associated with early sexual behavior and substance use. For adolescents who are ethnic or sexual minorities, discrimination sometimes presents a set of challenges that nonminorities do not face.

Finally, genetic variations contribute an additional source of diversity in adolescence. Current approaches emphasize gene X environment interactions, which often follow a *differential susceptibility* model (Belsky & Pluess, 2009[17]). That is, particular genetic variations are considered riskier than others, but genetic variations also can make adolescents more or less susceptible to environmental factors. For example, the association between the CHRM2genotype and adolescent externalizing behavior (aggression and delinquency)has been found in adolescents whose parents are low in monitoring behaviors (Dick et al., 2011[18]). Thus, it is important to bear in mind that individual differences play an important role in adolescent development.

# Conclusions

Adolescent development is characterized by biological, cognitive, and social changes. Social changes are particularly notable as adolescents become more autonomous from their parents, spend more time with peers, and begin exploring romantic relationships and sexuality. Adjustment during adolescence is reflected in identity formation, which often involves a period of exploration followed by commitments to particular identities. Adolescence is characterized by risky behavior, which is made more likely by changes in the brain in which reward-processing centers develop more rapidly than cognitive control systems, making adolescents more sensitive to rewards than to possible negative consequences. Despite these generalizations, factors such as country of residence, gender, ethnicity, and sexual orientation shape development in ways that lead to diversity of experiences across adolescence.

## Outside Resources

*Podcasts: Society for Research on Adolescence website with links to podcasts on a variety of topics related to adolescent development available at the end of this section.*

## Discussion Questions

1. What can parents do to promote their adolescents' positive adjustment?
2. In what ways do changes in brain development and cognition make adolescents particularly susceptible to peer influence?
3. How could interventions designed to prevent or reduce adolescents' problem behavior be developed to take advantage of what we know about adolescent development?
4. Reflecting on your own adolescence, provide examples of times when you think your experience was different from those of your peers as a function of something unique about you.
5. In what ways was your experience of adolescence different from your parents' experience of adolescence? How do you think adolescence may be different 20 years from now?


1. Stattin, H., & Kerr, M. (2000). Parental monitoring: A reinterpretation. Child Development, 71, 1072–1085. ↵
2. Barber, B. K. (1996). Parental psychological control: Revisiting a neglected construct. Child Development, 67, 3296–3319. ↵
3. Dishion, T. J., & Tipsord, J. M. (2011). Peer contagion in child and adolescent social and emotional development. Annual Review of Psychology, 62, 189–214. ↵
4. Brown, B. B., & Larson, J. (2009). Peer relationships in adolescence. In R. M. Lerner & L. Steinberg (Eds.), Handbook of adolescent psychology (pp. 74–103). New York, NY: Wiley. ↵
5. Connolly, J., Furman, W., & Konarski, R. (2000). The role of peers in the emergence of heterosexual romantic relationships in adolescence. Child Development, 71, 1395–1408. ↵
6. Furman, W., & Shaffer, L. (2003). The role of romantic relationships in adolescent development. In P. Florsheim (Ed.), Adolescent romantic relations and sexual behavior: Theory, research, and practical implications (pp. 3–22). Mahwah, NJ: Erlbaum. ↵
7. Russell, S. T., Clarke, T. J., & Clary, J. (2009). Are teens "post-gay"? Contemporary adolescents' sexual identity labels. Journal of Youth and Adolescence, 38, 884–890. ↵
8. Erikson, E. H. (1968). Identity, youth, and crisis. New York, NY: Norton. ↵
9. Marcia, J. E. (1966). Development and validation of ego identity status. Journal of Personality and Social Psychology, 3, 551–558. ↵
10. Phinney, J. (1989). Stages of ethnic identity in minority group adolescents. Journal of Early Adolescence, 9, 34–49. ↵
11. Patterson, G. R. (1982). Coercive family process. Eugene, OR: Castalia Press. ↵
12. Moffitt, T. E. (1993). Adolescence-limited and life course persistent antisocial behavior: Developmental taxonomy. Psychological Review, 100, 674–701. ↵
13. Rudolph, K. D. (2009). The interpersonal context of adolescent depression. In S. Nolen-Hoeksema & L. M. Hilt (Eds.), Handbook of depression in adolescents (pp. 377–418). New York, NY: Taylor and Francis. ↵
14. American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.). Arlington, VA: American Psychiatric Publishing. ↵
15. Rudolph, K. D. (2009). The interpersonal context of adolescent depression. In S. Nolen-Hoeksema & L. M. Hilt (Eds.), Handbook of depression in adolescents (pp. 377–418). New York, NY: Taylor and Francis. ↵
16. Eccles, J. S., & Roeser, R. W. (2011). Schools as developmental contexts during adolescence. Journal of Research on Adolescence, 21, 225–241. ↵
17. Belsky, J., & Pluess, M. (2009). Beyond diathesis-stress: Differential susceptibility to environmental influences. Psychological Bulletin, 135, 885–908. ↵
18. Dick, D. M., Meyers, J. L., Latendresse, S. J., Creemers, H. E., Lansford, J. E., ... Huizink, A. C. (2011). CHRM2, parental monitoring, and adolescent externalizing behavior: Evidence for gene-environment interaction. Psychological Science, 22, 481–489. ↵


## Answers

**Outside Resources**

http://www.s-r-a.org/sra-news/podcasts
http://www.cpc.unc.edu/projects/addhealth
http://tinyurl.com/lku4a3k
http://www.unicef.org/adolescence/index.html

This page titled 15.4.4: Social Development is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 11.4: Social Development by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/atd-hostos-child-development-education.

# 15.4.5: Lecture- Adolescence

## Lecture Transcript

Adolescence is a period of transition from childhood to adulthood. It includes many physical, cognitive, and psychosocial changes. We first explore physical development.

Puberty is a period of rapid physical growth and sexual maturation that occurs during adolescence. These changes begin somewhere between ages 8 and 14. Girls begin puberty at around 10 years of age. Boys begin about a year and a half later. These changes take around 3 to 4 years for completion.

Adolescents experience an overall physical growth spurt. The growth proceeds from the extremities toward the torso. This is referred to as distal-proximal development. In other words, you may see the hands grow, then the arms, and finally the torso. The overall physical growth spurt means increases of about 10-11 inches in height and 50 to 75 pounds in weight. The head begins to grow sometime after the feet have gone through their period of growth. Growth of the head is preceded by growth of the ears, nose, and lips, however. As the torso grows, so does the internal organs. The heart and lungs experience dramatic growth during this period. Sweat, odor, and oil glands become more active. Teenagers in the United States spend a lot of money on deodorants and acne medications as a result.

The brain also undergoes dramatic change during adolescence. The prefrontal cortex, located behind the forehead, is a part of the brain that helps with judgment, planning, and strategizing. This grows in early adolescence. The cerebellum also grows during adolescence. Watch the film assigned in this lesson, Inside the Teenage Brain, for more detail.

Sexual maturation is another change we undergo during adolescence. Changes are divided into two categories: primary sex characteristics are changes in the reproductive organs. For males, primary characteristics include growth of the testes, penis, scrotum, and the first ejaculation of semen or spermarche. This occurs between 11-15 years of age.

Secondary characteristics are those not directly linked to reproduction but changes that signal that a male is becoming sexually mature. Shoulders become broader, the areola or area around the nipples become larger. There is some temporary breast development due to hormonal changes in many boys, typically around 14 years of age. The voice becomes lower as the larynx grows.
Hair becomes more coarse and darker. And hair in the pubic area, under the arms, and on the face develops.

In females, primary characteristics include growth of the uterus and the first menstrual period or menarche. Stress and higher percentage of body fat can bring menstruation at younger ages.

Many of the secondary characteristics are the same for boys and girls. Breast development begins at around age 10 and full development takes several years. Hips broaden and legs get larger. The voice becomes lower as the larynx grows, just as it does in males. Although, it is often less noticeable in females. Hair becomes darker and coarser. Pubic and underarm hair develops as well.

There is currently a lot of attention placed on physical appearance in the United States. This can be difficult for teens. Most teens just want to fit in with their peers and those who do not may feel uncomfortable. Teens that are overweight or obese may be ridiculed or teased. Physical changes may be easier for boys than girls because while boys are moving toward the cultural ideal of getting larger, girls are moving away from the cultural ideal of remaining thin. Early maturing females may feel uncomfortable with puberty, particularly because they may be thought of as much older than they are and may be thought of sexually active and mature, even though they are not.
Late maturing females may feel that others do not respect them as having grown up. Early maturing males may be popular in school and thought of as more mature than they are. They may also be recruited into gangs or for other violent activity because of their physique if they live in neighborhoods or communities where this type of activity occurs. Late maturing males may overcompensate for their slight build by trying to act as if they are older than they are.

The growth spurt is accompanied by a need for more calories. Most teens in the United States take in enough calories, but do not eat healthy foods. High fat, sugar, and salty foods combined with a sedentary life style leave many teens struggling with being overweight or obese. Such teens experience health risks such as sleep apnea, high blood pressure, and type II diabetes.

Teens may also experience eating disorders. Teenage girls are especially vulnerable to eating disorders in cultures obsessed with thinness.
Anorexia nervosa is overall starvation that is life threatening. A person with anorexia sees fat where there is none and may become obsessed with thinness, excessive dieting, and exercise. Anorexia is difficult to treat but can lead to cardiac arrest.

Bulimia is another eating disorder in which a person eats in binging episodes and then purges through self-induced vomiting or using laxatives or enemas. Repeated exposure of the teeth to corrosive stomach acid can break down the enamel. Blood blisters may develop on the roof of the mouth, the index finger may become discolored, and the esophagus damaged by repeatedly vomiting.

With adolescence comes a potential escalation in situations of abuse. Physical abuse becomes more violent as a parent has altercations with a much bigger child in adolescence. Sexual abuse increases with puberty and the impact of such abuse can include feeling stigmatized, having a distorted sense of sexuality, feeling powerless, and distrust. The myth of mutuality is the myth that the victim of sexual abuse is somehow responsible for its occurrence. This myth makes it very difficult for a person who has been sexually abused to overcome the negative feelings associated with the abuse. Recognizing that this is a myth is an important step toward healing.

A majority of youth become sexually active in their late teens. The use of contraception has increased and teen pregnancy rates, though still high, have decreased. Most teens engage in sexual activity with a steady partner.

In the United States, the decline in teenagers using tobacco has stopped. Over-the-counter medications are still cause for concern as many teens use these for recreation. Marijuana is now the most commonly used drug. It has surpassed smoking tobacco. The perceived risk of marijuana use has been declining.

Some drugs are considered gateway drugs which means that the use of these drugs can often lead to use of stronger drugs. Drug use often interferes with healthy nutrition and sleep so important for teens. And many dangerous decisions can be made while under the influence. Examples include engaging in risky sexual behavior or driving while high or intoxicated.

Let's turn our attention to some global concerns about youth. Youth make up 30 percent of the population in some developing countries.
We've seen an increase in the amount of schooling children receive. But often the quality of instruction is poor and teachers and educational materials are hard to obtain. Drought, war, and other circumstances often disrupt schooling. The number of youth participating in the labor force has decreased in many parts of the world. This allows children to participate in formal education.

HIV/AIDS is the leading cause of death in sub-Saharan Africa. This is due to low condom use and widespread coercive sex. Tobacco use has been increasing in developing countries. And child brides or marriage to girls under 18 has decreased. These are just a few concerns about youth in the developing world.

Let's explore cognitive development in adolescence.

Piaget believed that many adolescents reach formal operational thought. This is marked by the ability to think abstractly or to use systems of abstract thought or logic more readily. An adolescent may now be able to understand symbolic meanings such as those found in religion. Adolescents may also thing about "what if" situations or hypothetical situations more easily. And the adolescent may become conscious of their thoughts and enjoy the game of thinking or introspection.

Psychologist David Elkind offers some insights into the unique qualities of adolescent thought.

Adolescent egocentrism is the feeling a teenager may have that no one can understand what they are going through. A consoling adult may be told, "You don't understand! Nobody understands!"

The imaginary audience refers to the feeling of self-consciousness that many adolescents feel. Even when alone, the teenager may be imagining how others would see them. Those who feel particularly uneasy or awkward may try to make the discomfort by being sarcastic or by posturing in public.

The personal fable is the notion that fame and fortune lie ahead. This belief comes as the adolescent is able to see possibilities, but not yet understand probabilities. I had a student once who raised her hand during our class discussion of the personal fable. I called on her and she said, "Oh my gosh! I did this! I kept a list of all of my teacher's names so that I could personally thank them when I became famous!"

What was your personal fable? You may have given up on it once you found out how unlikely it was.

The invincibility fable is the mistaken idea that one is indestructible. Teenagers may think they may never get hurt when engaging in risky behavior. Look for examples of the invincibility fable in the film you view for this lesson.

In youth, conformity is emphasized. Many young teenagers, especially, pressure one another to act, speak, dress, and think alike.

Formal operational thought can be accompanied by the ability to see possibilities never before considered. Youth are often idealistic as a result. However, what is possible is not the same as what is likely.

Some current concerns in education in the United States include reducing the rate of students who drop out of school before completing their high school diplomas, the impersonal nature of large, bureaucratic high schools, and the issue of where to group students by age in school. Should sixth graders be included in elementary school or should they be part of a junior high? Should ninth graders be at the top of their school in a junior high or should they attend school with seniors? What would be the advantages and disadvantages of each?

We now turn our attention to relationships and psychosocial development in adolescence.

The beginning of our modern idea of adolescence as a time of storm and stress can be traced to G. Stanley Hall. Hall wrote a 3 volume work documenting the lives of youth in 1909. As people relocated to large industrial cities in the U. S., youth became more visible and gained the attention of social workers and others concerned with development. Hall believed that the storm and stress of adolescence is created by the biological changes associated with puberty. But for many teens, adolescence is not a period of storm and stress. It seems to be a more stressful time for those who are also experiencing other stressors, perhaps at school or at home.
Consider your adolescence. Would you like to return to that period in your life? Why or why not?

Anna Freud wrote about adolescence and saw it as a period of temporary disruption as the id, ego, and superego are out of balance.
Hopefully, the overactive id is brought under control by the ego or through the use of reason and by being realistic. The later years of adolescence are less volatile than early adolescence.

Erikson believed that the primary concern of adolescence is that of establishing identity. The teen struggles with the question, “Who am I?” Who am I physically, sexually, socially, vocationally, spiritually, academically, and so on? Hopefully, the teen postpones making any decisions that will lock him or her in prematurely. The teen needs to wait or go through a period of exploration, called a psychosocial moratorium, before making any long term decisions. Foreclosure occurs when others take that decision-making away from the teen. Having a criminal record or becoming a parent are examples of foreclosure. The teen that goes through adolescence without establishing an identity may be apathetic about the future. This is referred to as identity confusion.

Here is a list of what some teens reported that they wanted from their parents.

- They wanted reasonable freedoms and privileges.
- The wanted their parents to show faith in the decisions they made.
- They wanted their parents to approve of them as people; not that they had to like everything the teen did or said.
- They wanted their parents to be willing to listen to them.
- The wanted their parents to show concern for them and to support them in their interests.

This page titled 15.4.5: Lecture- Adolescence is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 11.5: Lecture- Adolescence by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/atd-hostos-child-development-education.

# 15.5: EARLY ADULTHOOD

Emerging adulthood is a phase of the life span between adolescence and full-fledged adulthood which encompasses late adolescence and early adulthood, proposed by Jeffrey Arnett in a 2000 article in the American Psychologist. It primarily describes people living in developed countries, but it is also experienced by young people in urban wealthy families in the Global South. The term describes young adults who do not have children, do not live in their own home, or do not have sufficient income to become fully independent in their early to late 20s. Arnett suggests emerging adulthood is the distinct period between 18 and 25 years of age where adolescents become more independent and explore various life possibilities.


**15.5.1: Introduction to Early Adulthood**

**15.5.2: Physical Development**

**15.5.3: Cognitive Development**

**15.5.4: Psychosocial Development**

**15.5.5: Types of Love**

**15.5.6: Love Attitude Scale**

**15.5.7: Love Styles**

**15.5.8: Adolescence and Early Adulthood**

**15.5.9: Early Adulthood**

**15.5.10: Early Adulthood**

**15.5.11: Adolescence and Early Adulthood**

**15.5.12: Unit 3 Exam**



This page titled 15.5: Early Adulthood is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Laura Overstreet via source content that was edited to the style and standards of the LibreTexts platform.

- 8: Early Adulthood by Laura Overstreet is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/lifespandevelopment2.

# 15.5.1: Introduction to Early Adulthood

## Learning Objectives

- Discuss the developmental tasks of early adulthood.
- Describe physical development in early adulthood.
- Explain how early adulthood is a healthy, yet risky time of life.
- Summarize Levinson's theory of adult transitions.
- Distinguish between formal and postformal thought.
- Explain dialectical thought.
- Describe Erikson's stage of intimacy vs. isolation.
- Question Erikson's assertion about the focus on intimacy in early adulthood.
- Identify trends in mate selection, age at first marriage, and cohabitation in the United States.
- Discuss fertility issues in early adulthood.
- Explain social exchange theory of mate selection.
- Define the principle of least interest.
- Apply Sternberg's theory of love to specific examples of relationships.
- Apply Lee's love styles to specific examples of relationships.
- Compare frames of relationships.
- Explain the wheel theory of love.
- Explain the process of disaffection.
- Describe some current concerns in education in today's colleges.

## Developmental Tasks of Early Adulthood

Early adulthood can be a very busy time of life. Havighurst (1972) describes some of the developmental tasks of young adults. These include:

- Achieving autonomy: trying to establish oneself as an independent person with a life of one's own
- Establishing identity: more firmly establishing likes, dislikes, preferences, and philosophies
- Developing emotional stability: becoming more stable emotionally which is considered a sign of maturing
- Establishing a career: deciding on and pursuing a career or at least an initial career direction and pursuing an education
- Finding intimacy: forming first close, long-term relationships
- Becoming part of a group or community: young adults may, for the first time, become involved with various groups in the community. They may begin voting or volunteering to be part of civic organizations (scouts, church groups, etc.). This is especially true for those who participate in organizations as parents.
- Establishing a residence and learning how to manage a household: learning how to budget and keep a home maintained.
- Becoming a parent and rearing children: learning how to manage a household with children. Making marital adjustments and learning to parent.

## Exercise:

To what extent do you think these have changed in the last several years? How might these tasks be different across cultures?

## REFERENCES

American Society of Reproductive Medicine (1996-2011): quick facs about infertility. (n.d.). American Society for Reproductive Medicine: News and Publications. Retrieved May 07, 2011, from http://www.reproductivefacts.org

Basseches, M. (1984). Dialectical thinking and adult development. Norwood, NJ: Ablex Pub.

Benokraitis, N. V. (2005). Marriages and families: Changes, choices, and constraints (5th ed.). Upper Saddle River, NJ: Pearson.

Berger, K. S. (n.d.). The developing person through the life span (6th ed.). New York: Worth.

Bianchi, S., & Casper, L. (2000). American families. (Dec. ed., Vol. 55) (United States, Population Reference Bureau). Washington, DC: Population Bulletin.

Bok, D. (2005, December 18). Are colleges failing? – The Boston Globe. Boston.com – Boston, MA News, Breaking News, Sports, Video. Retrieved May 07, 2011, from http://www.boston.com/news/education...lleges_failing?

Bok, D. C. (2006). Our underachieving colleges: A candid look at how much students learn and why they should be learning more. Princeton, NJ: Princeton University Press.

Brooks, J. M. (1997). Beyond teaching and learning paradigms: Trekking into the Virtual University. Teaching Sociology, 27, 1-14.

Carroll, J. L. (2007). Sexuality now: Embracing diversity (2nd ed.). Belmont, CA: Thomson Learning.

Casper, L. M., & Bianchi, S. M. (2002). Continuity and change in the American family. Thousand Oaks, CA: Sage.

Collins, L. (1999). Emotional adultery: Cybersex and commitment. Social Theory and Practice, 25(2), 243-270.

Davidson, J. K. (1991). Marriage and family. Dubuque, IA: William C. Brown.

Frieden, T. (2011, January 14). Morbidity and Mortality Weekly Report for the Centers for Disease Control (United States, Center for Disease Control). Retrieved February 12, 2011, from http://www.cdc.gov/mmwr/preview/mmwr...m?s_su6001al_w

Gwinnell, E. (1998). Online seductions: Falling in love with strangers on the Internet. New York: Johnson Publishing.

Havighurst, R. J. (1972). Developmental tasks and education, (3rd ed.). New York: D. McKay.

Heron, M. P., & Smith, B. L. (2007). Products – Health E Stats – Homepage. Centers for Disease Control and Prevention. Retrieved May 07, 2011, from http://www.cdc.gov/nchs/products/pub...ingdeath03.htm

HRC | Marriage & relationship recognition. (n.d.). HRC | Human Rights Campaign | Home. Retrieved May 07, 2011, from http://www.hrc.org/issues/marriage.asp

Kerckhoff, A., & Davis, K. (1962). Value consensus and need complementarity in mate selection. American Sociological Review, 27(June), 295-303.

Lee, J. A. (1973). The colors of love: An exploration of the ways of loving. Don Mills, Ont.: New Press.

Of, T. (2006, September 21). Families and living arrangements, formerly households and families. Census Bureau Home Page. Retrieved May 07, 2011, from http://www.census.gov/population/www...mo/hh-fam.html

Reiss, I. (1960). Toward a sociology of the heterosexual love relationship. Marriage and Family Living, 22(May), 139-145.

Ridley, C. A., Peterman, D. J., & Avery, A. W. (1978). Cohabitation: Does it make for a better marriage? The Family Coordinator, April, 126-136.

Seccombe, K., & Warner, R. L. (2004). Marriages and families: Relationships in social context. Belmont, CA: Wadsworth/Thomson Learning.

Sternberg, R. (1988). A triangular theory of love. New York: Basic.

Tannen, D. (1990). You just don't understand: Women and men in conversation. New York: Morrow.

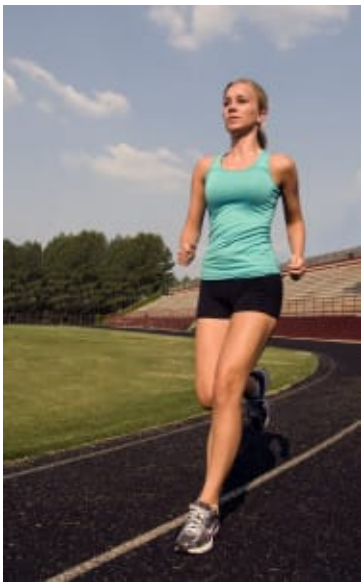
United States, U. S. Department of Education. (2006). A test of leadership: Charting the future of U. S. higher education. Washington, D. C.

Volko, N. D. (2004, September 19). Exploring the Whys of Adolescent Drug Use. (United States, National Institute on Drug Abuse). Retrieved January 23, 2007, from http://www.drugabuse.gov/NIDA_notes/...epVol19N3.html

This page titled 15.5.1: Introduction to Early Adulthood is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Laura Overstreet via source content that was edited to the style and standards of the LibreTexts platform.

- 8.1: Introduction to Early Adulthood by Laura Overstreet is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/lifespandevelopment2.

# 15.5.2: Physical Development



**The Physiological Peak**: People in their twenties and thirties are considered young adults. If you are in your early twenties, good news-you are probably at the peak of your physiological development. Your reproductive system, motor ability, strength, and lung capacity are operating at their best. Now here is the bad news. These systems will now start a slow, gradual decline so that by the time you reach your mid to late 30s, you will begin to notice signs of aging. This includes a decline in your immune system, your response time, and in your ability to recover quickly from physical exertion. For example, you may have noticed that it takes you quite some time to stop panting after running to class or taking the stairs. But, here is more good news. Getting out of shape is not an inevitable part of aging; it is probably due to the fact that you have become less physically active and have experienced greater stress. How is that good news, you ask? It's good news because it means that there are thing you can do to combat many of these changes. So keep in mind, as we continue to discuss the life span that many of the changes we associate with aging can be turned around if we adopt healthier lifestyles.

**A Healthy, but Risky Time**: Doctor's visits are less frequent in early adulthood than for those in midlife and late adulthood and are necessitated primarily by injury and pregnancy (Berger, 2005). However, among the top five causes of death in young adulthood are non-intentional injury (including motor vehicle accidents), homicide, and suicide (Heron, M. P. & B. L. Smith, 2007). Cancer and heart disease complete the list. Rates of violent death (homicide, suicide, and accidents) are highest among young adult males, and vary among by race and ethnicity. Rates of violent death are higher in the United States than in Canada, Mexico, Japan, and other selected countries. Males are 3 times more likely to die in auto accidents than are females (Frieden, 2011).

**Substance Abuse**: Rates of violent death are influenced by substance abuse which peaks during early adulthood. Illicit drug use peaks between the ages of 19 and 22 and then begins to decline (Berk, 2007). And twenty-five percent of those who smoke cigarettes, a third of those who smoke marijuana, and 70 percent of those who abuse cocaine began using after age 17 (Volkow, 2004). Some young adults use as a way of coping with stressors from family, personal relationships, or concerns over being on one's own. Others use because they have friends who use and in the early 20s, there is still a good deal of pressure to conform. Half of all alcohol consumed in the United States is in the form of binge drinking (Frieden, 2011).

Drugs impair judgment, reduce inhibitions, and alter mood, all of which can lead to dangerous behavior. Reckless driving, violent altercations, and forced sexual encounters are some examples. Binge drinking on college campuses has received considerable media and public attention. The role alcohol plays in predicting acquaintance rape on college campuses is of particular concern. In the majority of cases of rape, the victim knows the rapist. Being intoxicated increases a female's risk of being the victim of date or acquaintance rape (Fisher et als. in Carroll, 2007). And, she is more likely to blame herself and to be blamed by others if she was intoxicated when raped. Males increase their risk of being accused of rape if they are drunk when an incidence occurred (Carroll, 2007).

Drug and alcohol use increase the risk of sexually transmitted infections because people are more likely to engage in risky sexual

behavior when under the influence. This includes having sex with someone who has had multiple partners, having anal sex without the use of a condom, having multiple partners, or having sex with someone whose history is unknown. And, as we previously discussed in our lesson on Beginnings, drugs and alcohol ingested during pregnancy have a teratogenic effect.

## Sexual Responsiveness and Reproduction in Early Adulthood

**Sexual Responsiveness**: Men and women tend to reach their peak of sexual responsiveness at different ages. For men, sexual responsiveness tends to peak in the late teens and early twenties. Sexual arousal can easily occur in response to physical stimulation or fantasizing. Sexual responsiveness begins a slow decline in the late twenties and into the thirties although a man may continue to be sexually active. Through time, a man may require more intense stimulation in order to become aroused. Women often find that they become more sexually responsive throughout their 20s and 30s and may peak in the late 30s or early 40s. This is likely due to greater self-confidence and reduced inhibitions about sexuality.

**Reproduction**: For many couples, early adulthood is the time for having children. However, delaying childbearing until the late 20s or early 30s has become more common in the United States.

Couples delay childbearing for a number of reasons. Women are more likely to attend college and begin careers before starting families. And both men and women are delaying marriage until they are in their late 20s and early 30s.

**Infertility**: Infertility affects about 6.1 million women or 10 percent of the reproductive age population (American Society of Reproductive Medicine [ASRM], 2000-2007). Male factors create infertility in about a third of the cases. For men, the most common cause is a lack of sperm production or low sperm production. Female factors cause infertility in another third of cases. For women, one of the most common causes of infertility is the failure to ovulate. Another cause of infertility is pelvic inflammatory disease, an infection of the female genital tract (Carroll, 2007). Pelvic inflammatory disease is experienced by 1 out of 7 women in the United States and leads to infertility about 20 percent of the time. One of the major causes of pelvic inflammatory disease is Chlamydia trachomatis, the most commonly diagnosed sexually transmitted infection in young women. Another cause of pelvic inflammatory disease is gonorrhea. Both male and female factors contribute to the remainder of cases of infertility.

**Fertility treatment**: The majority of infertility cases (85-90 percent) are treated using fertility drugs to increase ovulation or with surgical procedures to repair the reproductive organs or remove scar tissue from the reproductive tract. In vitro fertilization is used to treat infertility in less than 5 percent of cases. IVF is used when a woman has blocked or deformed fallopian tubes or sometimes when a man has a very low sperm count. This procedure involves removing eggs from the female and fertilizing the eggs outside the woman's body. The fertilized egg is then reinserted in the woman's uterus. The average cost of IVF is over $12,000 and the success rate is between 5 to 30 percent. IVF makes up about 99 percent of artificial reproductive procedures.

Less common procedures include gamete intra-fallopian tube transfer (GIFT) which involves implanting both sperm and ova into the fallopian tube and fertilization is allowed to occur naturally. The success rate of implantation is higher for GIFT than for IVF (Carroll, 2007). Zygote intra-fallopian tube transfer (ZIFT) is another procedure in which sperm and ova are fertilized outside of the woman's body and the fertilized egg or zygote is then implanted in the fallopian tube. This allows the zygote to travel down the fallopian tube and embed in the lining of the uterus naturally. This procedure also has a higher success rate than IVF.

Insurance coverage for infertility is required in fourteen states, but the amount and type of coverage available varies greatly (ASRM, 2000-2007). The majority of couples seeking treatment for infertility pay much of the cost. Consequently, infertility treatment is much more accessible to couples with higher incomes. However, grants and funding sources are available for lower income couples seeking infertility treatment as well.

This page titled 15.5.2: Physical Development is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Laura Overstreet via source content that was edited to the style and standards of the LibreTexts platform.

- 8.2: Physical Development by Laura Overstreet is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/lifespandevelopment2.

# 15.5.3: Cognitive Development

## Beyond Formal Operational Thought: Post-formal Thought

In our last lesson, we discussed formal operational thought. The hallmark of this type of thinking is the ability to think abstractly or to consider possibilities and ideas about circumstances never directly experienced. Thinking abstractly is only one characteristic of adult thought, however. If you compare a 15 year old with someone in their late 30s, you would probably find that the later considers not only what is possible, but also what is likely. Why the change? The adult has gained experience and understands why possibilities do not always become realities. This difference in adult and adolescent thought can spark arguments between the generations. Here is an example. A student in her late 30s relayed such an argument she was having with her 14 year old son. The son had saved a considerable amount of money and wanted to buy an old car and store it in the garage until he was old enough to drive. He could sit in it; pretend he was driving, clean it up, and show it to his friends. It sounded like a perfect opportunity. The mother, however, had practical objections. The car could just sit for several years without deteriorating. The son would certainly change his mind about the type of car he wanted before he was old enough to drive and they would be stuck with a car that would not run. Having a car nearby would be too much temptation and the son might decide to sneak it out for a quick run around the block, etc.

Postformal thought is practical, realistic and more individualistic. As a person approaches the late 30s, chances are they make decisions out of necessity or because of prior experience and are less influenced by what others think. Of course, this is particularly true in individualistic cultures such as the United States.

## Dialectical Thought

In addition to moving toward more practical considerations, thinking in early adulthood may also become more flexible and balanced. Abstract ideas that the adolescent believes in firmly may become standards by which the adult evaluates reality. Adolescents tend to think in dichotomies; ideas are true or false; good or bad; right or wrong and there is no middle ground. However, with experience, the adult comes to recognize that there is some right and some wrong in each position, some good or some bad in a policy or approach, some truth and some falsity in a particular idea. This ability to bring together salient aspects of two opposing viewpoints or positions is referred to as dialectical thought and is considered one of the most advanced aspects of postformal thinking (Basseches, 1984). Such thinking is more realistic because very few positions, ideas, situations, or people are completely right or wrong. So, for example, parents who were considered angels or devils by the adolescent eventually become just people with strengths and weaknesses, endearing qualities and faults to the adult.

# Educational Concerns



In 2005, 37 percent of people in the United States between 18 and 24 had some college or an associate degree; about 30 percent of people between 25 and 34 had completed an education at the bachelor's level or higher (U. S. Bureau of the Census, 2005). Of current concern is the relationship between higher education and the workplace. Bok (2005), American educator and Harvard University President, calls for a closer alignment between the goals of educators and the demands of the economy. Companies outsource much of their work, not only to save costs, but to find workers with the skills they need. What is required to do well in today's economy? Colleges and universities, he argues, need to promote global awareness, critical thinking skills, the ability to communicate, moral reasoning, and responsibility in their students (Bok, 2006). Regional accrediting agencies and state organizations provide similar guidelines for educators. Workers need skills in listening, reading, writing, speaking, global awareness, critical thinking, civility, and computer literacy-all skills that enhance success in the workplace. The U. S. Secretary of Education, Margaret Spellings challenges colleges and universities to demonstrate their effectiveness in providing these skills to students and to work toward increasing America's competitiveness in the global economy (U. S. Department of Education, 2006).

A quality education is more than a credential. Being able to communicate and work well with others is crucial for success. There is some evidence to suggest that most workers who lose their jobs do so because of an inability to work with others, not because they do not know how to do their jobs (Cascio, in Berger 2005). Writing, reading, being able to work with a diverse work team, and having the social skills required to be successful in a career and in society are qualities that go beyond merely earning a credential to compete for a job. Employers must select employees who are not only degreed, but who will be successful in the work environment. Hopefully, students gain these skills as they pursue their degrees. Listen to this story about the lack of rigor in higher education and the problems students face as a result: A Lack Of Rigor Leaves Students 'Adrift' In College.

This page titled 15.5.3: Cognitive Development is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Laura Overstreet via source content that was edited to the style and standards of the LibreTexts platform.

- 8.3: Cognitive Development by Laura Overstreet is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/lifespandevelopment2.

# 15.5.4: Psychosocial Development

## Gaining Adult Status

Many of the developmental tasks of early adulthood involve becoming part of the adult world and gaining independence. Young adults sometimes complain that they are not treated with respect-especially if they are put in positions of authority over older workers. Consequently, young adults may emphasize their age to gain credibility from those who are even slightly younger. "You're only 23? I'm 27!" a young adult might exclaim. (Note: This kind of statement is much less likely to come from someone in their 40s!).

The focus of early adulthood is often on the future. Many aspects of life are on hold while people go to school, go to work, and prepare for a brighter future. There may be a belief that the hurried life now lived will improve 'as soon as I finish school' or 'as soon as I get promoted' or 'as soon as the children get a little older.' As a result, time may seem to pass rather quickly. The day consists of meeting many demands that these tasks bring. The incentive for working so hard is that it will all result in better future.

## Levinson's Theory

In 1978, Daniel Levinson published a book entitled *The Seasons of a Man's Life* in which he presented a theory of development in adulthood. Levinson's work was based on in-depth interviews with 40 men between the ages of 35-45. He later conducted interviews with women as well (1996). According to Levinson, these adults have an image of the future that motivates them. This image is called "the dream" and for the men interviewed, it was a dream of how their career paths would progress and where they would be at midlife. Women held a "split dream"; an image of the future in both work and family life and a concern with the timing and coordination of the two. Dreams are very motivating. Dreams of a home bring excitement to couples as they look, save, and fantasize about how life will be. Dreams of careers motivate students to continue in school as they fantasize about how much their hard work will pay off. Dreams of playgrounds on a summer day inspire would be parents. A dream is perfect and retains that perfection as long as it remains in the future. But as the realization of it moves closer, it may or may not measure up to its image. If it does, all is well. But if it does not, the image must be replaced or modified. And so, in adulthood, plans are made, efforts follow, and plans are reevaluated. This creating and recreating characterizes Levinson's theory.

Levinson's stages are presented below (Levinson, 1978). He suggests that period of transition last about 5 years and periods of "settling down" last about 7 years. The ages presented below are based on life in the middle class about 30 years ago. Think about how these ages and transitions might be different today.

- Early adult transition (17-22): Leaving home, leaving family; making first choices about career and education
- Entering the adult world (22-28): Committing to an occupation, defining goals, finding intimate relationships
- Age 30 transition (28-33): Reevaluating those choices and perhaps making modifications or changing one's attitude toward love and work
- Settling down (33 to 40): Reinvesting in work and family commitments; becoming involved in the community
- Midlife transition (40-45): Reevaluating previous commitments; making dramatic changes if necessary; giving expression to previously ignored talents or aspirations; feeling more of a sense of urgency about life and its meaning
- Entering middle adulthood (45-50): Committing to new choices made and placing one's energies into these commitments

Adulthood, then, is a period of building and rebuilding one's life. Many of the decisions that are made in early adulthood are made before a person has had enough experience to really understand the consequences of such decisions. And, perhaps, many of these initial decisions are made with one goal in mind-to be seen as an adult. As a result, early decisions may be driven more by the expectations of others. For example, imagine someone who chose a career path based on other's advice but now find that the job is not what was expected. The age 30 transition may involve recommitting to the same job, not because it's stimulating, but because it pays well. Settling down may involve settling down with a new set of expectations for that job. As the adult gains status, he or she may be freer to make more independent choices. And sometimes these are very different from those previously made. The midlife transition differs from the age 30 transition in that the person is more aware of how much time has gone by and how much time is left. This brings a sense of urgency and impatience about making changes. The future focus of early adulthood gives way to an emphasis on the present in midlife. (We will explore this in our next lesson.) Overall, Levinson calls our attention to the dynamic nature of adulthood.

Exercise:

How well do you think Levinson's theory translates culturally? Do you think that personal desire and a concern with reconciling dreams with the realities of work and family is equally important in all cultures? Do you think these considerations are equally important in all social classes, races and ethnic groups? Why or why not? How might this model be modified in today's economy?

# Erikson's Theory

## Intimacy vs. Isolation

Erikson believed that the main task of early adulthood was to establish intimate relationships. Intimate relationships are more difficult if one is still struggling with identity. Achieving a sense of identity is a life-long process, but there are periods of identity crisis and stability. And having some sense of identify is essential for intimate relationships. In early adulthood, intimacy (or emotional or psychological closeness) comes from friendships and mates.

## Friendships as a source of intimacy

In our twenties, intimacy needs may be met in friendships rather than with partners. This is especially true in the United States today as many young adults postpone making long-term commitments to partners either in marriage or in cohabitation. The kinds of friendships shared by women tend to differ from those shared by men (Tannen, 1990). Friendships between men are more likely to involve sharing information, providing solutions, or focusing on activities rather than discussion problems or emotions. Men tend to discuss opinions or factual information or spend time together in an activity of mutual interest. Friendships between women are more likely to focus on sharing weaknesses, emotions, or problems. Women talk about difficulties they are having in other relationships and express their sadness, frustrations, and joys. These differences in approaches lead to problems when men and women come together. She may want to vent about a problem she is having; he may want to provide a solution and move on to some activity. But when he offers a solution, she thinks he does not care!

Friendships between men and women become more difficult because of the unspoken question about whether the friendships will lead to a romantic involvement. It may be acceptable to have opposite-sex friends as an adolescent, but once a person begins dating or marries; such friendships can be considered threatening. Consequently, friendships may diminish once a person has a partner or single friends may be replaced with couple friends.

# Partners as a source of intimacy: Dating, Cohabitation, and Mate Selection

## Dating

In general, traditional dating among teens and those in their early twenties has been replaced with more varied and flexible ways of getting together. The Friday night date with dinner and a movie that may still be enjoyed by those in their 30s gives way to less formal, more spontaneous meetings that may include several couples or a group of friends. Two people may get to know each other and go somewhere alone. How would you describe a "typical" date? Who calls? Who pays? Who decides where to go? What is the purpose of the date? In general, greater planning is required for people who have additional family and work responsibilities. Teens may simply have to negotiate getting out of the house and carving out time to be with friends.

## Cohabitation or Living Together

How prevalent is cohabitation? There are over 5 million heterosexual cohabiting couples in the United States and, an additional 594,000 same-sex couples share households (U. S. Census Bureau, 2006). In 2000, 9 percent of women and 12 percent of men were in cohabiting relationships (Bumpass in Casper & Bianchi, 2002). This number reflects only those couples who were together when census data were collected, however. The number of cohabiting couples in the United States today is over 10 times higher than it was in 1960.

Similar increases have also occurred in other industrialized countries. For example, rates are high in Great Britain, Australia, Sweden, Denmark, and Finland. In fact, more children in Sweden are born to cohabiting couples than to married couples. The lowest rates of cohabitation are in Ireland, Italy, and Japan (Benokraitis, 2005).

## How long do cohabiting relationships last?

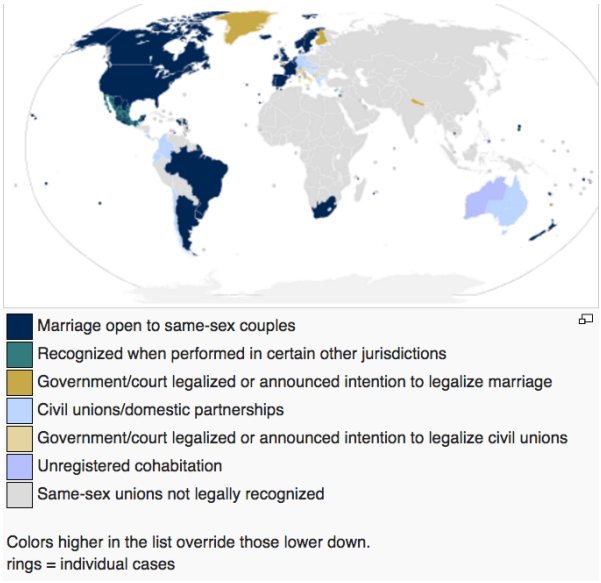
Cohabitation tends to last longer in European countries than in the United States. Half of cohabiting relationships in the U. S. end within a year; only 10 percent last more than 5 years. These short-term cohabiting relationships are more characteristics of people in their early 20s. Many of these couples eventually marry. Those who cohabit more than five years tend to be older and more committed to the relationship. Cohabitation may be preferable to marriage for a number of reasons. For partners over 65, cohabitation is preferable to marriage for practical reasons. For many of them, marriage would result in a loss of Social Security benefits and consequently is not an option. Others may believe that their relationship is more satisfying because they are not bound by marriage. Consider this explanation from a 62-year old woman who was previously in a long-term, dissatisfying marriage. She and her partner live in New York but spend winters in South Texas at a travel park near the beach. “There are about 20 other couples in this park and we are the only ones who aren’t married. They look at us and say, ‘I wish we were so in love’. I don’t want to be like them.” (Author’s files.) Or another couple who have been happily cohabiting for over 12 years. Both had previously been in bad marriages that began as long-term, friendly, and satisfying relationships. But after marriage, these relationships became troubled marriages. These happily cohabiting partners stated that they believe that there is something about marriage that “ruins a friendship”.

The majority of people who cohabit are between the ages of 25-44. Only about 20 percent of those who cohabit are under age 24. Cohabitation among younger adults tends to be short-lived. Relationships between older adults tend to last longer.

## Why do people cohabit?

People cohabit for a variety of reasons. The largest number of couples in the United States engages in premarital cohabitation. These couples are testing the relationship before deciding to marry. About half of these couples eventually get married. The second most common type of cohabitation is dating cohabitation. These partnerships are entered into for fun or convenience and involve less commitment than premarital cohabitation. About half of these partners break up and about one-third eventually marry. Trial marriage is a type of cohabitation in which partners are trying to see what it might be like to be married. They are not testing the other person as a potential mate, necessarily; rather, they are trying to find out how being married might feel and what kinds of adjustments they might have to make. Over half of these couples split up. In the substitute marriage, partners are committed to one another and are not necessarily seeking marriage. Forty percent of these couples continue to cohabit after 5 to 7 years (Bianchi & Casper, 2000). Certainly, there are other reasons people cohabit. Some cohabit out of a feeling of insecurity or to gain freedom from someone else (Ridley, C. Peterman, D. & Avery, A., 1978). And many cohabit because they cannot legally marry.

## Same-Sex Couples




Same sex marriage is legal in 21 countries, including the United States. Many other countries either recognize same-sex couples for the purpose of immigration, grant rights for domestic partnerships, or grant common law marriage status to same-sex couples.



*Photo Courtesy Salvor Gissurardottir*

Same sex couples struggle with concerns such as the division of household tasks, finances, sex, and friendships as do heterosexual couples. One difference between same sex and heterosexual couples, however, is that same sex couples have to live with the added stress that comes from social disapproval and discrimination. And continued contact with an ex-partner may be more likely among homosexuals and bisexuals because of closeness of the circle of friends and acquaintances.

# Mate-Selection

Contemporary young adults in the United States are waiting longer than before to marry. The median age of first marriage is 25 for women and 27 for men. This reflects a dramatic increase in age of first marriage for women, but the age for men is similar to that found in the late 1800s. Marriage is being postponed for college and starting a family often takes place after a woman has completed her education and begun a career. However, the majority of women will eventually marry (Bianchi & Casper, 2000).

**Social exchange theory** suggests that people try to maximize rewards and minimize costs in social relationships. Each person entering the marriage market comes equipped with assets and liabilities or a certain amount of social currency with which to attract a prospective mate. For men, assets might include earning potential and status while for women, assets might include

physical attractiveness and youth.

## A Fair Exchange

Customers in the market do not look for a 'good deal', however. Rather, most look for a relationship that is mutually beneficial or equitable. One of the reasons for this is because most a relationship in which one partner has far more assets than the other will result if power disparities and a difference in the level of commitment from each partner. According to Waller's principle of least interest, the partner who has the most to lose without the relationship (or is the most dependent on the relationship) will have the least amount of power and is in danger of being exploited. A greater balance of power, then, may add stability to the relationship.

Homogamy and the filter theory of mate selection: Societies specify through both formal and informal rules who is an appropriate mate. Consequently, mate selection is not completely left to the individual. Rules of endogamy indicate within which groups we should marry. For example, many cultures specify that people marry within their own race, social class, age group, or religion. These rules encourage homogamy or marriage between people who share social characteristics. The majority of marriages in the U. S. are homogamous with respect to race, social class, age and to a lesser extent, religion. Rules of exogamy specify the groups into which one is prohibited from marrying. For example, in most of the United States, people are not allowed to marry someone of the same sex.

According to the filter theory of mate selection (Kerckhoff & Davis, 1962), the pool of eligible partners becomes narrower as it passes through filters used to eliminate members of the pool. One such filter is propinquity or geographic proximity. Mate selection in the United States typically involves meeting eligible partners face to face. Those with whom one does not come into contact are simply not contenders. Race and ethnicity is another filter used to eliminate partners. Although interracial dating has increased in recent years and interracial marriage rates are higher than before, interracial marriage still represents only 5.4 percent of all marriages in the United States. Physical appearance is another feature considered when selecting a mate. Age, social class, and religion are also criteria used to narrow the field of eligibles. Thus, the field of eligibles becomes significantly smaller before those things we are most conscious of such as preferences, values, goals, and interests, are even considered.

## Online Relationships

What impact does the internet have on the pool of eligibles? There are hundreds of websites designed to help people meet. Some of these are geared toward helping people find suitable marriage partners and others focus on less committed involvements. Websites focus on specific populations-big beautiful women, Christian motorcyclists, parents without partners, and people over 50, etc. Theoretically, the pool of eligibles is much larger as a result. However, many who visit sites are not interested in marriage; many are already married. And so if a person is looking for a partner online, the pool must be filtered again to eliminate those who are not seeking long-term relationships. While this is true in the traditional marriage market as well, knowing a person's intentions and determining the sincerity of their responses becomes problematic online.



*Photo Courtesy Vikram Kharvi*

This young man offers his picture and a description of his professional status and stability. While he's looking for employment, his ad might also help him find an eligible partner online.

Online communication differs from face-to-face interaction in a number of ways. In face-to-face meetings, people have many cues upon which to base their first impressions. A person's looks, voice, mannerisms, dress, scent, and surroundings all provide information in face-to-face meetings. But in computer- mediated meetings, written messages are the only cues provided. Fantasy is used to conjure up images of voice, physical appearance, mannerisms, and so forth. The anonymity of online involvement makes it easier to become intimate without fear of interdependence. It is easier to tell one's secrets because there is little fear of loss. One can find a virtual partner who is warm, accepting, and undemanding (Gwinnell, 1998). And exchanges can be focused more on emotional attraction than physical appearance.

When online, people tend to disclose more intimate details about themselves more quickly. A shy person can open up without worrying about whether or not the partner is frowning or looking away. And someone who has been abused may feel safer in virtual relationships. None of the worries of home or work get in the way of the exchange. The partner can be given one's undivided attention, unlike trying to have a conversation on the phone with a houseful of others or at work between duties. Online exchanges take the place of the corner café as a place to relax, have fun, and be you (Brooks, 1997). However, breaking up or disappearing is also easier. A person can simply not respond, or block e-mail.

But what happens if the partners meet face to face? People often complain that pictures they have been provided of the partner are misleading. And once couples begin to think more seriously about the relationship, the reality of family situations, work demands, goals, timing, values, and money all add new dimensions to the mix. Next we will turn our attention to theories of love.

This page titled 15.5.4: Psychosocial Development is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Laura Overstreet via source content that was edited to the style and standards of the LibreTexts platform.

- 8.4: Psychosocial Development by Laura Overstreet is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/lifespandevelopment2.

# 15.5.5: Types of Love



## Sternberg's Triangle of Love: Three Components

Sternberg (1988) suggests that there are three main components of love: passion, intimacy, and commitment. Love relationships vary depending on the presence or absence of each of these components. Passion refers to the intense, physical attraction partners feel toward one another. Intimacy involves the ability the share feelings, personal thoughts and psychological closeness with the other. Commitment is the conscious decision to stay together. Passion can be found in the early stages of a relationship, but intimacy takes time to develop because it is based on knowledge of the partner. Once intimacy has been established, partners may resolve to stay in the relationship. Although many would agree that all three components are important to a relationship, many love relationships do not consist of all three. Let's look at other possibilities.

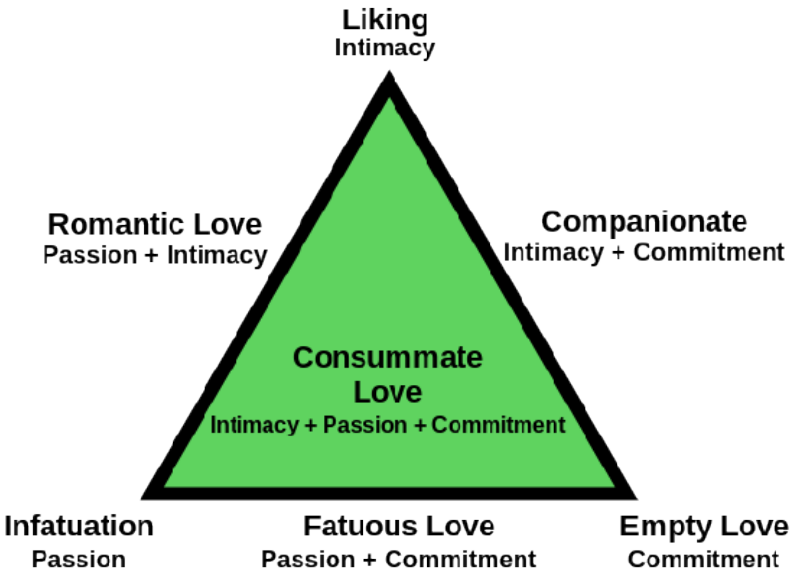



*Image shows the 3 properties of love and how it creates the 7 different loves according to theory. (Public Domain; AnonMoos).*

**Liking**: In this relationship, intimacy or knowledge of the other and a sense of closeness is present. Passion and commitment,

however, are not. Partners feel free to be themselves and disclose personal information. They may feel that the other person knows them well and can be honest with them and let them know if they think the person is wrong. These partners are friends. However, being told that your partner 'thinks of you as a friend' can be a devastating blow if you are attracted to them and seek a romantic involvement.

**Infatuation**: Perhaps, this is Sternberg's version of "love at first sight". Infatuation consists of an immediate, intense physical attraction to someone. A person who is infatuated finds it hard to think of anything but the other person. Brief encounters are played over and over in one's head; it may be difficult to eat and there may be a rather constant state of arousal. Infatuation is rather short-lived, however, lasting perhaps only a matter of months or as long as a year or so. It tends to be based on chemical attraction and an image of what one thinks the other is all about.

**Fatuous Love**: However, some people who have a strong physical attraction push for commitment early in the relationship. Passion and commitment are aspects of fatuous love. There is no intimacy and the commitment is premature. Partners rarely talk seriously or share their ideas. They focus on their intense physical attraction and yet one, or both, is also talking of making a lasting commitment. Sometimes this is out of a sense of insecurity and a desire to make sure the partner is locked into the relationship.

**Empty Love**: This type of love may be found later in a relationship or in a relationship that was formed to meet needs other than intimacy or passion (money, childrearing, status). Here the partners are committed to staying in the relationship (for the children, because of a religious conviction, or because there are no alternatives perhaps), but do not share ideas or feelings with each other and have no physical attraction for one another.

**Romantic Love**: Intimacy and passion are components of romantic love, but there is no commitment. The partners spend much time with one another and enjoy their closeness but have not made plans to continue 'no matter what'. This may be true because they are not in a position to make such commitments or because they are looking for passion and closeness and are afraid it will die out if they commit to one another and start to focus on other kinds of obligations.

**Companionate Love**: Intimacy and commitment are the hallmarks of companionate love. Partners love and respect one another and they are committed to staying together. But their physical attraction may have never been strong or may have just died out. This may be interpreted as 'just the way things are' after so much time together or there may be a sense of regret and loss. Nevertheless, partners are good friends committed to one another.

**Consummate Love**: Intimacy, passion, and commitment are present in consummate love. This is often the ideal type of love. The couple shares passion; the spark has not died, and the closeness is there. They feel like best friends as well as lovers and they are committed to staying together.

## Types of Lovers

Lee (1973) offers a theory of love styles or types of lovers derived from an analysis of writings about love through the centuries. As you read these, think about how these styles might become part of the types of love described above.

- **Pragma** is a style of love that emphasizes the practical aspects of love. The pragmatic lover considers compatibility and the sensibility of their choice of partners. This lover will be concerned with goals in life, status, family reputation, attitudes about parenting, career issues and other practical concerns.
- **Mania** is a style of love characterized by volatility, insecurity, and possessiveness. This lover gets highly upset during arguments or breakups, may have trouble sleeping when in love, and feels emotions very intensely.
- **Agape** is an altruistic, selfless love. These partners give of themselves without expecting anything in return. Such a lover places the partner's happiness above their own and is self-sacrificing to benefit the partner.
- **Eros** is an erotic style of loving in which the person feels consumed. Physical chemistry and emotional involvement are important to this type of lover.
- **Ludus** refers to a style of loving that emphasizes the game of seduction and fun. Such a lover stays away from commitment and often has several love interests at the same time. This lover does not self-disclose and in fact may prefer to keep the other guessing. This lover can end a relationship easily.
- **Storge** is a style of love that develops slowly over time. It often begins as a friendship and becomes sexual much later. These partners are likely to remain friends even after the breakup.

## Frames of Relationships

| A | H | M |
|---|---|---|

Another useful way to consider relationships is to consider the amount of dependency in the relationship. Davidson (1991) suggests three models. The **A-frame** relationship is one in which the partners lean on one another and are highly dependent on the other for survival. If one partner changes, the other is at risk of 'falling over'. This type of relationship cannot easily accommodate change and the partners are vulnerable should change occur. A breakup could be devastating.

The **H-frame** relationship is one in which the partners live parallel lives. They rarely spend time with one another and tend to have separate lives. What time they do share is usually spent meeting obligations rather than sharing intimacies. This independent type of relationship can end without suffering emotionally.

The **M-frame** relationship is interdependent. Partners have a strong sense of connection but also are able to stand alone without suffering devastation. If this relationship ends, partners will be hurt and saddened, but will still be able to stand alone. This ability comes from a strong sense of self-love. Partners can love each other without losing a sense of self. And each individual has self-respect and confidence that enriches the relationship as well as strengthens the self.

We have been looking at love in the context of many kinds of relationships. In our next lesson, we will focus more specifically on marital relationships. But before we do, we examine the dynamics of falling in and out of love.

## The Process of Love and Breaking Up

Reiss (1960) provides a theory of love as process. Based on the wheel theory of love, love relationships begin with the establishment of rapport.

Rapport involves sharing likes, preferences, establishing some common interests. The next step is to begin to disclose more personal information through self-revelation. When one person begins to open up, the social expectation is that the other will follow and also share more personal information so that each has made some risk and trust is built. Sexual intimacy may also become part of the relationship. Gradually, partners begin to disclose even more about themselves and are met with support and acceptance as they build mutual dependency. With time, partners come to rely on each other for need fulfillment. The wheel must continue in order for love to last. It becomes important for partners to continue to establish rapport by discussing the day's events, communicating about their goals and desires, and showing signs of trust. Partners must continue to rely on one another to have certain needs fulfilled. If the wheel turns backward, partners talk less and less, rely less on one another and are less likely to disclose.

## Process of Disaffection: Breaking Up

When relationships are new, partners tend to give one another the benefit of the doubt and focus on what they like about one another. Flaws and imperfections do not go unnoticed; rather, they are described as endearing qualities. So, for example, the partner who has a very large nose is described as 'distinguished' or as having a 'striking feature.' This is very exhilarating because features that someone may have previously felt self-conscious about are now accepted or even appreciated. However, once partners begin the process of breaking up, these views are abandoned and questionable qualities are once again flaws and imperfections.

Kersten (1990) provides a look at the dynamics of breaking up. Although this work is primarily about divorce, the dynamics of dissolving any long-term relationship are similar. The beginning phase of breaking up involves seeing imperfections in the relationship but remaining hopeful that things will improve. This improvement will require the partner's cooperation because they are primarily at fault. So, as long as the offending partner makes the necessary changes, and of course the offended partner will provide the advice, support, and guidance required, the relationship will continue. (If you are thinking that this is not going to work-you are right. Attempts to change one's partner are usually doomed to failure. Would you want your partner to try to change you?)

Once it becomes clear that efforts to change are futile, the middle phase is entered. This phase is marked by disappointment. Partners talk less and less, make little eye contact, and grow further apart. One may still try to make contact, but the other is clearly disengaged and is considering the benefits and costs of leaving the relationship.

In the end phase, the decision to leave has been made. The specific details are being worked out. Turning a relationship around is very difficult at this point. Trust has diminished, and thoughts have turned elsewhere. This stage is one of hopelessness.

We will explore marriage, divorce, and cohabitation more fully in our next lesson.

This page titled 15.5.5: Types of Love is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Laura Overstreet via source content that was edited to the style and standards of the LibreTexts platform.

- 8.5: Types of Love by Laura Overstreet is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/lifespandevelopment2.

# 15.5.6: Love Attitude Scale

## Introduction

So what is your love style? Your authors discussed several types of love in the text, including John Lee's six love types. The Love Attitude Scale, created by Clyde Hendrick and Susan Hendrick, measures your attitudes about each of the styles.

## Directions

For each of the following statements, write the number (1-5) that most nearly describes your attitude or belief. Some of the items refer to a specific love relationship, while others refer to general attitudes and beliefs about love. Whenever possible, answer the questions with your current partner in mind. If you are not currently dating anyone, answer the questions with your most recent partner in mind. If you have never been in love, answer in terms of what you think your responses would most likely be.

For even more insight, make a copy of the questions and have your current partner complete them also. Answer the questions independently of each other and then compare your scores.

After looking at your style, type a paragraph in which you answer the following questions:

- Does these scores surprise you? Why or why not?
- What would you consider the advantages and disadvantages of these styles to be?
- What styles do you think would be most common in adolescence? Early adulthood? Adulthood? Why?

The code for the rating to be used for each statement is as follows:

| SD = STRONGLY disagree | D = Disagree | N = Neutral | A = Agree | SA = STRONGLY agree |
|---|---|---|---|---|
| SD | D | N | A | SA |
| 1 | 2 | 3 | 4 | 5 |

1. My lover and I were attracted to each other immediately after we first met
2. I try to keep my lover a little uncertain about my commitment to him/her.
3. It is hard to say exactly where friendship ends and love begins.
4. I consider what a person is going to become in life before I commit myself to him/her.
5. When things aren't right with my lover and me, my stomach gets upset.
6. I try to always help my lover through difficult times.
7. My lover and I have the right physical "chemistry" between us.
8. I believe that what my lover doesn't know about me won't hurt him/her.
9. Genuine love first requires caring for a while.
10. I try to plan my life carefully before choosing a lover.
11. When my love affairs break up, I get so depressed.
12. I would rather suffer myself than let my lover suffer.
13. Our lovemaking is very intense and satisfying.
14. I have sometimes had to keep two of my lovers from finding out about each other.
15. I expect to always be friends with the one I love.
16. It is best to love someone with a similar background.
17. Sometimes I get so excited about being in love that I can't sleep.
18. I cannot be happy unless I place my lover's happiness before my own.
19. I feel that my lover and I were meant for each other.
20. I can get over love affairs pretty easily and quickly.
21. The best kind of love grows out of a long friendship.
22. A main consideration in choosing a lover is how he/she reflects on my family.
23. When my lover doesn't pay attention to me, I feel sick all over.
24. I am usually willing to sacrifice my own wishes to let my lover achieve his/hers.

25. My lover and I became emotionally involved rather quickly.
26. My lover would get upset if he/she knew of some of the things I've done with other people.
27. Our friendship merged gradually into love over time.
28. An important factor in choosing a partner is whether or not he/she will be a good parent.
29. When I am in love, I have trouble concentrating.
30. Whatever I own is my lover's to use as he/she chooses.
31. My lover and I really understand each other.
32. When my lover gets too dependent on me, I want to back off a little.
33. Love is really a deep friendship, not a mysterious, mystical emotion.
34. One consideration in choosing a partner is how he/she will reflect on my career.
35. I cannot relax if I suspect that my lover is with someone else.
36. When my lover gets angry with me, I still love Him/her fully and unconditionally.
37. My lover fits my ideal standards of physical beauty/handsomeness.
38. I enjoy playing the "game of love" with a number is different partners.
39. My most satisfying love relationships have developed from good friendships.
40. Before getting very involved with anyone, I try to figure out how compatible his/her hereditary background is with mine in case we ever have children.
41. If my lover ignores me for a while, I do stupid things to get his/her attention back.
42. I would endure all things for the sake of my lover.

**Source**: Hendrick, C and Hendrick, S. (1986). "A theory and method of love." Journal of Personality and Social Psychology, 50, 2, 392-402. Reprinted with permission of the American Psychological Association.

## Love Attitude Scale — Scoring Instructions

The higher the score, the stronger you are on this love style

Scoring:

**Eros**: Add up all the numbers you circled for items 1, 7, 13, 19, 25, 31, and 37.

Eros Score: _____

**Ludus**: Add up all the numbers you circled for items 2, 8, 14, 20, 26, 32, and 38.

Ludus Score: _____

**Storge**: Add up all the numbers you circled for items 3, 9, 15, 21, 27, 33, and 39.

Storge Score: _____

**Pragma**: Add up all the numbers you circled for items 4, 10, 16, 22, 28, 34, and 40.

Pragma Score: _____

**Mania**: Add up all the numbers you circled for items 5, 11, 17, 23, 29, 35, and 41.

Mania Score: _____

**Agape**: Add up all the numbers you circled for items 6, 12, 18, 24, 30, 36, and 42.

Agape Score: _____

---

This page titled 15.5.6: Love Attitude Scale is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Laura Overstreet via source content that was edited to the style and standards of the LibreTexts platform.

- 8.6: Love Attitude Scale by Laura Overstreet is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/lifespandevelopment2.

# 15.5.7: Love Styles

After studying Lee's Love Styles, answer the Love Styles questionnaire you see in this week's lessons. Compute your scores and then answer the following questions. (Post your answers and respond to at least one other person.)

- Do these scores surprise you? Why or why not?
- What would you consider the advantages and disadvantages of these styles to be?
- What styles do you think would be most common in adolescence? Early adulthood? Adulthood? Why?

This page titled 15.5.7: Love Styles is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Laura Overstreet via source content that was edited to the style and standards of the LibreTexts platform.

- 8.7: Love Styles by Laura Overstreet is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/lifespandevelopment2.

# 15.5.8: Adolescence and Early Adulthood



Choose two of the following:

1. Examine how cultural ideals and timing of puberty can affect an adolescent's body image.
2. Question Erikson's assertion about the focus on intimacy in early adulthood.
3. Apply Sternberg's theory of love to specific examples of relationships from song or media.
4. Discuss social problems facing youth such as suicide, juvenile delinquency, and victimization. What kinds of recommendations would you make to help reduce these problems?

This page titled 15.5.8: Adolescence and Early Adulthood is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Laura Overstreet via source content that was edited to the style and standards of the LibreTexts platform.

- 8.8: Adolescence and Early Adulthood by Laura Overstreet is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/lifespandevelopment2.

# 15.5.9: Early Adulthood

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

## Lecture Transcript

Here we are in early adulthood. This is the period of life when we are in our 20s and 30s.

First, a look at physical development.

If you are in your early 20s, you are enjoying your physiological peak. You may have more energy, endurance, and reproductive ability than at any other time in your life. Enjoy! In our 30s, we experience a slow, gradual decline in some abilities. One of the first noticeable signs of this is a loss of lung reserve capacity. If you exert yourself, you may notice that it takes longer to reach your normal breathing and heart rate than before. Most of this decline is due to a lack of exercise rather than aging alone, however. Busy lives in early adulthood sometimes means less time for working on physical fitness.

Men may reach their peak of sexual responsiveness in their late teens and early 20s. They can achieve an erection more easily at this period of life. Women may become more sexually responsive as they move through early adulthood. This may be because they become less self-conscious or more confident or comfortable than before.

About 10 to 15 percent of people who are of reproductive age experience infertility. Half of the time this may be due to the male having a low sperm count or not producing enough healthy sperm with enough motility to reach the egg. Half of the time the reason for infertility is because the female doesn't ovulate or has pelvic inflammatory disease or some other blockage in the reproductive tract. About a third of couples conceive eventually without treatment. Treatment helps couples conceive about half of the time.

Most fertility treatment is the use of drugs to stimulate ovulation. Five percent of fertility treatment involves in vitro fertilization where sperm cells fertilize the egg outside the body and the zygote is transferred to the uterus. In vitro fertilization has about a 5 to 30 percent success rate. The more closely the procedure can mimic normal fertilization, the higher the success rate. Gamete intra-fallopian transfer involves transferring sperm and egg into the fallopian tube where conception typically occurs. A small percentage of couples use zygote intra-fallopian transfer in which the fertilized egg is transferred to the fallopian tube to continue its journey to the uterus.

Even though early adulthood is a peak for physiological condition, it's also a time vulnerable to societal risks. Drug abuse peaks between 19 and 22 as people transition into adulthood. Rates fall after these years. However, the use of intoxicants is associated with acquaintance rape and contracting sexually transmitted infections. It also increases the risk of death due to homicide, motor vehicle accidents, and suicide.

Here are some comparisons of violent deaths by sex and ethnic category taken from the National Center for Health Statistics. We can see first that risk is higher for males than for females in all ethnic categories. Homicide rates are particularly high for black males and suicide rates are particularly high for Native American males.

The brain continues to develop during early adulthood. How does thinking change in this period?

Have you ever heard a conversation between a 14 year old and someone in their mid-thirties? If it's a parent and child, you may have heard the 14 year old enthusiastically describe a plan of action while the 35 year old was quick to explain why the plan was unreasonable. This practical, realistic approach is the hallmark of postformal thinking. Postformal thinking is abstract, realistic,

and personal. In early adulthood, we become less concerned with what our peers think and experience reveals what is likely to happen. Not just what is possible.

Dialectical thought is another feature of adult thought. While an adolescent may tend to think in either/or categories, the adult may begin to understand that there are strengths and weaknesses in both sides of an argument. Being able to take what is salient from both sides of opposing viewpoints and to synthesize the two into a personalized view is referred to as dialectical thought. Education promotes this when it entails exploring various positions on a topic. In our personal life, dialectical thought may result in greater tolerance of others with the recognition that no one is perfect.

One concern over higher education is its relationship to the workplace. Derek Bok, former president of Harvard University, suggests that colleges and the workplace should be more closely aligned. The workplace needs people who are aware of global issues, who have effective communicative skills, and who have a sense of integrity or moral reasoning to offer the workplace. Universities and colleges need to address these issues. Higher education has also been criticized for graduating students who do not have critical thinking skills or adequate writing skills.

Now we take a look at the social world of early adulthood.

Havighurst provides a list of developmental tasks in early adulthood. These include achieving a sense of independence or learning how to be on one's own, achieving a sense of identity, emotional stability, beginning a career, engaging in intimate relationships, learning how to participate in the community, establishing one's own residence, and perhaps becoming parents. If you are in this age group and you find you days quite busy or even exhausting, it's certainly understandable!

One reason for engaging in such busy demands is because we feel that in the future, all will pay off. Many of our decisions are designed to show benefits later in adulthood. Young adults hope to be taken seriously as mature individuals and therefore may emphasize how old or experienced they are. They may also make decisions in order to earn the respect of others and to be viewed as adults.

Daniel Levinson offered one of the first studies of adult transitions. In the late 1970s, he published his work entitled Seasons of a Man's Life in which he described the transitions men faced as they launched as young adults and moved through midlife. The early 20s was a time of adult transition and making plans for the future. These plans were implemented for the duration of the 20s, but were reevaluated as they approached their 30s. Some revisions might occur during this transition and carried out through a settling down period that followed. At midlife, these men compared what they thought their lives would be like, referred to as the dream, and how it really was. During the midlife transition, further adjustments such as career changes or changes in personal relationships could be made as well.

Erikson views early adulthood as a time of focusing on intimate relationships. Intimacy versus isolation.

Friendships can be one source of intimacy. Teens often have collections of friends of both sexes. But having opposite sexed friends becomes a bit more problematic once an intimate relationship has been established. As a result, males and females tend to have same-sex friendships. It's been suggested that the friendships that males share are focused on information sharing, debate, and problem-solving. But females are more likely to discuss personal problems and relationship issues. Do you think this is true in all cultures?

Cohabitation refers to partners living together in an intimate relationship without being married. It's estimated that there are about 7.5 million cohabiting couples in the United States. This reflects a 10 fold increase in the last 40 years. Of those, just under 800,000 are same-sex couples. In general, cohabiting relationships do not last as long as marriages. Cohabitation is a more permanent relationship in Europe. And with the decrease in remarriage rates and increase in cohabitation rates, the U. S. may become more similar to Europe in this regard. Younger partners tend to have shorter cohabiting relationships. Cohabitation continues to increase in the United States.

Why do people cohabit? Many cohabiting relationships are considered to be a temporary arrangement prior to marriage. These premarital cohabiting couples do intend to marry, but are living together prior to marriage for practical or emotional reasons. Dating cohabitation does not last very long. This cohabiting relationship is more like a long date where partners continue to spend time together as long as it is enjoyable. The trial marriage pattern is one in which partners try out a marital type of relationship by moving in together. They're not really evaluating a particular partner; rather they are trying out the relationship of marriage. Some couple substitute cohabitation for marriage and have no intentions of marrying. Cohabitation is their preference, perhaps because they've had failed marriages in the past, are philosophically opposed to marriage, or do not want to marry for other practical or financial reasons. These relationships tend to last longer.

Same-sex couples can legally marry in Spain, Canada, Belgium, Argentina, Norway, Iceland, the Netherlands, South Africa, and Denmark. They can also legally marry in Massachusetts, Connecticut, Iowa, Vermont, New Hampshire, and the District of Columbia. The issues facing same-sex couples tend to be similar to those of heterosexual couples: concerns about money, household chores, leisure time, sex, and children. But they do have to face additional stressors of stigma from others. Same-sex partners tend to have a more equal distribution of power within the relationship than in heterosexual couples. And when couples break up, there is a greater likelihood of still having contact with the ex because of a closer same-sex community of friends.

Let's explore mate selection. Although the age at first marriage has been steadily increasing in the United States, 25 for females and 27 for males, many do still marry while in early adulthood. One way to look at the mate selection process is to think of the marriage market as a place where social currency is exchanged. You bring with you a certain amount of social currency or qualities that make you a good potential make. And these are weighed against those things that might make you a less than ideal partner. This is taken into account when looking for a partner. Most of us do not want a "good deal" when making the exchange. Rather, we look for a fair exchange. This is because in relationships, the person with the least interest in the relationship has the most power. So if you want an equal distribution of power, you want both parties to need the relationship equally. The majority of marriages are homogamous with respect to social class, race, age, and religion. This similarity of social characteristics is referred to as homogamy. This selection is guided by social rules of endogamy (the expectation that you will marry within certain groups such as race and class), exogamy (the expectation that you will marry outside of other groups such as your sex), and propinquity or nearness. We tend to marry those who are near because those are the people we meet and with whom we socialize.

Let's explore a few theories of love. Sternberg offers a triangular approach to love. Love has three elements, intimacy or psychological closeness, passion or physical attraction, and commitment or the conscious decision to stay together. Most of the problems people have in love relationships are about either intimacy, "We don't talk." passion, "We never hold each other anymore." or commitment, "I can't count on my partner to stay with me."

We can analyze love relationships as having one or more of these elements. Liking is intimacy only. Infatuation is a relationship based on passion alone. Empty love is based solely on commitment. Romantic love includes both intimacy and passion. Companionate love is based on commitment and intimacy. Fatuous love is characterized by passion and commitment, but no intimacy. What do we want? The ideal in the west is consummate love. We want passion, commitment, and intimacy.

John Lee explored types of love or love styles found in literature. You can look at your own style by taking the questionnaire at the end of this lesson.

Pragma is practical love based on sensible qualities. Agape is a selfless love that has the other's best interest at heart. Mania is possessive and insecure.

Eros is erotic love in which a person feels consumed. Ludus is carefree, nonpossessive, and based on seduction. Storge is based on friendship. What's your love style?

Another way to look at relationships is to examine the extent to which partners are dependent or independent of one another. In the A frame relationship, partners lean on one another and there is little room for growth or change.

The H frame relationship finds partners quite independent of one another. Their lives are parallel and there is little connection between the two. The M frame relationship is marked by interdependence. Partners have a close couple connection, but also a sense of self or individuality.

Ira Reiss suggests that love is not stagnant. Rather, it depends on continuous interaction and renewal to be sustained. As a relationship begins, partners find out about one another and their common interests as they establish rapport. This is deepened with mutual sharing of more personal information through self-revelation. The relationship progresses as partners become more dependent on one another in day to day life. Eventually, the partners begin to rely on one another to fulfill their needs. But it doesn't stop there. For love to continue, partners need to repeat the cycle and continue to establish rapport, engage in self-revelation, and be part of one another's lives. When partners break up, the wheel begins to turn in the other direction. Partners talk less and gradually become disengaged.

Kirsten looks at the process of disaffection or the psychological experience of breaking up. Before breaking up, couples may engage in "little fictions" or in maintaining little lies about one another in order to help the person feel good about themselves and the relationship. Flaws are seen as endearing. We're often quite forgiving and positive about our partners in the beginning. And what could be better than having someone love your flaws! But when undergoing the process of disaffection, partners become disenchanted with one another. Or perhaps, only one partner is becoming disappointed. In the beginning phase, this partner may begin to pull away psychologically or start to try to change the partner's flaws. There may still be optimism about the future of

the relationship . . . as long as the partner makes corrections. But in the middle phase, disappointment builds and there's less optimism about the future of the relationship. In the end, a sense of hopelessness creeps in and the disappointed partner may begin to plan their departure.

In our next lesson, we will look at middle adulthood and expand upon adult relationships.

This page titled 15.5.9: Early Adulthood is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Laura Overstreet via source content that was edited to the style and standards of the LibreTexts platform.

- 8.9: Early Adulthood by Laura Overstreet is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/lifespandevelopment2.

# 15.5.10: Early Adulthood

Interactive Content

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this Interactive Content online

**Lifespan Psychology Module 7 Early Adulthood Powerpoint** from **Lumen Learning**

This page titled 15.5.10: Early Adulthood is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Laura Overstreet via source content that was edited to the style and standards of the LibreTexts platform.

# 15.5.11: Adolescence and Early Adulthood

## Adolescence and Emerging Adulthood

1. Define puberty. What kinds of changes occur during puberty?
2. What impacts the timing of puberty?
3. Describe the growth spurt.
4. Discuss changes in the teenage brain (review your notes over the film.)
5. Distinguish between primary and secondary sex characteristics and give examples of each.
6. What is spermarche? Menarche?
7. How do cultural ideals and timing impact adolescent body image?
8. Describe some nutritional concerns during adolescence.
9. What is anorexia? Bulimia?
10. What is the myth of mutuality? Who is most likely to suffer from sexual abuse?
11. Characterize teen drug use.
12. What is formal operational intelligence?
13. Define and give examples of adolescent egocentrism, the imaginary audience, the personal fable, and the invincibility fable.
14. How does Erikson characterize adolescence?
15. What is a psychosocial moratorium? What is foreclosure? Identity diffusion?
16. Contrast teens as offenders and as victims of crime.
17. Discuss teen suicide.
18. What do teens want from parents?
19. List the developmental tasks of early adulthood.
20. Explain how emerging adulthood is a health but risky time.
21. Explain Levinson's theory of adulthood.
22. What is postformal thought? What is dialectical thought? What factors promote this?
23. Characterize cohabitation and types of cohabitation.
24. What is the median age of first marriage?
25. Explain social exchange theory of mate selection.
26. What is the principle of least interest?
27. Explain Sternberg's dimensions of love.
28. List and describe Lee's love styles.
29. Characterize frames of relationships.
30. Explain the wheel theory of love.
31. What is the "process of disaffection"? What happens in each stage?

This page titled 15.5.11: Adolescence and Early Adulthood is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Laura Overstreet via source content that was edited to the style and standards of the LibreTexts platform.

- 8.11: Adolescence and Early Adulthood by Laura Overstreet is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/lifespandevelopment2.

# 15.5.12: Unit 3 Exam

1. Fourteen-year-old Monica is very idealistic and often develops crushes on people she doesn't even know. This reflects her newly developed cognitive ability to:
   a. imagine possible worlds and people.
   b. take another person's viewpoint.
   c. deal simultaneously with two sides of an issue.
   d. see herself as others see her.
2. The term menarche refers to:
   a. first ovulation.
   b. the growth of the uterus.
   c. a girl's first menstrual period.
   d. the start of estrogen production.
3. New research indicates changes in the teenage brain. What occurs?
   a. There is a growth spurt in the prefrontal lobes of the brain.
   b. The hippocampus shrinks substantially.
   c. The circadian rhythm shifts making teens more alert in the morning.
   d. The motor cortex doubles in size.
4. Which of the following is TRUE about puberty?
   a. Only males experience lowered voices during puberty.
   b. Both males and females may experience breast growth during puberty.
   c. Teens typically gain about 20 pounds in weight during puberty.
   d. Males have greater body image problems than do females.
5. Most teens in the United States have which problem with nutrition?
   a. They have too much calcium in the diet.
   b. They consume too many calories and inadequate nutrition.
   c. They typically do not consume enough protein.
   d. They have low sodium levels.
6. The substance that is most commonly used by youth in America today is:
   a. Alcohol.
   b. Vicodin.
   c. Tobacco.
   d. Marijuana.
7. Which of the following is TRUE of youth in the United States today?
   a. Teen pregnancy rates are down.
   b. Teen crime rates have increased sharply in the last 5 years.
   c. Teen drop out rates are at an all time high.
   d. Teens suicide rates have increased steadily since the 1970s.
8. Changes in secondary sex characteristics include ALL BUT WHICH ONE?
   a. growth of the testes.
   b. The development of pubic hair.
   c. Breast development.
   d. An accumulation of fat on the thighs and hips.
9. The invincibility fable refers to a teenager's
   a. belief that the body is indestructible.
   b. feeling that everyone is watching their behavior.
   c. belief that they are destined to be famous.
   d. feeling that others do not understand how the teen feels.
10. Which of the following is TRUE concerning teens?
    a. Teens are often the victims of violence.
    b. Most types of teen crime are higher today than ever before.
    c. There are more runaway teens than thrownaway teens.
    d. Teen pregnancy rates are at an all-time high in the United States.
11. Bob helped his sports team win the state championship and now he thinks he may someday be famous. This reflects:
    a. the invincibility fable.

b. egocentrism.
c. the personal fable.
d. the imaginary audience.

12. This type of love is self-centered and manipulative.
    a. agape.
    b. storge.
    c. ludus.
    d. companionate.
13. If you believe the principle of least interest, you can maximize your power:
    a. by showing your partner how much you need him or her.
    b. by having plenty of other options for other relationships.
    c. by doing things to gain your partner's interest in the relationship.
    d. by being kind and loving.
14. Early adulthood is a time of:
    a. peak physiological development.
    b. thinking that you are destined to be famous.
    c. worrying about what others think.
    d. concrete operational thought.
15. This type of thought is associated with adulthood and education.
    a. concrete operational thought.
    b. dialectical thought.
    c. preoperational thought.
    d. existential thought.

This page titled 15.5.12: Unit 3 Exam is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Laura Overstreet via source content that was edited to the style and standards of the LibreTexts platform.

- 8.12: Unit 3 Exam by Laura Overstreet is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/lifespandevelopment2.

# 15.6: EARLY ADULTHOOD


15.6.1: Lecture- Early Adulthood

15.6.2: Physical Development

15.6.3: Cognitive Development

15.6.4: Psychosocial Development

15.6.5: Activity- Love Attitude Scale

15.6.6: Types of Love

15.6.7: Work and Personality



This page titled 15.6: Early Adulthood is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 14: Early Adulthood by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/atd-hostos-child-development-education.

# 15.6.1: Lecture- Early Adulthood

## Lecture Transcript

Here we are in early adulthood. This is the period of life when we are in our 20s and 30s.

First, a look at physical development.

If you are in your early 20s, you are enjoying your physiological peak. You may have more energy, endurance, and reproductive ability than at any other time in your life. Enjoy! In our 30s, we experience a slow, gradual decline in some abilities. One of the first noticeable signs of this is a loss of lung reserve capacity. If you exert yourself, you may notice that it takes longer to reach your normal breathing and heart rate than before. Most of this decline is due to a lack of exercise rather than aging alone, however. Busy lives in early adulthood sometimes means less time for working on physical fitness.

Men may reach their peak of sexual responsiveness in their late teens and early 20s. They can achieve an erection more easily at this period of life. Women may become more sexually responsive as they move through early adulthood. This may be because they become less self-conscious or more confident or comfortable than before.

About 10 to 15 percent of people who are of reproductive age experience infertility. Half of the time this may be due to the male having a low sperm count or not producing enough healthy sperm with enough motility to reach the egg. Half of the time the reason for infertility is because the female doesn't ovulate or has pelvic inflammatory disease or some other blockage in the reproductive tract. About a third of couples conceive eventually without treatment. Treatment helps couples conceive about half of the time.

Most fertility treatment is the use of drugs to stimulate ovulation. Five percent of fertility treatment involves in vitro fertilization where sperm cells fertilize the egg outside the body and the zygote is transferred to the uterus. In vitro fertilization has about a 5 to 30 percent success rate. The more closely the procedure can mimic normal fertilization, the higher the success rate. Gamete intra-fallopian transfer involves transferring sperm and egg into the fallopian tube where conception typically occurs. A small percentage of couples use zygote intra-fallopian transfer in which the fertilized egg is transferred to the fallopian tube to continue its journey to the uterus.

Even though early adulthood is a peak for physiological condition, it's also a time vulnerable to societal risks. Drug abuse peaks between 19 and 22 as people transition into adulthood. Rates fall after these years. However, the use of intoxicants is associated with acquaintance rape and contracting sexually transmitted infections. It also increases the risk of death due to homicide, motor vehicle accidents, and suicide.

Here are some comparisons of violent deaths by sex and ethnic category taken from the National Center for Health Statistics. We can see first that risk is higher for males than for females in all ethnic categories. Homicide rates are particularly high for black males and suicide rates are particularly high for Native American males.

The brain continues to develop during early adulthood. How does thinking change in this period?

Have you ever heard a conversation between a 14 year old and someone in their mid-thirties? If it's a parent and child, you may have heard the 14 year old enthusiastically describe a plan of action while the 35 year old was quick to explain why the plan was unreasonable. This practical, realistic approach is the hallmark of postformal thinking. Postformal thinking is abstract, realistic, and personal. In early adulthood, we become less concerned with what our peers think and experience reveals what is likely to happen. Not just what is possible.

Dialectical thought is another feature of adult thought. While an adolescent may tend to think in either/or categories, the adult may begin to understand that there are strengths and weaknesses in both sides of an argument. Being able to take what is salient from both sides of opposing viewpoints and to synthesize the two into a personalized view is referred to as dialectical thought. Education promotes this when it entails exploring various positions on a topic. In our personal life, dialectical thought may result in greater tolerance of others with the recognition that no one is perfect.

One concern over higher education is its relationship to the workplace. Derek Bok, former president of Harvard University, suggests that colleges and the workplace should be more closely aligned. The workplace needs people who are aware of global

issues, who have effective communicative skills, and who have a sense of integrity or moral reasoning to offer the workplace. Universities and colleges need to address these issues. Higher education has also been criticized for graduating students who do not have critical thinking skills or adequate writing skills.

Now we take a look at the social world of early adulthood.

Havighurst provides a list of developmental tasks in early adulthood. These include achieving a sense of independence or learning how to be on one's own, achieving a sense of identity, emotional stability, beginning a career, engaging in intimate relationships, learning how to participate in the community, establishing one's own residence, and perhaps becoming parents. If you are in this age group and you find you days quite busy or even exhausting, it's certainly understandable!

One reason for engaging in such busy demands is because we feel that in the future, all will pay off. Many of our decisions are designed to show benefits later in adulthood. Young adults hope to be taken seriously as mature individuals and therefore may emphasize how old or experienced they are. They may also make decisions in order to earn the respect of others and to be viewed as adults.

Daniel Levinson offered one of the first studies of adult transitions. In the late 1970s, he published his work entitled Seasons of a Man's Life in which he described the transitions men faced as they launched as young adults and moved through midlife. The early 20s was a time of adult transition and making plans for the future. These plans were implemented for the duration of the 20s, but were reevaluated as they approached their 30s. Some revisions might occur during this transition and carried out through a settling down period that followed. At midlife, these men compared what they thought their lives would be like, referred to as the dream, and how it really was. During the midlife transition, further adjustments such as career changes or changes in personal relationships could be made as well.

Erikson views early adulthood as a time of focusing on intimate relationships. Intimacy versus isolation.

Friendships can be one source of intimacy. Teens often have collections of friends of both sexes. But having opposite sexed friends becomes a bit more problematic once an intimate relationship has been established. As a result, males and females tend to have same-sex friendships. It's been suggested that the friendships that males share are focused on information sharing, debate, and problem-solving. But females are more likely to discuss personal problems and relationship issues. Do you think this is true in all cultures?

Cohabitation refers to partners living together in an intimate relationship without being married. It's estimated that there are about 7.5 million cohabiting couples in the United States. This reflects a 10 fold increase in the last 40 years. Of those, just under 800,000 are same-sex couples. In general, cohabiting relationships do not last as long as marriages. Cohabitation is a more permanent relationship in Europe. And with the decrease in remarriage rates and increase in cohabitation rates, the U. S. may become more similar to Europe in this regard. Younger partners tend to have shorter cohabiting relationships. Cohabitation continues to increase in the United States.

Why do people cohabit? Many cohabiting relationships are considered to be a temporary arrangement prior to marriage. These premarital cohabiting couples do intend to marry, but are living together prior to marriage for practical or emotional reasons.
Dating cohabitation does not last very long. This cohabiting relationship is more like a long date where partners continue to spend time together as long as it is enjoyable. The trial marriage pattern is one in which partners try out a marital type of relationship by moving in together. They're not really evaluating a particular partner; rather they are trying out the relationship of marriage. Some couple substitute cohabitation for marriage and have no intentions of marrying. Cohabitation is their preference, perhaps because they've had failed marriages in the past, are philosophically opposed to marriage, or do not want to marry for other practical or financial reasons. These relationships tend to last longer.

Same-sex couples can legally marry in Spain, Canada, Belgium, Argentina, Norway, Iceland, the Netherlands, South Africa, and Denmark.
They can also legally marry in Massachusetts, Connecticut, Iowa, Vermont, New Hampshire, and the District of Columbia. The issues facing same-sex couples tend to be similar to those of heterosexual couples: concerns about money, household chores, leisure time, sex, and children. But they do have to face additional stressors of stigma from others. Same-sex partners tend to have a more equal distribution of power within the relationship than in heterosexual couples. And when couples break up, there is a greater likelihood of still having contact with the ex because of a closer same-sex community of friends.

Let's explore mate selection. Although the age at first marriage has been steadily increasing in the United States, 25 for females and 27 for males, many do still marry while in early adulthood. One way to look at the mate selection process is to think of the marriage market as a place where social currency is exchanged. You bring with you a certain amount of social currency or

qualities that make you a good potential make. And these are weighed against those things that might make you a less than ideal partner. This is taken into account when looking for a partner. Most of us do not want a “good deal” when making the exchange. Rather, we look for a fair exchange. This is because in relationships, the person with the least interest in the relationship has the most power. So if you want an equal distribution of power, you want both parties to need the relationship equally. The majority of marriages are homogamous with respect to social class, race, age, and religion. This similarity of social characteristics is referred to as homogamy. This selection is guided by social rules of endogamy (the expectation that you will marry within certain groups such as race and class), exogamy (the expectation that you will marry outside of other groups such as your sex), and propinquity or nearness. We tend to marry those who are near because those are the people we meet and with whom we socialize.

Let’s explore a few theories of love. Sternberg offers a triangular approach to love. Love has three elements, intimacy or psychological closeness, passion or physical attraction, and commitment or the conscious decision to stay together. Most of the problems people have in love relationships are about either intimacy, “We don’t talk.” passion, “We never hold each other anymore.” or commitment, “I can’t count on my partner to stay with me.”

We can analyze love relationships as having one or more of these elements. Liking is intimacy only. Infatuation is a relationship based on passion alone. Empty love is based solely on commitment. Romantic love includes both intimacy and passion. Companionate love is based on commitment and intimacy. Fatuous love is characterized by passion and commitment, but no intimacy. What do we want? The ideal in the west is consummate love. We want passion, commitment, and intimacy.

John Lee explored types of love or love styles found in literature. You can look at your own style by taking the questionnaire at the end of this lesson.

Pragma is practical love based on sensible qualities. Agape is a selfless love that has the other’s best interest at heart. Mania is possessive and insecure.

Eros is erotic love in which a person feels consumed. Ludus is carefree, nonpossessive, and based on seduction. Storge is based on friendship. What’s your love style?

Another way to look at relationships is to examine the extent to which partners are dependent or independent of one another.
In the A frame relationship, partners lean on one another and there is little room for growth or change.

The H frame relationship finds partners quite independent of one another. Their lives are parallel and there is little connection between the two. The M frame relationship is marked by interdependence. Partners have a close couple connection, but also a sense of self or individuality.

Ira Reiss suggests that love is not stagnant. Rather, it depends on continuous interaction and renewal to be sustained. As a relationship begins, partners find out about one another and their common interests as they establish rapport. This is deepened with mutual sharing of more personal information through self-revelation. The relationship progresses as partners become more dependent on one another in day to day life. Eventually, the partners begin to rely on one another to fulfill their needs. But it doesn’t stop there. For love to continue, partners need to repeat the cycle and continue to establish rapport, engage in self-revelation, and be part of one another’s lives. When partners break up, the wheel begins to turn in the other direction. Partners talk less and gradually become disengaged.

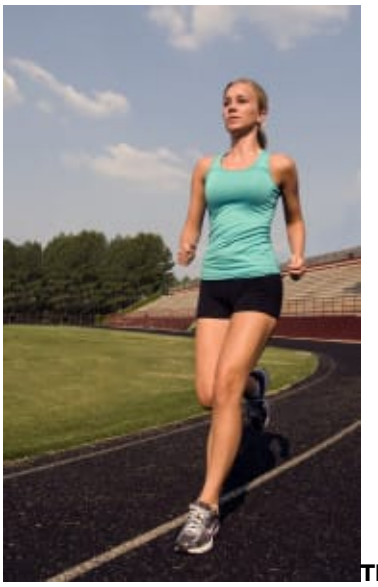
Kirsten looks at the process of disaffection or the psychological experience of breaking up. Before breaking up, couples may engage in “little fictions” or in maintaining little lies about one another in order to help the person feel good about themselves and the relationship. Flaws are seen as endearing. We’re often quite forgiving and positive about our partners in the beginning. And what could be better than having someone love your flaws! But when undergoing the process of disaffection, partners become disenchanted with one another. Or perhaps, only one partner is becoming disappointed. In the beginning phase, this partner may begin to pull away psychologically or start to try to change the partner’s flaws. There may still be optimism about the future of the relationship . . . as long as the partner makes corrections. But in the middle phase, disappointment builds and there’s less optimism about the future of the relationship.
In the end, a sense of hopelessness creeps in and the disappointed partner may begin to plan their departure.

In our next lesson, we will look at middle adulthood and expand upon adult relationships.

This page titled 15.6.1: Lecture- Early Adulthood is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 14.1: Lecture- Early Adulthood by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/atd-hostos-child-development-education.

# 15.6.2: Physical Development

 **The Physiological Peak**: People in their twenties and thirties are considered young adults. If you are in your early twenties, good news-you are probably at the peak of your physiological development. Your reproductive system, motor ability, strength, and lung capacity are operating at their best. Now here is the bad news. These systems will now start a slow, gradual decline so that by the time you reach your mid to late 30s, you will begin to notice signs of aging. This includes a decline in your immune system, your response time, and in your ability to recover quickly from physical exertion. For example, you may have noticed that it takes you quite some time to stop panting after running to class or taking the stairs. But, here is more good news. Getting out of shape is not an inevitable part of aging; it is probably due to the fact that you have become less physically active and have experienced greater stress. How is that good news, you ask? It's good news because it means that there are thing you can do to combat many of these changes. So keep in mind, as we continue to discuss the life span that many of the changes we associate with aging can be turned around if we adopt healthier lifestyles.

**A Healthy, but Risky Time**: Doctor's visits are less frequent in early adulthood than for those in midlife and late adulthood and are necessitated primarily by injury and pregnancy (Berger, 2005). However, among the top five causes of death in young adulthood are non-intentional injury (including motor vehicle accidents), homicide, and suicide (Heron, M. P. & B. L. Smith, 2007). Cancer and heart disease complete the list. Rates of violent death (homicide, suicide, and accidents) are highest among young adult males, and vary among by race and ethnicity. Rates of violent death are higher in the United States than in Canada, Mexico, Japan, and other selected countries. Males are 3 times more likely to die in auto accidents than are females (Frieden, 2011).

**Substance Abuse**: Rates of violent death are influenced by substance abuse which peaks during early adulthood. Illicit drug use peaks between the ages of 19 and 22 and then begins to decline (Berk, 2007). And twenty-five percent of those who smoke cigarettes, a third of those who smoke marijuana, and 70 percent of those who abuse cocaine began using after age 17 (Volkow, 2004). Some young adults use as a way of coping with stressors from family, personal relationships, or concerns over being on one's own. Others use because they have friends who use and in the early 20s, there is still a good deal of pressure to conform. Half of all alcohol consumed in the United States is in the form of binge drinking (Frieden, 2011).

Drugs impair judgment, reduce inhibitions, and alter mood, all of which can lead to dangerous behavior. Reckless driving, violent altercations, and forced sexual encounters are some examples. Binge drinking on college campuses has received considerable media and public attention. The role alcohol plays in predicting acquaintance rape on college campuses is of particular concern. In the majority of cases of rape, the victim knows the rapist. Being intoxicated increases a female's risk of being the victim of date or acquaintance rape (Fisher et als. in Carroll, 2007). And, she is more likely to blame herself and to be blamed by others if she was intoxicated when raped. Males increase their risk of being accused of rape if they are drunk when an incidence occurred (Carroll, 2007).

Drug and alcohol use increase the risk of sexually transmitted infections because people are more likely to engage in risky sexual behavior when under the influence. This includes having sex with someone who has had multiple partners, having anal sex without the use of a condom, having multiple partners, or having sex with someone whose history is unknown. And, as we previously

discussed in our lesson on Beginnings, drugs and alcohol ingested during pregnancy have a teratogenic effect.

## Sexual Responsiveness and Reproduction in Early Adulthood

**Sexual Responsiveness**: Men and women tend to reach their peak of sexual responsiveness at different ages. For men, sexual responsiveness tends to peak in the late teens and early twenties. Sexual arousal can easily occur in response to physical stimulation or fantasizing. Sexual responsiveness begins a slow decline in the late twenties and into the thirties although a man may continue to be sexually active. Through time, a man may require more intense stimulation in order to become aroused. Women often find that they become more sexually responsive throughout their 20s and 30s and may peak in the late 30s or early 40s. This is likely due to greater self-confidence and reduced inhibitions about sexuality.

**Reproduction**: For many couples, early adulthood is the time for having children. However, delaying childbearing until the late 20s or early 30s has become more common in the United States.

Couples delay childbearing for a number of reasons. Women are more likely to attend college and begin careers before starting families. And both men and women are delaying marriage until they are in their late 20s and early 30s.

**Infertility**: Infertility affects about 6.1 million women or 10 percent of the reproductive age population (American Society of Reproductive Medicine [ASRM], 2000-2007). Male factors create infertility in about a third of the cases. For men, the most common cause is a lack of sperm production or low sperm production. Female factors cause infertility in another third of cases. For women, one of the most common causes of infertility is the failure to ovulate. Another cause of infertility is pelvic inflammatory disease, an infection of the female genital tract (Carroll, 2007). Pelvic inflammatory disease is experienced by 1 out of 7 women in the United States and leads to infertility about 20 percent of the time. One of the major causes of pelvic inflammatory disease is Chlamydia trachomatis, the most commonly diagnosed sexually transmitted infection in young women. Another cause of pelvic inflammatory disease is gonorrhea. Both male and female factors contribute to the remainder of cases of infertility.

**Fertility treatment**: The majority of infertility cases (85-90 percent) are treated using fertility drugs to increase ovulation or with surgical procedures to repair the reproductive organs or remove scar tissue from the reproductive tract. In vitro fertilization is used to treat infertility in less than 5 percent of cases. IVF is used when a woman has blocked or deformed fallopian tubes or sometimes when a man has a very low sperm count. This procedure involves removing eggs from the female and fertilizing the eggs outside the woman's body. The fertilized egg is then reinserted in the woman's uterus. The average cost of IVF is over $12,000 and the success rate is between 5 to 30 percent. IVF makes up about 99 percent of artificial reproductive procedures.

Less common procedures include gamete intra-fallopian tube transfer (GIFT) which involves implanting both sperm and ova into the fallopian tube and fertilization is allowed to occur naturally. The success rate of implantation is higher for GIFT than for IVF (Carroll, 2007). Zygote intra-fallopian tube transfer (ZIFT) is another procedure in which sperm and ova are fertilized outside of the woman's body and the fertilized egg or zygote is then implanted in the fallopian tube. This allows the zygote to travel down the fallopian tube and embed in the lining of the uterus naturally. This procedure also has a higher success rate than IVF.

Insurance coverage for infertility is required in fourteen states, but the amount and type of coverage available varies greatly (ASRM, 2000-2007). The majority of couples seeking treatment for infertility pay much of the cost. Consequently, infertility treatment is much more accessible to couples with higher incomes. However, grants and funding sources are available for lower income couples seeking infertility treatment as well.

This page titled 15.6.2: Physical Development is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 14.2: Physical Development by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/atd-hostos-child-development-education.

# 15.6.3: Cognitive Development

## Beyond Formal Operational Thought: Post-formal Thought

In our last lesson, we discussed formal operational thought. The hallmark of this type of thinking is the ability to think abstractly or to consider possibilities and ideas about circumstances never directly experienced. Thinking abstractly is only one characteristic of adult thought, however. If you compare a 15 year old with someone in their late 30s, you would probably find that the later considers not only what is possible, but also what is likely. Why the change? The adult has gained experience and understands why possibilities do not always become realities. This difference in adult and adolescent thought can spark arguments between the generations. Here is an example. A student in her late 30s relayed such an argument she was having with her 14 year old son. The son had saved a considerable amount of money and wanted to buy an old car and store it in the garage until he was old enough to drive. He could sit in it; pretend he was driving, clean it up, and show it to his friends. It sounded like a perfect opportunity. The mother, however, had practical objections. The car could just sit for several years without deteriorating. The son would certainly change his mind about the type of car he wanted before he was old enough to drive and they would be stuck with a car that would not run. Having a car nearby would be too much temptation and the son might decide to sneak it out for a quick run around the block, etc.

Postformal thought is practical, realistic and more individualistic. As a person approaches the late 30s, chances are they make decisions out of necessity or because of prior experience and are less influenced by what others think. Of course, this is particularly true in individualistic cultures such as the United States.

## Dialectical Thought

In addition to moving toward more practical considerations, thinking in early adulthood may also become more flexible and balanced. Abstract ideas that the adolescent believes in firmly may become standards by which the adult evaluates reality. Adolescents tend to think in dichotomies; ideas are true or false; good or bad; right or wrong and there is no middle ground. However, with experience, the adult comes to recognize that there is some right and some wrong in each position, some good or some bad in a policy or approach, some truth and some falsity in a particular idea. This ability to bring together salient aspects of two opposing viewpoints or positions is referred to as dialectical thought and is considered one of the most advanced aspects of postformal thinking (Basseches, 1984). Such thinking is more realistic because very few positions, ideas, situations, or people are completely right or wrong. So, for example, parents who were considered angels or devils by the adolescent eventually become just people with strengths and weaknesses, endearing qualities and faults to the adult.

# Educational Concerns



In 2005, 37 percent of people in the United States between 18 and 24 had some college or an associate degree; about 30 percent of people between 25 and 34 had completed an education at the bachelor's level or higher (U. S. Bureau of the Census, 2005). Of current concern is the relationship between higher education and the workplace. Bok (2005), American educator and Harvard University President, calls for a closer alignment between the goals of educators and the demands of the economy. Companies outsource much of their work, not only to save costs, but to find workers with the skills they need. What is required to do well in today's economy? Colleges and universities, he argues, need to promote global awareness, critical thinking skills, the ability to communicate, moral reasoning, and responsibility in their students (Bok, 2006). Regional accrediting agencies and state organizations provide similar guidelines for educators. Workers need skills in listening, reading, writing, speaking, global awareness, critical thinking, civility, and computer literacy-all skills that enhance success in the workplace. The U. S. Secretary of Education, Margaret Spellings challenges colleges and universities to demonstrate their effectiveness in providing these skills to students and to work toward increasing America's competitiveness in the global economy (U. S. Department of Education, 2006).

A quality education is more than a credential. Being able to communicate and work well with others is crucial for success. There is some evidence to suggest that most workers who lose their jobs do so because of an inability to work with others, not because they do not know how to do their jobs (Cascio, in Berger 2005). Writing, reading, being able to work with a diverse work team, and having the social skills required to be successful in a career and in society are qualities that go beyond merely earning a credential to compete for a job. Employers must select employees who are not only degreed, but who will be successful in the work environment. Hopefully, students gain these skills as they pursue their degrees. Listen to this story about the lack of rigor in higher education and the problems students face as a result: A Lack Of Rigor Leaves Students 'Adrift' In College.

This page titled 15.6.3: Cognitive Development is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 14.3: Cognitive Development by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/atd-hostos-child-development-education.

# 15.6.4: Psychosocial Development

## Gaining Adult Status

Many of the developmental tasks of early adulthood involve becoming part of the adult world and gaining independence. Young adults sometimes complain that they are not treated with respect-especially if they are put in positions of authority over older workers. Consequently, young adults may emphasize their age to gain credibility from those who are even slightly younger. "You're only 23? I'm 27!" a young adult might exclaim. (Note: This kind of statement is much less likely to come from someone in their 40s!).

The focus of early adulthood is often on the future. Many aspects of life are on hold while people go to school, go to work, and prepare for a brighter future. There may be a belief that the hurried life now lived will improve 'as soon as I finish school' or 'as soon as I get promoted' or 'as soon as the children get a little older.' As a result, time may seem to pass rather quickly. The day consists of meeting many demands that these tasks bring. The incentive for working so hard is that it will all result in better future.

## Levinson's Theory

In 1978, Daniel Levinson published a book entitled *The Seasons of a Man's Life* in which he presented a theory of development in adulthood. Levinson's work was based on in-depth interviews with 40 men between the ages of 35-45. He later conducted interviews with women as well (1996). According to Levinson, these adults have an image of the future that motivates them. This image is called "the dream" and for the men interviewed, it was a dream of how their career paths would progress and where they would be at midlife. Women held a "split dream"; an image of the future in both work and family life and a concern with the timing and coordination of the two. Dreams are very motivating. Dreams of a home bring excitement to couples as they look, save, and fantasize about how life will be. Dreams of careers motivate students to continue in school as they fantasize about how much their hard work will pay off. Dreams of playgrounds on a summer day inspire would be parents. A dream is perfect and retains that perfection as long as it remains in the future. But as the realization of it moves closer, it may or may not measure up to its image. If it does, all is well. But if it does not, the image must be replaced or modified. And so, in adulthood, plans are made, efforts follow, and plans are reevaluated. This creating and recreating characterizes Levinson's theory.

Levinson's stages are presented below (Levinson, 1978). He suggests that period of transition last about 5 years and periods of "settling down" last about 7 years. The ages presented below are based on life in the middle class about 30 years ago. Think about how these ages and transitions might be different today.

- Early adult transition (17-22): Leaving home, leaving family; making first choices about career and education
- Entering the adult world (22-28): Committing to an occupation, defining goals, finding intimate relationships
- Age 30 transition (28-33): Reevaluating those choices and perhaps making modifications or changing one's attitude toward love and work
- Settling down (33 to 40): Reinvesting in work and family commitments; becoming involved in the community
- Midlife transition (40-45): Reevaluating previous commitments; making dramatic changes if necessary; giving expression to previously ignored talents or aspirations; feeling more of a sense of urgency about life and its meaning
- Entering middle adulthood (45-50): Committing to new choices made and placing one's energies into these commitments

Adulthood, then, is a period of building and rebuilding one's life. Many of the decisions that are made in early adulthood are made before a person has had enough experience to really understand the consequences of such decisions. And, perhaps, many of these initial decisions are made with one goal in mind-to be seen as an adult. As a result, early decisions may be driven more by the expectations of others. For example, imagine someone who chose a career path based on other's advice but now find that the job is not what was expected. The age 30 transition may involve recommitting to the same job, not because it's stimulating, but because it pays well. Settling down may involve settling down with a new set of expectations for that job. As the adult gains status, he or she may be freer to make more independent choices. And sometimes these are very different from those previously made. The midlife transition differs from the age 30 transition in that the person is more aware of how much time has gone by and how much time is left. This brings a sense of urgency and impatience about making changes. The future focus of early adulthood gives way to an emphasis on the present in midlife. (We will explore this in our next lesson.) Overall, Levinson calls our attention to the dynamic nature of adulthood.

## Exercise

How well do you think Levinson's theory translates culturally? Do you think that personal desire and a concern with reconciling dreams with the realities of work and family is equally important in all cultures? Do you think these considerations are equally important in all social classes, races and ethnic groups? Why or why not? How might this model be modified in today's economy?

# Erikson's Theory

## Intimacy vs. Isolation

Erikson believed that the main task of early adulthood was to establish intimate relationships. Intimate relationships are more difficult if one is still struggling with identity. Achieving a sense of identity is a life-long process, but there are periods of identity crisis and stability. And having some sense of identify is essential for intimate relationships. In early adulthood, intimacy (or emotional or psychological closeness) comes from friendships and mates.

## Friendships as a source of intimacy

In our twenties, intimacy needs may be met in friendships rather than with partners. This is especially true in the United States today as many young adults postpone making long-term commitments to partners either in marriage or in cohabitation. The kinds of friendships shared by women tend to differ from those shared by men (Tannen, 1990). Friendships between men are more likely to involve sharing information, providing solutions, or focusing on activities rather than discussion problems or emotions. Men tend to discuss opinions or factual information or spend time together in an activity of mutual interest. Friendships between women are more likely to focus on sharing weaknesses, emotions, or problems. Women talk about difficulties they are having in other relationships and express their sadness, frustrations, and joys. These differences in approaches lead to problems when men and women come together. She may want to vent about a problem she is having; he may want to provide a solution and move on to some activity. But when he offers a solution, she thinks he does not care!

Friendships between men and women become more difficult because of the unspoken question about whether the friendships will lead to a romantic involvement. It may be acceptable to have opposite-sex friends as an adolescent, but once a person begins dating or marries; such friendships can be considered threatening. Consequently, friendships may diminish once a person has a partner or single friends may be replaced with couple friends.

# Partners as a source of intimacy: Dating, Cohabitation, and Mate Selection

### Dating

In general, traditional dating among teens and those in their early twenties has been replaced with more varied and flexible ways of getting together. The Friday night date with dinner and a movie that may still be enjoyed by those in their 30s gives way to less formal, more spontaneous meetings that may include several couples or a group of friends. Two people may get to know each other and go somewhere alone. How would you describe a "typical" date? Who calls? Who pays? Who decides where to go? What is the purpose of the date? In general, greater planning is required for people who have additional family and work responsibilities. Teens may simply have to negotiate getting out of the house and carving out time to be with friends.

### Cohabitation or Living Together

How prevalent is cohabitation? There are over 5 million heterosexual cohabiting couples in the United States and, an additional 594,000 same-sex couples share households (U. S. Census Bureau, 2006). In 2000, 9 percent of women and 12 percent of men were in cohabiting relationships (Bumpass in Casper & Bianchi, 2002). This number reflects only those couples who were together when census data were collected, however. The number of cohabiting couples in the United States today is over 10 times higher than it was in 1960.

Similar increases have also occurred in other industrialized countries. For example, rates are high in Great Britain, Australia, Sweden, Denmark, and Finland. In fact, more children in Sweden are born to cohabiting couples than to married couples. The lowest rates of cohabitation are in Ireland, Italy, and Japan (Benokraitis, 2005).

## How long do cohabiting relationships last?

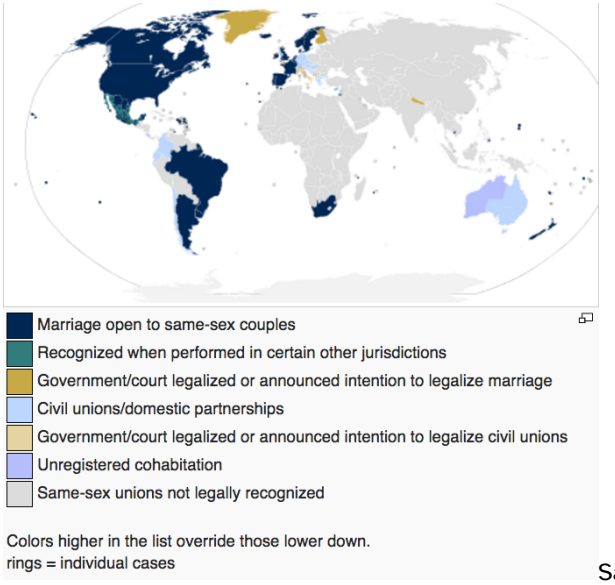
Cohabitation tends to last longer in European countries than in the United States. Half of cohabiting relationships in the U. S. end within a year; only 10 percent last more than 5 years. These short-term cohabiting relationships are more characteristics of people in their early 20s. Many of these couples eventually marry. Those who cohabit more than five years tend to be older and more committed to the relationship. Cohabitation may be preferable to marriage for a number of reasons. For partners over 65, cohabitation is preferable to marriage for practical reasons. For many of them, marriage would result in a loss of Social Security benefits and consequently is not an option. Others may believe that their relationship is more satisfying because they are not bound by marriage. Consider this explanation from a 62-year old woman who was previously in a long-term, dissatisfying marriage. She and her partner live in New York but spend winters in South Texas at a travel park near the beach. “There are about 20 other couples in this park and we are the only ones who aren’t married. They look at us and say, ‘I wish we were so in love’. I don’t want to be like them.” (Author’s files.) Or another couple who have been happily cohabiting for over 12 years. Both had previously been in bad marriages that began as long-term, friendly, and satisfying relationships. But after marriage, these relationships became troubled marriages. These happily cohabiting partners stated that they believe that there is something about marriage that “ruins a friendship”.

The majority of people who cohabit are between the ages of 25-44. Only about 20 percent of those who cohabit are under age 24. Cohabitation among younger adults tends to be short-lived. Relationships between older adults tend to last longer.

## Why do people cohabit?

People cohabit for a variety of reasons. The largest number of couples in the United States engages in premarital cohabitation. These couples are testing the relationship before deciding to marry. About half of these couples eventually get married. The second most common type of cohabitation is dating cohabitation. These partnerships are entered into for fun or convenience and involve less commitment than premarital cohabitation. About half of these partners break up and about one-third eventually marry. Trial marriage is a type of cohabitation in which partners are trying to see what it might be like to be married. They are not testing the other person as a potential mate, necessarily; rather, they are trying to find out how being married might feel and what kinds of adjustments they might have to make. Over half of these couples split up. In the substitute marriage, partners are committed to one another and are not necessarily seeking marriage. Forty percent of these couples continue to cohabit after 5 to 7 years (Bianchi & Casper, 2000). Certainly, there are other reasons people cohabit. Some cohabit out of a feeling of insecurity or to gain freedom from someone else (Ridley, C. Peterman, D. & Avery, A., 1978). And many cohabit because they cannot legally marry.

## Same-Sex Couples




Same sex marriage is legal in 21 countries, including the United States. Many other countries either recognize same-sex couples for the purpose of immigration, grant rights for domestic partnerships, or grant common law marriage status to same-sex couples.



Photo Courtesy Salvor Gissurardottir

Same sex couples struggle with concerns such as the division of household tasks, finances, sex, and friendships as do heterosexual couples. One difference between same sex and heterosexual couples, however, is that same sex couples have to live with the added stress that comes from social disapproval and discrimination. And continued contact with an ex-partner may be more likely among homosexuals and bisexuals because of closeness of the circle of friends and acquaintances.

## Mate-Selection

Contemporary young adults in the United States are waiting longer than before to marry. The median age of first marriage is 25 for women and 27 for men. This reflects a dramatic increase in age of first marriage for women, but the age for men is similar to that found in the late 1800s. Marriage is being postponed for college and starting a family often takes place after a woman has completed her education and begun a career. However, the majority of women will eventually marry (Bianchi & Casper, 2000).

**Social exchange theory** suggests that people try to maximize rewards and minimize costs in social relationships. Each person entering the marriage market comes equipped with assets and liabilities or a certain amount of social currency with which to attract a prospective mate. For men, assets might include earning potential and status while for women, assets might include physical attractiveness and youth.

## A fair exchange

Customers in the market do not look for a 'good deal', however. Rather, most look for a relationship that is mutually beneficial or equitable. One of the reasons for this is because most a relationship in which one partner has far more assets than the other will result if power disparities and a difference in the level of commitment from each partner. According to Waller's principle of least interest, the partner who has the most to lose without the relationship (or is the most dependent on the relationship) will have the least amount of power and is in danger of being exploited. A greater balance of power, then, may add stability to the relationship.

Homogamy and the filter theory of mate selection: Societies specify through both formal and informal rules who is an appropriate mate. Consequently, mate selection is not completely left to the individual. Rules of endogamy indicate within which groups we should marry. For example, many cultures specify that people marry within their own race, social class, age group, or religion. These rules encourage homogamy or marriage between people who share social characteristics. The majority of marriages in the U. S. are homogamous with respect to race, social class, age and to a lesser extent, religion. Rules of exogamy specify the groups into which one is prohibited from marrying. For example, in most of the United States, people are not allowed to marry someone of the same sex.

According to the filter theory of mate selection (Kerckhoff & Davis, 1962), the pool of eligible partners becomes narrower as it passes through filters used to eliminate members of the pool. One such filter is propinquity or geographic proximity. Mate selection in the United States typically involves meeting eligible partners face to face. Those with whom one does not come into contact are simply not contenders. Race and ethnicity is another filter used to eliminate partners. Although interracial dating has increased in recent years and interracial marriage rates are higher than before, interracial marriage still represents only 5.4 percent of all marriages in the United States. Physical appearance is another feature considered when selecting a mate. Age, social class, and religion are also criteria used to narrow the field of eligibles. Thus, the field of eligibles becomes significantly

smaller before those things we are most conscious of such as preferences, values, goals, and interests, are even considered.

## Online Relationships

What impact does the internet have on the pool of eligibles? There are hundreds of websites designed to help people meet. Some of these are geared toward helping people find suitable marriage partners and others focus on less committed involvements. Websites focus on specific populations-big beautiful women, Christian motorcyclists, parents without partners, and people over 50, etc. Theoretically, the pool of eligibles is much larger as a result. However, many who visit sites are not interested in marriage; many are already married. And so if a person is looking for a partner online, the pool must be filtered again to eliminate those who are not seeking long-term relationships. While this is true in the traditional marriage market as well, knowing a person's intentions and determining the sincerity of their responses becomes problematic online.



Photo Courtesy Vikram Kharvi

This young man offers his picture and a description of his professional status and stability. While he's looking for employment, his ad might also help him find an eligible partner online.

Online communication differs from face-to-face interaction in a number of ways. In face-to-face meetings, people have many cues upon which to base their first impressions. A person's looks, voice, mannerisms, dress, scent, and surroundings all provide information in face-to-face meetings. But in computer- mediated meetings, written messages are the only cues provided. Fantasy is used to conjure up images of voice, physical appearance, mannerisms, and so forth. The anonymity of online involvement makes it easier to become intimate without fear of interdependence. It is easier to tell one's secrets because there is little fear of loss. One can find a virtual partner who is warm, accepting, and undemanding (Gwinnell, 1998). And exchanges can be focused more on emotional attraction than physical appearance.

When online, people tend to disclose more intimate details about themselves more quickly. A shy person can open up without worrying about whether or not the partner is frowning or looking away. And someone who has been abused may feel safer in virtual relationships. None of the worries of home or work get in the way of the exchange. The partner can be given one's undivided attention, unlike trying to have a conversation on the phone with a houseful of others or at work between duties. Online exchanges take the place of the corner café as a place to relax, have fun, and be you (Brooks, 1997). However, breaking up or disappearing is also easier. A person can simply not respond, or block e-mail.

But what happens if the partners meet face to face? People often complain that pictures they have been provided of the partner are misleading. And once couples begin to think more seriously about the relationship, the reality of family situations, work demands, goals, timing, values, and money all add new dimensions to the mix. Next we will turn our attention to theories of love.

This page titled 15.6.4: Psychosocial Development is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 14.4: Psychosocial Development by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/atd-hostos-child-development-education.

# 15.6.5: Activity- Love Attitude Scale

## Introduction

So what is your love style? Your authors discussed several types of love in the text, including John Lee's six love types. The Love Attitude Scale, created by Clyde Hendrick and Susan Hendrick, measures your attitudes about each of the styles.

## Directions

For each of the following statements, write the number (1-5) that most nearly describes your attitude or belief. Some of the items refer to a specific love relationship, while others refer to general attitudes and beliefs about love. Whenever possible, answer the questions with your current partner in mind. If you are not currently dating anyone, answer the questions with your most recent partner in mind. If you have never been in love, answer in terms of what you think your responses would most likely be.

For even more insight, make a copy of the questions and have your current partner complete them also. Answer the questions independently of each other and then compare your scores.

After looking at your style, type a paragraph in which you answer the following questions:

- Does these scores surprise you? Why or why not?
- What would you consider the advantages and disadvantages of these styles to be?
- What styles do you think would be most common in adolescence? Early adulthood? Adulthood? Why?

The code for the rating to be used for each statement is as follows:

SD = STRONGLY disagree; D = Disagree; N = Neutral; A = Agree; SA = STRONGLY agree

SD D N A SA

1 2 3 4 5

1. My lover and I were attracted to each other immediately after we first met
2. I try to keep my lover a little uncertain about my commitment to him/her.
3. It is hard to say exactly where friendship ends and love begins.
4. I consider what a person is going to become in life before I commit myself to him/her.
5. When things aren't right with my lover and me, my stomach gets upset.
6. I try to always help my lover through difficult times.
7. My lover and I have the right physical "chemistry" between us.
8. I believe that what my lover doesn't know about me won't hurt him/her.
9. Genuine love first requires caring for a while.
10. I try to plan my life carefully before choosing a lover.
11. When my love affairs break up, I get so depressed.
12. I would rather suffer myself than let my lover suffer.
13. Our lovemaking is very intense and satisfying.
14. I have sometimes had to keep two of my lovers from finding out about each other.
15. I expect to always be friends with the one I love.
16. It is best to love someone with a similar background.
17. Sometimes I get so excited about being in love that I can't sleep.
18. I cannot be happy unless I place my lover's happiness before my own.
19. I feel that my lover and I were meant for each other.
20. I can get over love affairs pretty easily and quickly.
21. The best kind of love grows out of a long friendship.
22. A main consideration in choosing a lover is how he/she reflects on my family.
23. When my lover doesn't pay attention to me, I feel sick all over.
24. I am usually willing to sacrifice my own wishes to let my lover achieve his/hers.

25. My lover and I became emotionally involved rather quickly.
26. My lover would get upset if he/she knew of some of the things I've done with other people.
27. Our friendship merged gradually into love over time.
28. An important factor in choosing a partner is whether or not he/she will be a good parent.
29. When I am in love, I have trouble concentrating.
30. Whatever I own is my lover's to use as he/she chooses.
31. My lover and I really understand each other.
32. When my lover gets too dependent on me, I want to back off a little.
33. Love is really a deep friendship, not a mysterious, mystical emotion.
34. One consideration in choosing a partner is how he/she will reflect on my career.
35. I cannot relax if I suspect that my lover is with someone else.
36. When my lover gets angry with me, I still love Him/her fully and unconditionally.
37. My lover fits my ideal standards of physical beauty/handsomeness.
38. I enjoy playing the "game of love" with a number is different partners.
39. My most satisfying love relationships have developed from good friendships.
40. Before getting very involved with anyone, I try to figure out how compatible his/her hereditary background is with mine in case we ever have children.
41. If my lover ignores me for a while, I do stupid things to get his/her attention back.
42. I would endure all things for the sake of my lover.

**Source**: Hendrick, C and Hendrick, S. (1986). "A theory and method of love." Journal of Personality and Social Psychology, 50, 2, 392-402. Reprinted with permission of the American Psychological Association.

## Love Attitude Scale — Scoring Instructions

The higher the score, the stronger you are on this love style

Scoring:

**Eros**: A dd up all the numbers you circled for items 1, 7, 13, 19, 25, 31, and 37.

Eros Score: _____

**Ludus**: Add up all the numbers you circled for items 2, 8, 14, 20, 26, 32, and 38.

Ludus Score: _____

**Storge**: Add up all the numbers you circled for items 3, 9, 15, 21, 27, 33, and 39.

Storge Score: _____

**Pragma**: Add up all the numbers you circled for items 4, 10, 16, 22, 28, 34, and 40.

Pragma Score: _____

**Mania**: Add up all the numbers you circled for items 5, 11, 17, 23, 29, 35, and 41.

Mania Score: _____

**Agape**: Add up all the numbers you circled for items 6, 12, 18, 24, 30, 36, and 42.

Agape Score: _____

---

This page titled 15.6.5: Activity- Love Attitude Scale is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 14.6: Activity- Love Attitude Scale by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/atd-hostos-child-development-education.

# 15.6.6: Types of Love

## Sternberg's Triangle of Love: Three Components



Sternberg (1988) suggests that there are three main components of love: passion, intimacy, and commitment. Love relationships vary depending on the presence or absence of each of these components. Passion refers to the intense, physical attraction partners feel toward one another. Intimacy involves the ability the share feelings, personal thoughts and psychological closeness with the other. Commitment is the conscious decision to stay together. Passion can be found in the early stages of a relationship, but intimacy takes time to develop because it is based on knowledge of the partner. Once intimacy has been established, partners may resolve to stay in the relationship. Although many would agree that all three components are important to a relationship, many love relationships do not consist of all three. Let's look at other possibilities.

**Liking**: In this relationship, intimacy or knowledge of the other and a sense of closeness is present. Passion and commitment, however, are not. Partners feel free to be themselves and disclose personal information. They may feel that the other person knows them well and can be honest with them and let them know if they think the person is wrong. These partners are friends. However, being told that your partner 'thinks of you as a friend' can be a devastating blow if you are attracted to them and seek a romantic involvement.

**Infatuation**: Perhaps, this is Sternberg's version of "love at first sight". Infatuation consists of an immediate, intense physical attraction to someone. A person who is infatuated finds it hard to think of anything but the other person. Brief encounters are played over and over in one's head; it may be difficult to eat and there may be a rather constant state of arousal. Infatuation is rather short-lived, however, lasting perhaps only a matter of months or as long as a year or so. It tends to be based on chemical attraction and an image of what one thinks the other is all about.

**Fatuous Love**: However, some people who have a strong physical attraction push for commitment early in the relationship. Passion and commitment are aspects of fatuous love. There is no intimacy and the commitment is premature. Partners rarely talk seriously or share their ideas. They focus on their intense physical attraction and yet one, or both, is also talking of making a lasting commitment. Sometimes this is out of a sense of insecurity and a desire to make sure the partner is locked into the relationship.

**Empty Love**: This type of love may be found later in a relationship or in a relationship that was formed to meet needs other than intimacy or passion (money, childrearing, status). Here the partners are committed to staying in the relationship (for the children, because of a religious conviction, or because there are no alternatives perhaps), but do not share ideas or feelings with each other and have no physical attraction for one another.

**Romantic Love**: Intimacy and passion are components of romantic love, but there is no commitment. The partners spend much

time with one another and enjoy their closeness but have not made plans to continue 'no matter what'. This may be true because they are not in a position to make such commitments or because they are looking for passion and closeness and are afraid it will die out if they commit to one another and start to focus on other kinds of obligations.

**Companionate Love**: Intimacy and commitment are the hallmarks of companionate love. Partners love and respect one another and they are committed to staying together. But their physical attraction may have never been strong or may have just died out. This may be interpreted as 'just the way things are' after so much time together or there may be a sense of regret and loss. Nevertheless, partners are good friends committed to one another.

**Consummate Love**: Intimacy, passion, and commitment are present in consummate love. This is often the ideal type of love. The couple shares passion; the spark has not died, and the closeness is there. They feel like best friends as well as lovers and they are committed to staying together.

## Types of Lovers

Lee (1973) offers a theory of love styles or types of lovers derived from an analysis of writings about love through the centuries. As you read these, think about how these styles might become part of the types of love described above.

**Pragma** is a style of love that emphasizes the practical aspects of love. The pragmatic lover considers compatibility and the sensibility of their choice of partners. This lover will be concerned with goals in life, status, family reputation, attitudes about parenting, career issues and other practical concerns.

**Mania** is a style of love characterized by volatility, insecurity, and possessiveness. This lover gets highly upset during arguments or breakups, may have trouble sleeping when in love, and feels emotions very intensely.

**Agape** is an altruistic, selfless love. These partners give of themselves without expecting anything in return. Such a lover places the partner's happiness above their own and is self-sacrificing to benefit the partner.

**Eros** is an erotic style of loving in which the person feels consumed. Physical chemistry and emotional involvement are important to this type of lover.

**Ludus** refers to a style of loving that emphasizes the game of seduction and fun. Such a lover stays away from commitment and often has several love interests at the same time. This lover does not self-disclose and in fact may prefer to keep the other guessing. This lover can end a relationship easily.

**Storge** is a style of love that develops slowly over time. It often begins as a friendship and becomes sexual much later. These partners are likely to remain friends even after the breakup.

## Frames of Relationships

# A H M

Another useful way to consider relationships is to consider the amount of dependency in the relationship. Davidson (1991) suggests three models. The **A-frame** relationship is one in which the partners lean on one another and are highly dependent on the other for survival. If one partner changes, the other is at risk of 'falling over'. This type of relationship cannot easily accommodate change and the partners are vulnerable should change occur. A breakup could be devastating.

The **H-frame** relationship is one in which the partners live parallel lives. They rarely spend time with one another and tend to have separate lives. What time they do share is usually spent meeting obligations rather than sharing intimacies. This independent type of relationship can end without suffering emotionally.

The **M-frame** relationship is interdependent. Partners have a strong sense of connection but also are able to stand alone without suffering devastation. If this relationship ends, partners will be hurt and saddened, but will still be able to stand alone. This ability comes from a strong sense of self-love. Partners can love each other without losing a sense of self. And each individual has self-respect and confidence that enriches the relationship as well as strengthens the self.

We have been looking at love in the context of many kinds of relationships. In our next lesson, we will focus more specifically on

marital relationships. But before we do, we examine the dynamics of falling in and out of love.

## The Process of Love and Breaking Up

Reiss (1960) provides a theory of love as process. Based on the wheel theory of love, love relationships begin with the establishment of rapport.

Rapport involves sharing likes, preferences, establishing some common interests. The next step is to begin to disclose more personal information through self-revelation. When one person begins to open up, the social expectation is that the other will follow and also share more personal information so that each has made some risk and trust is built. Sexual intimacy may also become part of the relationship. Gradually, partners begin to disclose even more about themselves and are met with support and acceptance as they build mutual dependency. With time, partners come to rely on each other for need fulfillment. The wheel must continue in order for love to last. It becomes important for partners to continue to establish rapport by discussing the day's events, communicating about their goals and desires, and showing signs of trust. Partners must continue to rely on one another to have certain needs fulfilled. If the wheel turns backward, partners talk less and less, rely less on one another and are less likely to disclose.

## Process of Disaffection: Breaking Up

When relationships are new, partners tend to give one another the benefit of the doubt and focus on what they like about one another. Flaws and imperfections do not go unnoticed; rather, they are described as endearing qualities. So, for example, the partner who has a very large nose is described as 'distinguished' or as having a 'striking feature.' This is very exhilarating because features that someone may have previously felt self-conscious about are now accepted or even appreciated. However, once partners begin the process of breaking up, these views are abandoned and questionable qualities are once again flaws and imperfections.

Kersten (1990) provides a look at the dynamics of breaking up. Although this work is primarily about divorce, the dynamics of dissolving any long-term relationship are similar. The beginning phase of breaking up involves seeing imperfections in the relationship but remaining hopeful that things will improve. This improvement will require the partner's cooperation because they are primarily at fault. So, as long as the offending partner makes the necessary changes, and of course the offended partner will provide the advice, support, and guidance required, the relationship will continue. (If you are thinking that this is not going to work-you are right. Attempts to change one's partner are usually doomed to failure. Would you want your partner to try to change you?)

Once it becomes clear that efforts to change are futile, the middle phase is entered. This phase is marked by disappointment. Partners talk less and less, make little eye contact, and grow further apart. One may still try to make contact, but the other is clearly disengaged and is considering the benefits and costs of leaving the relationship.

In the end phase, the decision to leave has been made. The specific details are being worked out. Turning a relationship around is very difficult at this point. Trust has diminished, and thoughts have turned elsewhere. This stage is one of hopelessness.

We will explore marriage, divorce, and cohabitation more fully in our next lesson.

This page titled 15.6.6: Types of Love is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 14.5: Types of Love by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/atd-hostos-child-development-education.

# 15.6.7: Work and Personality

## Productivity at Work

 We have already discussed expertise as part of our look at cognitive development in midlife. A person may be at their peak of performance at work during this time. Connections between work units, companies, culture, and operations may be appreciated for the first time and with that, a midlife worker may be able to contribute to an organization in new, more comprehensive ways. Midlife may also be the peak time for earning and spending to meet the demands of launching children or caring for aging parents.

Work and midlife includes many scenarios. Some experience stable careers while others experience lay-offs and find themselves back in school to gain new skills for reemployment. Others experience discrimination due to age or find it difficult to gain employment because of the higher salary demands compared with younger, less experienced workers (Barnett, 1997). Many people over 50 seek meaning as well as income in careers entered into in midlife known as “encore careers” www.encore.org/). Some midlife adults anticipate retirement, while others may be postponing it for financial reasons. Listen to this story of *Encore Careers in the lives of Baby Boomers*.

13)"

A YouTube element has been excluded from this version of the text. You can view it online here: pb.libretexts.org/temp4/?p=234

The workplace today is one in which many people from various walks of life come together. Work schedules are more flexible and varied, and more work independently from home or anywhere there is an internet connection. The midlife worker must be flexible, stay current with technology, and be capable of working within a global community. And the midlife mind seeks meaningful work.

## Personality in Midlife

Does the personality change in midlife? Think about your parents or other adults you’ve known for some time. Did their personalities change when they reached midlife? Or were they pretty much the same? Some theorists maintain that personality becomes more stable as we reach middle adulthood. Other suggest that with age comes the addition of new personality traits-one’s we may not have felt comfortable showing when we were younger.

Midlife is viewed as a time of increased stability especially if compared with early adulthood or adolescence. A person’s tendency toward extraversion, agreeableness, neuroticism, conscientiousness, and openness, the Big Five personality traits, is more consistent (McCrae & Costa, 2003). Midlife adults become more agreeable, but decline in openness and neuroticism.

However, midlife is also viewed as a time of change. Carl Jung believed that our personality actually matures as we get older. A healthy personality is one that is balanced. People suffer tension and anxiety when they fail to express all of their qualities. Jung believed that each of us possess a “shadow side”. For example, those who are typically introverted also have an extroverted side that rarely finds expression unless we are relaxed and uninhibited. Each of us has both a masculine and feminine side but in younger years, we feel societal pressure to give expression only to one. As we get older, we may become freer to express all of our traits as the situation arises. We find gender convergence in older adults. Men become more interested in intimacy and family ties. Women may become more assertive. This gender convergence is also affected by changes in society’s expectations for males and females. With each new generation we find that the roles of men and women are less stereotypic and this allows for change as well.

Again, a sense of mastery and control over one’s life can help midlife adults meet the challenges of this time of life (Lachman and Firth, 2004).

## Conclusion

Midlife is a period of transition. It is also a time of productivity and expertise; a time of putting things together. Midlife is perhaps the least studied period of life. The story of midlife will continue to unfold as more attention is given to it as a part of the lifespan.

This page titled 15.6.7: Work and Personality is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 14.7: Work and Personality by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/atd-hostos-child-development-education.

# 15.7: YOUNG ADULTHOOD

15.7.1: Emerging Adulthood
15.7.2: Health and Physical Development for Young Adults
15.7.3: Gender in Young Adulthood
15.7.4: Sexuality in Young Adulthood
15.7.5: Cognitive Development in Young Adulthood
15.7.6: Work and Education in Young Adulthood
15.7.7: Psychosocial Development in Young Adulthood
15.7.8: Young Adult Lifestyles
15.7.9: Part 4 References

This page titled 15.7: Young Adulthood is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Anne Baird (eCampus Ontario) via source content that was edited to the style and standards of the LibreTexts platform.

- Part 4: Young Adulthood by Anne Baird is licensed CC BY-NC-SA 4.0. Original source: https://ecampusontario.pressbooks.pub/alwaysdeveloping/.

# 15.7.1: Emerging Adulthood



Figure 15.7.1.1: A group of young adults take a selfie

Emerging adulthood is the period between the late teens and early twenties; ages 18-25, although some researchers have included up to age 29 in the definition (Society for the Study of Emerging Adulthood, 2016). Jeffrey Arnett (2000) argues that emerging adulthood is neither adolescence nor is it young adulthood. Individuals in this age period have left behind the relative dependency of childhood and adolescence, but have not yet taken on the responsibilities of adulthood. "Emerging adulthood is a time of life when many different directions remain possible, when little about the future is decided for certain, when the scope of independent exploration of life's possibilities is greater for most people than it will be at any other period of the life course" (Arnett, 2000, p. 469).

Arnett has identified five characteristics of emerging adulthood that distinguishes it from adolescence and young adulthood (Arnett, 2006).

- It is the **age of identity exploration**.
  - In 1950, Erik Erikson proposed that it was during adolescence that humans wrestled with the question of identity. Yet, even Erikson (1968) commented on a trend during the 20th century of a "prolonged adolescence" in industrialized societies. Today, most identity development occurs during the late teens and early twenties rather than adolescence. It is during emerging adulthood that people are exploring their career choices and ideas about intimate relationships, setting the foundation for adulthood.
- Arnett also described this time period as the **age of instability** (Arnett, 2000; Arnett, 2006).
  - Exploration generates uncertainty and instability. Emerging adults change jobs, relationships, and residences more frequently than other age groups.
- This is also the **age of self-focus**.
  - Being self-focused is not the same as being "self- centered." Adolescents are more self-centered than emerging adults. Arnett reports that in his research, he found emerging adults to be very considerate of the feelings of others, especially their parents. They now begin to see their parents as people not just parents, something most adolescents fail to do (Arnett, 2006). Nonetheless, emerging adults focus more on themselves, as they realize that they have few obligations to others and that this is the time where they can do what they want with their life.
- This is also the **age of feeling in-between.**
  - When asked if they feel like adults, more 18 to 25 year-olds answer "yes and no" than do teens or adults over the age of 25 (Arnett, 2001). Most emerging adults have gone through the changes of puberty, are typically no longer in high school, and many have also moved out of their parents' home. Thus, they no longer feel as dependent as they did as teenagers. Yet, they may still be financially dependent on their parents to some degree, and they have not completely attained some of the indicators of adulthood, such as finishing their education, obtaining a good full-time job, being in a committed relationship, or being responsible for others. It is not surprising that Arnett found that 60% of 18 to 25 year-olds felt that in some ways they were adults, but in some ways they were not (Arnett, 2001).
- Emerging adulthood is the **age of possibilities**.
  - It is a time period of optimism as more 18 to 25 year-olds feel that they will someday get to where they want to be in life. Arnett (2000, 2006) suggests that this optimism is because these dreams have yet to be tested. For example, it is easier to believe that you will eventually find your soul mate when you have yet to have had a serious relationship. It may also be a chance to change directions, for those whose lives up to this point have been difficult. The experiences of children

and teens are influenced by the choices and decisions of their parents. If the parents are dysfunctional, there is little a child can do about it. In emerging adulthood, people can move out and move on. They have the chance to transform their lives and move away from unhealthy environments. Even those whose lives were happier and more fulfilling as children, now have the opportunity in emerging adulthood to become independent and make decisions about the direction they would like their life to take.

## Cultural Variations in Emerging Adulthood

The five features proposed in the theory of emerging adulthood originally were based on research involving about 300 Americans between ages 18 and 29 from various ethnic groups, social classes, and geographical regions (Arnett, 2004). To what extent does the theory of emerging adulthood apply to Canada and elsewhere?



Figure 15.7.1.2: OECD member countries

The answer to this question depends greatly on what part of the world is considered. Demographers make a useful distinction between the developing countries that comprise the majority of the world's population and the economically developed countries that are part of the Organization for Economic Co-operation and Development (OECD), including the United States, Canada, Western Europe, Japan, South Korea, Australia, and New Zealand. The current population of OECD countries (also called developed countries) is 1.2 billion, about 18% of the total world population (United Nations Development Programme, 2011). The rest of the human population resides in developing countries, which have much lower median incomes, much lower median educational attainment, and much higher incidence of illness, disease, and early death. Let us consider emerging adulthood in other OECD countries, as little is known about the experiences of 18-25 year-olds in developing countries.

The same demographic changes as described above for the United States have taken place in other OECD countries as well. This is true of participation in postsecondary education, as well as median ages for entering marriage and parenthood (UNdata, 2010). However, there is also substantial variability in how emerging adulthood is experienced across OECD countries. Europe is the region where emerging adulthood is longest and most leisurely. The median ages for entering marriage and parenthood are near 30 in most European countries (Douglass, 2007). Europe today is the location of the most affluent, generous, and egalitarian societies in the world, in fact, in human history (Arnett, 2007). Governments pay for tertiary education, assist young people in finding jobs, and provide generous unemployment benefits for those who cannot find work. In northern Europe, many governments also provide housing support. Emerging adults in European societies make the most of these advantages, gradually making their way to adulthood during their twenties while enjoying travel and leisure with friends.



Figure 15.7.1.3: Is your culture one that promotes romantic relationships for emerging adults? Or does it encourage you to wait until you're older? What would it be like to live in the opposite culture?

The lives of Asian emerging adults in developed countries, such as Japan and South Korea, are in some ways similar to the lives of emerging adults in Europe and in some ways strikingly different. Like European emerging adults, Asian emerging adults tend to enter marriage and parenthood around age 30 (Arnett, 2011). Like European emerging adults, Asian emerging adults in Japan and South Korea enjoy the benefits of living in affluent societies with generous social welfare systems that provide support for them in making the transition to adulthood, including free university education and substantial unemployment benefits.

However, in other ways, the experience of emerging adulthood in Asian OECD countries is markedly different than in Europe. Europe has a long history of individualism, and today's emerging adults carry that legacy with them in their focus on self-development and leisure during emerging adulthood. In contrast, Asian cultures have a shared cultural history emphasizing collectivism and family obligations.

Although Asian cultures have become more individualistic in recent decades, as a consequence of globalization, the legacy of collectivism persists in the lives of emerging adults. They pursue identity explorations and self-development during emerging adulthood, like their American and European counterparts, but within narrower boundaries set by their sense of obligations to others, especially their parents (Phinney & Baldelomar, 2011). For example, in their views of the most important criteria for becoming an adult, emerging adults in the United States and Europe consistently rank financial independence among the most important markers of adulthood. In contrast, emerging adults with an Asian cultural background especially emphasize becoming capable of supporting parents financially as among the most important criteria (Arnett, 2003; Nelson, Badger, & Wu, 2004). This sense of family obligation may curtail their identity explorations in emerging adulthood to some extent, as they pay more heed to their parents' wishes about what they should study, what job they should take, and where they should live than emerging adults do in the West (Rosenberger, 2007).

## When does Adulthood Begin?

According to Rankin and Kenyon (2008), historically the process of becoming an adult was more clearly marked by rites of passage. For many individuals, marriage and becoming a parent were considered entry into adulthood. However, these role transitions are no longer considered as the important markers of adulthood (Arnett, 2001). Economic and social changes have resulted in increase in young adults attending college (Rankin & Kenyon, 2008) and a delay in marriage and having children (Arnett & Taber, 1994; Laursen & Jensen-Campbell, 1999) Consequently, current research has found financial independence and accepting responsibility for oneself to be the most important markers of adulthood in Western culture across age (Arnett, 2001) and ethnic groups (Arnett, 2004).

In looking at college students' perceptions of adulthood, Rankin and Kenyon (2008) found that some students still view rites of passage as important markers. College students who had placed more importance on role transition markers, such as parenthood and marriage, belonged to a fraternity/sorority, were traditionally aged (18–25), belonged to an ethnic minority, were of a traditional marital status; i.e., not cohabitating, or belonged to a religious organization, particularly for men. These findings supported the view that people holding collectivist or more traditional values place more importance on role transitions as markers of adulthood. In contrast, older college students and those cohabitating did not value role transitions as markers of adulthood as strongly.

## Living Arrangements in Emerging and Early Adulthood



Figure 15.7.1.4: young adult roommates

In 2014, for the first time in more than 130 years, adults 18 to 34 were more likely to be living in their parents' home than they were to be living with a spouse or partner in their own household (Fry, 2016). The current trend is that young Canadians and Americans are not choosing to settle down romantically before age 35. Since 1880, living with a romantic partner was the most common living arrangement among young adults. In 1960, 62% of America's 18- to 34-year-olds were living with a spouse or partner in their own household, while only 20% were living with their parents.

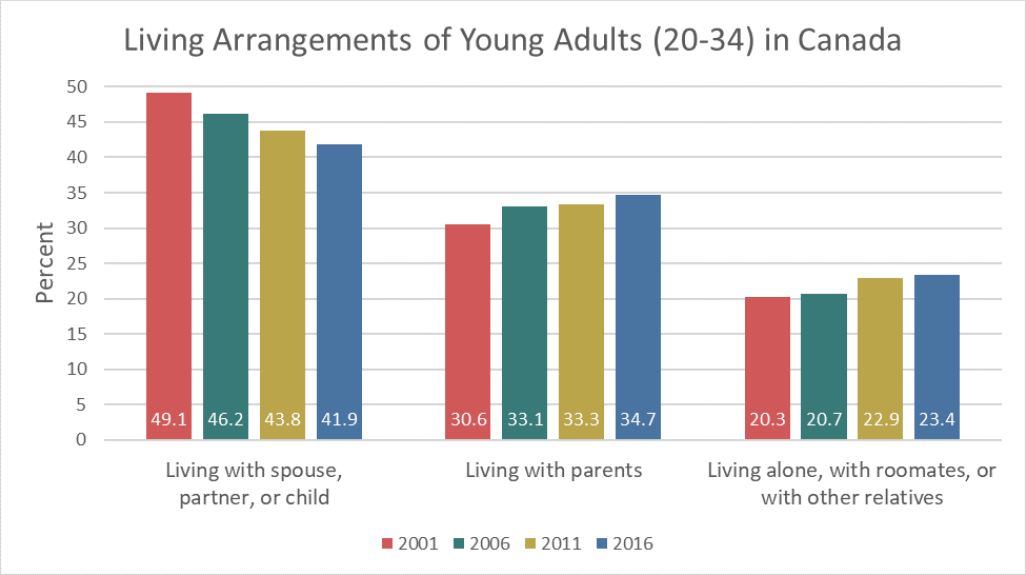



Figure 15.7.1.5: fewer young adults are living with partners or children

By 2014, 31.6% of early adults were living with a spouse or partner in their own household, while 32.1% were living in the home of their parent(s). Another 14% of early adults lived alone, were a single parent, or lived with one or more roommates. The remaining 22% lived in the home of another family member (such as a grandparent, in-law, or sibling), a non-relative, or in group quarters (e.g., college dormitories). Comparing ethnic groups, 36% of black and Hispanic early adults lived at home, while 30% of white young adults lived at home.

Gender differences in living arrangements are also noted in that young men are living with parents at a higher rate than young women (55.7% versus 44.3% in Canada in 2011, according to Statistics Canada). In 2014, 35% of young American men were residing with their parents, while 28% were living with a spouse or partner in their own household. Young women were more likely to be living with a spouse or partner (35%) than living with their parents (29%). Additionally, more young women (16%) than young men (13%) were heading up a household without a spouse or partner, primarily because women are more likely to be single parents living with their children. Lastly, young men (25%) are more likely than young women (19%) to be living in the home of another family member, a non-relative, or in some type of group quarters (Fry, 2016).

**What are some factors that help explain these changes in living arrangements?** First, early adults are postponing marriage or choosing not to marry or cohabitate. Lack of employment and lower wages have especially contributed to males residing with their parents. Men who are employed are less likely to live at home. Wages for young men (adjusting for inflation) have been falling since 1970 and correlate with the rise in young men living with their parents. The recent recession and recovery (2007-present) has also contributed to the increase in early adults living at home. College enrollments increased during the recession, which further increased early adults living at home. However, once early adults possess a college degree, they are more likely to establish their own households (Fry, 2016).

This page titled 15.7.1: Emerging Adulthood is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Anne Baird (eCampus Ontario) via source content that was edited to the style and standards of the LibreTexts platform.

- 4.1: Emerging Adulthood by Anne Baird is licensed CC BY-NC-SA 4.0. Original source: https://ecampusontario.pressbooks.pub/alwaysdeveloping/.

# 15.7.2: Health and Physical Development for Young Adults

## The Physiological Peak



Figure 15.7.2.1: Humans are typically in their peak condition during young adulthood.

People in their mid-twenties to mid-forties are considered to be in early adulthood. By the time we reach early adulthood, our physical maturation is complete, although our height and weight may increase slightly. Those in their early twenties are probably at the peak of their physiological development, including muscle strength, reaction time, sensory abilities, and cardiac functioning. The reproductive system, motor skills, strength, and lung capacity are all operating at their best. Most professional athletes are at the top of their game during this stage, and many women have children in the early-adulthood years (Boundless, 2016).

The aging process actually begins during early adulthood. Around the age of 30, many changes begin to occur in different parts of the body. For example, the lens of the eye starts to stiffen and thicken, resulting in changes in vision (usually affecting the ability to focus on close objects). Sensitivity to sound decreases; this happens twice as quickly for men as for women. Hair can start to thin and become gray around the age of 35, although this may happen earlier for some individuals and later for others. The skin becomes drier and wrinkles start to appear by the end of early adulthood. This includes a decline in response time and the ability to recover quickly from physical exertion. The immune system also becomes less adept at fighting off illness, and reproductive capacity starts to decline (Boundless, 2016).

## Obesity

Although at the peak of physical health, a concern for early adults is the current rate of obesity. Results from the 2015 National Center for Health Statistics indicate that an estimated 70.7% of U.S. adults aged 20 and over are overweight and 37.9% are obese (CDC, 2015b). **Body mass index (BMI)**, *expressed as weight in kilograms divided by height in meters squared (kg/m2)*, is commonly used to classify overweight (BMI 25.0–29.9), obesity (BMI greater than or equal to 30.0), and extreme obesity (BMI greater than or equal to 40.0). The 2015 statistics are an increase from the 2013-2014 statistics that indicated that an estimated 35.1% were obese, and 6.4% extremely obese (Fryar, Carroll, & Ogden, 2014). In 2003-2004, 32% of American adults were identified as obese. The CDC also indicated that one's 20s are the prime time to gain weight as the average person gains one to two pounds per year from early adulthood into middle adulthood. The average man in his 20s weighs around 185 pounds and by his 30s weighs approximately 200 pounds. The average American woman weights 162 pounds in her 20s and 170 pounds in her 30s. (Material in this chapter up to this point taken directly from Lally and Valentine-French (2017)

The American obesity crisis is also reflected in Canada (Statistics Canada, 2018) and worldwide (Wighton, 2016). In 2018, Statistics Canada reported that 2017 20% of those from 18 to 39 were obese and overall 27% of Canadians were obese. In contrast with the U.S. figures the overall rate of obesity in Canada has been relatively unchanging, at least from 2007 to 2017. In 2014, global obesity rates for men were measured at 10.8% and among women 14.9%. This translates to 266 million obese men and 375 million obese women in the world, and more people were identified as obese than underweight. Although obesity is seen throughout the world, more obese men and women live in China and the USA than in any other country. See the following interactive map for more information on adult obesity around the world: https://www.worldobesitydata.org/map/overview-adults#

**Material in above paragraph is directly from Lally & Valentine-French (2017) with the exception of material on Canada obtained by Baird and material for table or figure by O'Neil, McCarthy, & Williams.**

## *Causes of Obesity

According to the Centers for Disease Control and Prevention (CDC) (2016), obesity originates from a complex set of contributing factors, including one's environment, behavior, and genetics. Societal factors include culture, education, food marketing and promotion, the quality of food, and the physical activity environment available. Behaviors leading to obesity include diet, the amount of physical activity, and medication use. Lastly, there does not appear to be a single gene responsible for obesity. Rather, research has identified variants in several genes that may contribute to obesity by increasing hunger and food intake. Another genetic explanation is the mismatch between today's environment and "energy-thrifty genes" that multiplied in the distant past, when food sources were unpredictable. The genes that helped our ancestors survive occasional famines are now being challenged by environments in which food is plentiful all the time. Overall, obesity most likely results from complex interactions among the environment and multiple genes.

## Obesity Health Consequences

Obesity is considered to be one of the leading causes of death in the United States and worldwide. Additionally, the medical care costs of obesity in the United States were estimated to be $147 billion in 2008. According to the CDC (2016) compared to those with a normal or healthy weight, people who are obese are at increased risk for many serious diseases and health conditions including:

- All-causes of death (mortality)
- High blood pressure (Hypertension)
- High LDL cholesterol, low HDL cholesterol, or high levels of triglycerides (Dyslipidemia)
- Type 2 diabetes
- Coronary heart disease
- Stroke
- Gallbladder disease
- Osteoarthritis (a breakdown of cartilage and bone within a joint)
- Sleep apnea and breathing problems
- Some cancers (endometrial, breast, colon, kidney, gallbladder, and liver)
- Low quality of life
- Mental illness such as clinical depression, anxiety, and other mental disorders
- Body pain and difficulty with physical functioning

# A Healthy, But Risky Time

Doctor's visits are less frequent in early adulthood than for those in midlife and late adulthood and are necessitated primarily by injury and pregnancy (Berger, 2005). However, the top five causes of death in emerging and early adulthood are non-intentional injury (including motor vehicle accidents), homicide, and suicide with cancer and heart disease completing the list (Heron, & Smith, 2007). Rates of violent death (homicide, suicide, and accidents) are highest among young adult males, and vary by race and ethnicity. Rates of violent death are higher in the United States than in Canada, Mexico, Japan, and other selected countries. Males are 3 times more likely to die in auto accidents than are females (Frieden, 2011).

*Material from here to here taken directly from Lally & Valentine-French (2017). Figure below is provided by O'Neil, McCarthy, & Williams.

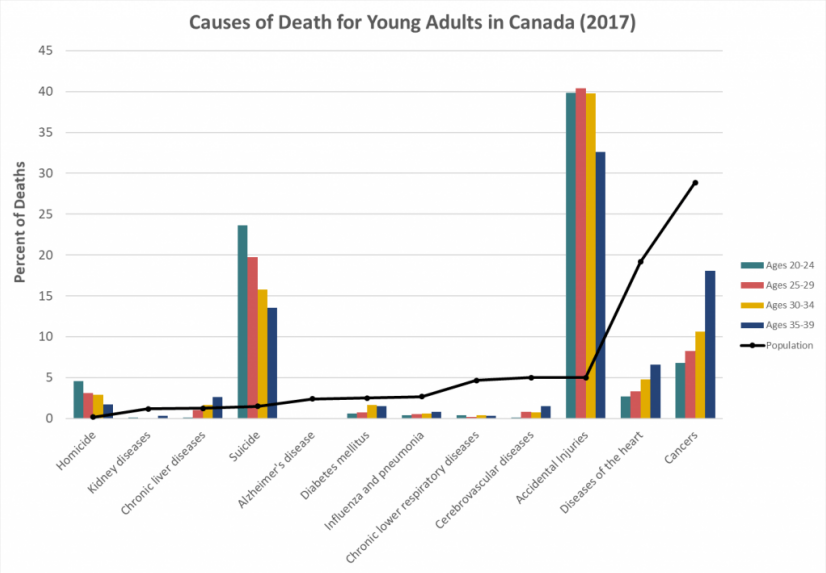



Figure 15.7.2.2: Comparing lead causes of death among young adults versus the general Canadian population.

## *Alcohol Abuse

A significant contributing factor to risky behavior is alcohol. According to the 2014 National Survey on Drug Use and Health (National Institute on Alcohol Abuse and Alcoholism (NIAAA), 2016) 88% of people ages 18 or older reported that they drank alcohol at some point in their lifetime; 71% reported that they drank in the past year; and 57% reported drinking in the past month. Additionally, 6.7% reported that they engaged in heavy drinking in the past month. Heavy drinking is defined as drinking five or more drinks on the same occasion on each of five or more days in the past 30 days. Nearly 88,000 people (approximately 62,000 men and 26,000 women) die from alcohol-related causes annually, making it the fourth leading preventable cause of death in the United States. In 2014, alcohol-impaired driving fatalities accounted for 9,967 deaths (31% of overall driving fatalities).

The NIAAA defines binge drinking when blood alcohol concentration levels reach 0.08 g/dL. This typically occurs after four drinks for women and five drinks for men in approximately two hours. In 2014, 25% of people ages 18 or older reported that they engaged in binge drinking in the past month. According to the NIAAA (2015) “Binge drinking poses serious health and safety risks, including car crashes, drunk-driving arrests, sexual assaults, and injuries. Over the long term, frequent binge drinking can damage the liver and other organs,” (p. 1).

## Alcohol and College Students

Results from the 2014 survey demonstrated a difference between the amount of alcohol consumed by college students and those of the same age who are not in college (NIAAA, 2016). Specifically, 60% of full-time college students’ ages 18–22 drank alcohol in the past month compared with 51.5% of other persons of the same age not in college. In addition, 38% of college students’ ages 18–22 engaged in binge drinking; that is, five or more drinks on one occasion in the past month, compared with 33.5% of other persons of the same age. Lastly, 12% of college students’ (ages 18–22) engaged in heavy drinking; that is, binge drinking on five or more occasions per month, in the past month. This compares with 9.5% of other emerging adults not in college.




Figure 15.7.2.3: College students are at greater risk of binge drinking and suffering associated consequences.

The consequences for college drinking are staggering, and the NIAAA (2016) estimates that each year the following occur:

- 1,825 college students between the ages of 18 and 24 die from alcohol-related unintentional injuries, including motor-vehicle crashes.
- 696,000 students between the ages of 18 and 24 are assaulted by another student who has been drinking.
- Roughly 1 in 5 college students meet the criteria for an Alcohol Use Disorder.
- About 1 in 4 college students report academic consequences from drinking, including missing class, falling behind in class, doing poorly on exams or papers, and receiving lower grades overall. (p. 1)
- 97,000 students between the ages of 18 and 24 report experiencing alcohol-related sexual assault or date rape.

The role alcohol plays in predicting acquaintance rape on college campuses is of particular concern. “Alcohol use in one the strongest predictors of rape and sexual assault on college campuses,” (Carroll, 2016, p. 454). Krebs, Lindquist, Warner, Fisher and Martin (2009) found that over 80% of sexual assaults on college campuses involved alcohol. Being intoxicated increases a female’s risk of being the victim of date or acquaintance rape (Carroll,

2007). Females are more likely to blame themselves and to be blamed by others if they were intoxicated when raped. College students view perpetrators who were drinking as less responsible, and victims who were drinking as more responsible for the assaults (Untied, Orchowski, Mastroleo, & Gidycz, 2012).

**Factors Affecting College Students’ Drinking:** Several factors associated with college life affect a student’s involvement with alcohol (NIAAA, 2015). These include the pervasive availability of alcohol, inconsistent enforcement of underage drinking laws, unstructured time, coping with stressors, and limited interactions with parents and other adults. Due to social pressures to conform and expectations when entering college, the first six weeks of freshman year are an especially susceptible time for students. Additionally, more drinking occurs in colleges with active Greek systems and athletic programs. Alcohol consumption is lowest among students living with their families and commuting, while it is highest among those living in fraternities and sororities.

**College Strategies to Curb Drinking:** Strategies to address college drinking involve the individual-level and campus community as a whole. Identifying at-risk groups, such as first year students, members of fraternities and sororities, and athletes has proven helpful in changing students’ knowledge, attitudes, and behavior regarding alcohol (NIAAA, 2015). Interventions include education and awareness programs, as well as intervention by health professionals. At the college-level, reducing the availability of alcohol has proven effective by decreasing both consumption and negative consequences.

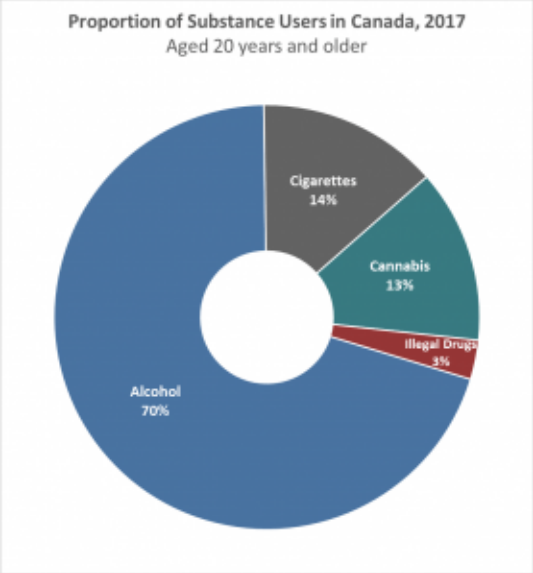



Figure 15.7.2.4: Proportion of adult substance users in Canada

**Non-Alcohol Substance Use:** In the U.S. illicit drug use peaks between the ages of 19 and 22 and then begins to decline. Additionally, 25% of those who smoke cigarettes, 33% of those who smoke marijuana, and 70% of those who abuse cocaine began using after age 17 (Volkow, 2004). Emerging adults (18 to 25) are the largest abusers of prescription opioid pain relievers, anti-anxiety medications, and Attention Deficit Hyperactivity Disorder medication (National Institute on Drug Abuse, 2015). In 2014 more than 1700 emerging adults died from a prescription drug overdose in the U.S. This is an increase of four times since 1999. Additionally, for every death there were 119 emergency room visits.

*Material from here to here taken directly from Lally & Valentine-French. Canadian material in next two paragraphs was curated by Baird and Figure at left was found and prepared by O'Neil, McCarthy, & Williams.

Canadian data (Orpana et al., 2018) show that mortality and disability related to opioid use increased dramatically from 1990 to 2014, while these rates decreased on a global level. In Canada overall effects were greater for men than women and among age groups were greatest for 25 to 29 year-olds. Although these increases in disability and death were less than those in the U.S., the authors note that Canada usually follows U.S. trends in the years following.

The 2017 Canadian Cannabis Survey indicated that 41% of people from 16 to 24 used marijuana at some level during the previous 12 months according to a report in *The Globe and Mail* by Anna Sharratt (Nov. 2, 2018). Dr. Abby Goldstein, a University of Toronto psychology professor noted that recent legalization offered an opportunity for societal decisions protecting students and others from the negative effects of cannabis use.

*Daily marijuana use is at the highest level in three decades in the U.S. (National Institute on Drug Abuse, 2015). For those in college, 2014 data indicate that 6% of college students smoke marijuana daily, while only 2% smoked daily in 1994. For non-college students of the same age, the daily percentage is twice as high (approximately 12%). Additionally, daily cigarette smoking is lower for those in college as only 13% smoked in the past month, while for those not in college it was almost 25%.

Rates of violent death are influenced by substance use which peaks during emerging and early adulthood. Drugs impair judgment, reduce inhibitions, and alter mood, all of which can lead to dangerous behavior. Reckless driving, violent altercations, and forced sexual encounters are some examples. Drug and alcohol use increase the risk of sexually transmitted infections because people are more likely to engage in risky sexual behavior when under the influence. This includes having sex with someone who has had multiple partners, having anal sex without the use of a condom, having multiple partners, or having sex with someone whose history is unknown. Lastly, as previously discussed, drugs and alcohol ingested during pregnancy have a teratogenic effect on the developing embryo and fetus.

*Material from here to here taken directly from Lally & Valentine-French (2017). The rest of the chapter was written by Baird.

# SUMMARY

As we glance back at this section on physical development and health in emerging and young adulthood, we can see again the relevance of the lifespan perspective. The opioid use crisis is a part of early twenty-first century life for those in their twenties, but not for earlier cohorts. It is not as severe in some other places around the world as it is in North America. Clearly societies have a major role in laying the ground for substance use disorders as well as in intervening.

Solving the problems raised by substance use also is best done from a lifespan perspective. We need to retain that idea of plasticity—opioid and other substance use disorders can be treated successfully at any age and need not persist through the rest of the lifespan. Recognizing that development is continuous leads to the idea that prevention efforts should start before the twenties since substance use often starts then as well as the mental health problems that can make people in their teens and twenties vulnerable to substance misuse (Greenbaum, 2019a). Psychologists and others working on innovations to treat pain and opioid use disorder find that a biopsychosocial approach is the most productive, and they suggest that our whole society needs a change in mindset from the idea that you treat pain with medicine to the idea that you treat pain with the whole panorama of approaches that affect the mind-body connection (Greenbaum). Think yoga, Tai Chi, meditation, relaxation therapy, psychoeducation, and counselling.

One way society affects problems for better or worse is the way we talk about each other and the problem, as we have discussed regarding chronological age. Researchers who study stigma and substance use advise us to use “person with an alcohol use disorder,” not “alcoholic;” “negative screen test,” not “clean;” and “medications for alcohol use disorder treatment,” not “medication-assisted treatment” (Greenbaum, 2019b).

Lifespan developmental psychologists in the American Psychological Association have compiled recommendations for maintaining and building resilience across the lifespan in their booklet entitled *Life Plan for the Life Span* (American Psychological Association [APA], 2018). As you probably would predict, they recommend a healthy diet, physical activity habit, and regular sleep. If you think about some of the ways we’ve talked about in which emotions can affect health, then you might predict correctly their recommendation that young adults work on their stress management and emotional regulation skills. Given how fast the health context for adult development changes, as well as our understanding of environmental influences, maybe the following recommendations also won’t surprise you. They advise that young adults should pay close attention to their physicians for information on preventive measures, that they educate themselves about prevention and health, that they develop effective advocacy skills for themselves and loved ones, and that they try to avoid harmful substances and events in the environment (APA, 2018).

This page titled 15.7.2: Health and Physical Development for Young Adults is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Anne Baird (eCampus Ontario) via source content that was edited to the style and standards of the LibreTexts platform.

- 4.2: Health and Physical Development for Young Adults by Anne Baird is licensed CC BY-NC-SA 4.0. Original source: https://ecampusontario.pressbooks.pub/alwaysdeveloping/.

# 15.7.3: Gender in Young Adulthood

**Sex** refers to *physical or physiological differences between males, females, and intersex persons, including both their primary and secondary sex characteristics*. **Gender**, on the other hand, refers to *social or cultural distinctions associated with a given sex*. When babies are born, they are assigned a gender based on their biological sex, male babies are assigned as boys, female babies are assigned as girls, and intersex babies are usually relegated into one category or another. Scholars generally regard gender as a social construct, *meaning that it does not exist naturally, but is instead a concept that is created by cultural and societal norms*. From birth, children are socialized to conform to certain gender roles based on their biological sex and the gender to which they are assigned.

Since the term sex refers to biological or physical distinctions, characteristics of sex will not vary significantly between different human societies. For example, persons of the female sex, in general, regardless of culture, will eventually menstruate and develop breasts that can lactate. Characteristics of gender, on the other hand, may vary greatly between different societies. For example, in the current majority Canadian and American cultures, it is considered feminine to wear a dress or skirt. However, in many Middle Eastern, Asian, and African cultures, dresses or skirts (often referred to as sarongs, robes, or gowns) can be considered masculine. Similarly, the kilt worn by a Scottish male does not make him appear feminine in his culture.



Figure 15.7.3.1: The Transgender Pride flag was designed by Monica Helms in 2000 to represent the traditional boy and girl colours with white representing transition.

**Gender identity** *is a person's sense of self as a member of a particular gender*. Individuals who identify with a role that corresponds to the sex assigned to them at birth (for example, they were born with male sex characteristics, were assigned as a boy, and identify today as a boy or man) are **cisgender**. Those who identify with a role that is different from their biological sex (for example, they were born with male sex characteristics, were assigned as a boy, but identify today as a girl, woman, or some other gender altogether) are often referred to as **transgender**.

The term transgender encompasses a wide range of possible identities, including agender, genderfluid, genderqueer (signifying gender experiences that do not fit into a binary concept), androgynous, bigender, pangender, ambigender, non-gendered, and intergender, **Two-spirit** is a *modern umbrella term* used by some indigenous North Americans to describe *gender-variant individuals in their communities*.

Transgender is *independent* of sexual orientation; transgender people may identify as heterosexual, homosexual, bisexual, pansexual, polysexual, asexual, or any other kind of sexuality, just like cisgender people do. It is difficult to determine the prevalence of transgender people in society; however, it is estimated that 700,000 individuals in the United States (0.3%) are transgender (Gates, 2011).

Some transgender individuals may alter their bodies through medical interventions, such as surgery and hormonal therapy, so that their physical being is better aligned with gender identity. Not all transgender individuals choose to alter their bodies or physically transition. Many will maintain their original anatomy, but may present themselves to society as a different gender, often by adopting the dress, hairstyle, mannerisms, or other characteristics typically assigned to a certain gender. It is important to note that people who cross-dress, or wear clothing that is traditionally assigned to the opposite gender, such as transvestites, drag kings, and drag queens, do not necessarily identify as transgender (though some do). People often confuse the term **transvestite**, which is the *practice of dressing and acting in a style or manner traditionally associated with another sex*, with transgender. Cross-dressing is typically a form of self-expression, entertainment, or personal style, and not necessarily an expression about

one's gender identity.

## Transgender Discrimination

Transgender people are much more likely to experience harassment, bullying, and violence based on their gender identity; they also experience much higher rates of discrimination in housing, employment, healthcare, and education (National Center for Transgender Equality, 2015). Transgender individuals of color face additional financial, social, and interpersonal challenges, in comparison to the transgender community as a whole, as a result of structural racism. Specifically, black transgender people reported the highest level of discrimination among all transgender individuals of color. As members of several intersecting minority groups, transgender people of color, and transgender women of color in particular, are especially vulnerable to employment discrimination, poor health outcomes, harassment, and violence. Consequently, they face even greater obstacles than white transgender individuals and cisgender members of their own race.

## Gender Roles

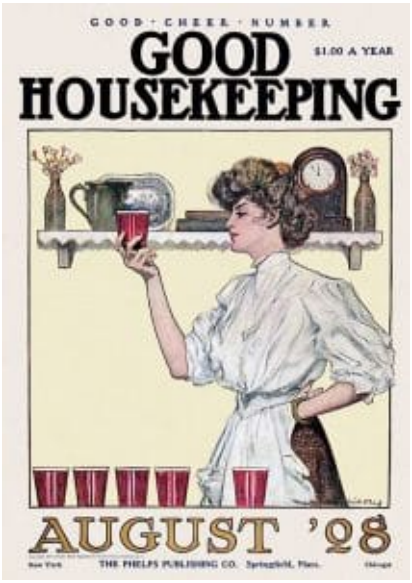



Figure 15.7.3.2: Cover of "Good Housekeeping" magazine in 1908, promoting the expected gender role for women.

As we grow, we learn how to behave from those around us. In this socialization process, children are introduced to certain roles that are typically linked to their biological sex. The term **gender role** *refers to society's concept of how men and women are expected to act and behave*. Gender roles are based on norms, or standards, created by society. In American culture, masculine roles have traditionally been associated with strength, aggression, and dominance, while feminine roles have traditionally been associated with passivity, nurturing, and subordination.

The drive to adhere to masculine and feminine gender roles continues throughout life. Men tend to outnumber women in professions such as law enforcement, the military, and politics; women tend to outnumber men in care-related occupations such as childcare, healthcare, and social work. These occupational roles are examples of typical American male and female behavior, derived not from biology or genetics, but from our culture's traditions. Adherence to these roles demonstrates fulfillment of social expectations, but not necessarily personal preference (Diamond, 2002).

Text in this chapter taken directly from Lally & Valentine-French (2017). Figures were curated by O'Neil, McCarthy, & Williams.

---

This page titled 15.7.3: Gender in Young Adulthood is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Anne Baird (eCampus Ontario) via source content that was edited to the style and standards of the LibreTexts platform.

- 4.3: Gender in Young Adulthood by Anne Baird is licensed CC BY-NC-SA 4.0. Original source: https://ecampusontario.pressbooks.pub/alwaysdeveloping/.

# 15.7.4: Sexuality in Young Adulthood



Figure 15.7.4.1: Sexuality manifests itself in many ways

**Human sexuality***refers to people's sexual interest in and attraction to others, as well as their capacity to have erotic experiences and responses.* Sexuality may be experienced and expressed in a variety of ways, including thoughts, fantasies, desires, beliefs, attitudes, values, behaviors, practices, roles, and relationships. These may manifest themselves in biological, physical, emotional, social, or spiritual aspects. The biological and physical aspects of sexuality largely concern the human reproductive functions, including the human sexual-response cycle and the basic biological drive that exists in all species. Emotional aspects of sexuality include bonds between individuals that are expressed through profound feelings or physical manifestations of love, trust, and care. Social aspects deal with the effects of human society on one's sexuality, while spirituality concerns an individual's spiritual connection with others through sexuality. Sexuality also impacts, and is impacted by cultural, political, legal, philosophical, moral, ethical, and religious aspects of life.

## The Sexual Response Cycle

*Sexual motivation, often referred to as* **libido**, *is a person's overall sexual drive or desire for sexual activity.* This motivation is determined by biological, psychological, and social factors. In most mammalian species, sex hormones control the ability to engage in sexual behaviors. However, sex hormones do not directly regulate the ability to copulate in primates (including humans); rather, they are only one influence on the motivation to engage in sexual behaviors. Social factors, such as work and family also have an impact, as do internal psychological factors like personality and stress. Sex drive may also be affected by hormones, medical conditions, medications, lifestyle stress, pregnancy, and relationship issues.

The **sexual response cycle***is a model that describes the physiological responses that take place during sexual activity.* According to Kinsey, Pomeroy, and Martin (1948), the cycle consists of four phases: excitement, plateau, orgasm, and resolution. The **excitement phase** is the phase in which the *intrinsic (inner) motivation to pursue sex arises.* The **plateau phase** is the period of *sexual excitement with increased heart rate and circulation* that sets the stage for orgasm. **Orgasm** is the *release of tension*, and the **resolution period** is the *unaroused state* before the cycle begins again.

## The Brain and Sex

The brain is the structure that translates the nerve impulses from the skin into pleasurable sensations. It controls nerves and muscles used during sexual behavior. The brain regulates the release of hormones, which are believed to be the physiological origin of sexual desire. The cerebral cortex, which is the outer layer of the brain that allows for thinking and reasoning, is believed to be the origin of sexual thoughts and fantasies. Beneath the cortex is the limbic system, which consists of the amygdala, hippocampus, cingulate gyrus, and septal area. These structures are where emotions and feelings are believed to originate, and

are important for sexual behavior.

The **hypothalamus** is the most important part of the brain for sexual functioning. *This is the small area at the base of the brain consisting of several groups of nerve-cell bodies that receives input from the limbic system.* Studies with lab animals have shown that destruction of certain areas of the hypothalamus causes complete elimination of sexual behavior. One of the reasons for the importance of the hypothalamus is that it controls the pituitary gland, which secretes hormones that control the other glands of the body.

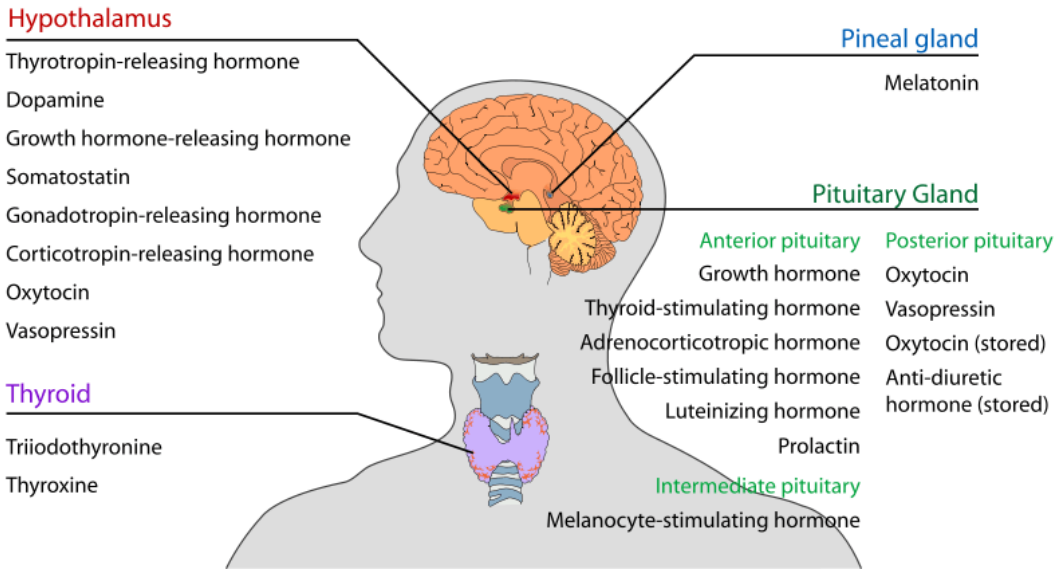



Figure 15.7.4.2: Sex and the Brain

## Hormones

Several important sexual hormones are secreted by the pituitary gland. **Oxytocin,** also known as the hormone of love*, is released during sexual intercourse when an orgasm is achieved*. Oxytocin is also released in females when they give birth or are breast feeding; it is believed that oxytocin is involved with maintaining close relationships. Both prolactin and oxytocin stimulate milk production in females. **Follicle-stimulating hormone** (FSH) *is responsible for ovulation in females by triggering egg maturity; it also stimulates sperm production in males.* **Luteinizing hormone** (LH) *triggers the release of a mature egg in females during the process of ovulation.*

In males, testosterone appears to be a major contributing factor to sexual motivation. **Vasopressin** *is involved in the male arousal phase* , and the increase of vasopressin during erectile response may be directly associated with increased motivation to engage in sexual behavior.

The relationship between hormones and female sexual motivation is not as well understood, largely due to the overemphasis on male sexuality in Western research. **Estrogen** and **progesterone** typically *regulate motivation to engage in sexual behavior for females, with estrogen increasing motivation and progesterone decreasing it.* The levels of these hormones rise and fall throughout a woman's menstrual cycle. Research suggests that testosterone, oxytocin, and vasopressin are also implicated in female sexual motivation in similar ways as they are in males, but more research is needed to understand these relationships.

# Sexual Responsiveness Peak

Men and women tend to reach their peak of sexual responsiveness at different ages. For men, sexual responsiveness tends to peak in the late teens and early twenties. Sexual arousal can easily occur in response to physical stimulation or fantasizing. Sexual responsiveness begins a slow decline in the late twenties and into the thirties, although a man may continue to be sexually active. Through time, a man may require more intense stimulation in order to become aroused. Women often find that they become more sexually responsive throughout their 20s and 30s and may peak in the late 30s or early 40s. This is likely due to greater self-confidence and reduced inhibitions about sexuality.

# Sexually Transmitted Infections

**Sexually transmitted infections (STIs)**, also referred to as sexually transmitted diseases (STDs) or venereal diseases (VDs), *are illnesses that have a significant probability of transmission by means of sexual behavior, including vaginal intercourse, anal sex, and oral sex.* Some STIs can also be contracted by sharing intravenous drug needles with an infected person, as well as through childbirth or breastfeeding.

Common STIs include:

- chlamydia
- herpes (HSV-1 and HSV-2)
- human papillomavirus (HPV)
- gonorrhea
- syphilis
- trichomoniasis
- HIV (human immunodeficiency virus) and AIDS (acquired immunodeficiency syndrome)

According to the Centers for Disease Control and Prevention (CDC) (2014), there was an increase in the three most common types of STDs in 2014. These include 1.4 million cases of chlamydia, 350,000 cases of gonorrhea, and 20,000 cases of syphilis. Those most affected by STDS include those younger, gay/bisexual males, and females. The most effective way to prevent transmission of STIs is to practice safe sex and avoid direct contact of skin or fluids which can lead to transfer with an infected partner. Proper use of safe-sex supplies (such as male condoms, female condoms, gloves, or dental dams) reduces contact and risk and can be effective in limiting exposure; however, some disease transmission may occur even with these barriers.

Material in this chapter up to here taken directly from Lally & Valentine-French (2017). The following two paragraphs were written by Baird. Photographs in the remaining part of this chapter were gathered by O'Neil, McCarthy, & Williams.

The same three STIs are the most common in Canada. A CBC News (2019) article noted that chlamydia and gonorrhea rates across Canada soared in Canada in 2017, the last year for which statistics were available. Although the nation-wide rate of syphilis infection dipped slightly in 2017, it had risen steeply over the past 10 years (178%) with increases of 49% and 81% for gonorrhea.

These increases and concerns also apply worldwide according to the World Health Organization (WHO, 2019, especially to populations with low SES, sex workers, men who have sex with women. There is particular concern about under-utilization of condoms, especially female condoms, and increasing problems with antibiotic-resistant strains of gonorrhea. Untreated STIs can cause lifelong severe problems, such as infertility. In other words, the rise in STIs is a cohort-specific adult development concern. Prevention and treatment methods for STIs are topics adults should follow actively throughout their lifespan.

# Societal Views on Sexuality

Society's views on sexuality are influenced by everything from religion to philosophy, and they have changed throughout history and are continuously evolving. Historically, religion has been the greatest influence on sexual behavior in the United States; however, in more recent years, peers and the media have emerged as two of the strongest influences, particularly among American teens (Potard, Courtois, & Rusch, 2008).

Mass media in the form of television, magazines, movies, and music continues to shape what is deemed appropriate or normal sexuality, targeting everything from body image to products meant to enhance sex appeal. Media serves to perpetuate a number of social scripts about sexual relationships and the sexual roles of men and women, many of which have been shown to have both empowering and problematic effects on people's (especially women's) developing sexual identities and sexual attitudes.

## Cultural Differences

In the West, premarital sex is normative by the late teens, more than a decade before most people enter marriage. In the United States and Canada, and in northern and eastern Europe, cohabitation is also normative; most people have at least one cohabiting partnership before marriage. In southern Europe, cohabiting is still taboo, but premarital sex is tolerated in emerging adulthood. In contrast, both premarital sex and cohabitation remain rare and forbidden throughout Asia. Even dating is discouraged until the late twenties, when it would be a prelude to a serious relationship leading to marriage. In cross-cultural comparisons, about three fourths of emerging adults in the United States and Europe report having had premarital sexual relations by age 20, versus less

than one fifth in Japan and South Korea (Hatfield & Rapson, 2006).

# Sexual Orientation

A person's **sexual orientation** is their *emotional and sexual attraction to a particular sex or gender*. It is a personal quality that inclines people to feel romantic or sexual attraction (or a combination of these) to persons of a given sex or gender. According to the American Psychological Association (APA) (2016), sexual orientation also refers to a person's sense of identity based on those attractions, related behaviors, and membership in a community of others who share those attractions.

## Sexual Orientation on a Continuum



Figure 15.7.4.3: Two men in a gay relationship.

Sexuality researcher Alfred Kinsey was among the first to conceptualize sexuality as a continuum rather than a strict dichotomy of gay or straight. To classify this continuum of heterosexuality and homosexuality, Kinsey et al. (1948) created a seven-point rating scale that ranged from exclusively heterosexual to exclusively homosexual. Research done over several decades has supported this idea that sexual orientation ranges along a continuum, from exclusive attraction to the opposite sex/gender to exclusive attraction to the same sex/gender (Carroll, 2016).



Figure 15.7.4.4: Two women in a lesbian relationship.

However, sexual orientation now can be defined in many ways. **Heterosexuality**, which is often referred to as being straight, *is attraction to individuals of the opposite sex/gender*, while **homosexuality**, being gay or lesbian, *is attraction to individuals of one's own sex/gender*. **Bisexuality** was a term traditionally used to refer to *attraction to individuals of either male or female sex,* but it has recently been used in *nonbinary models of sex and gender* (i.e., models that do not assume there are only two sexes or two genders) to refer to attraction to *any* sex or gender. Alternative terms such as **pansexuality**and **polysexuality**have also been

developed, referring to *attraction to all sexes/genders* and *attraction to multiple sexes/genders*, respectively (Carroll, 2016).

**Asexuality** *refers to having no sexual attraction to any sex/gender* . According to Bogaert (2015) about one percent of the population is asexual. Being asexual is not due to any physical problems, and the lack of interest in sex does not cause the individual any distress. Asexuality is being researched as a distinct sexual orientation.

## Development of Sexual Orientation

According to current scientific understanding, individuals are usually aware of their sexual orientation between middle childhood and early adolescence. However, this is not always the case, and some do not become aware of their sexual orientation until much later in life. It is not necessary to participate in sexual activity to be aware of these emotional, romantic, and physical attractions; people can be celibate and still recognize their sexual orientation. Some researchers argue that sexual orientation is not static and inborn, but is instead fluid and changeable throughout the lifespan.

There is no scientific consensus regarding the exact reasons why an individual holds a particular sexual orientation. Research has examined possible biological, developmental, social, and cultural influences on sexual orientation, but there has been no evidence that links sexual orientation to one factor (APA, 2016). Biological explanations, that include genetics, hormones, and birth order, will be explored further.

Using both twin and familial studies, heredity provides one biological explanation for sexual orientation. Bailey and Pillard (1991) studied pairs of male twins and found that the concordance rate for identical twins was 52%, while the rate for fraternal twins was only 22%. Bailey, Pillard, Neale, and Agyei (1993) studied female twins and found a similar difference with a concordance rate of 48% for identical twins and 16% for fraternal twins. Schwartz, Kim, Kolundzija, Rieger, and Sanders (2010) found that gay men had more homosexual male relatives than heterosexual men, and sisters of gay men were more likely to be lesbians than sisters of straight men.

Excess or deficient exposure to hormones during prenatal development has also been theorized as an explanation for sexual orientation. One-third of females exposed to abnormal amounts of prenatal androgens, a condition called congenital adrenal hyperplasia (CAH), identify as bisexual or lesbian (Cohen-Bendahan, van de Beek, & Berenbaum, 2005). In contrast, too little exposure to prenatal androgens may affect male sexual orientation by not masculinizing the male brain (Carlson, 2011).

Another explanation attempts to explain why gay men tend to have a greater number of older brothers than heterosexual men (Blanchard, 2001). This difference is explained by the **maternal immune hypothesis** which proposes *"a progressive immunization to male-specific antigens after the birth of successive sons in some mothers, which increases the effect of anti-male antibodies on the sexual differentiation of the brain in the developing fetus"* (Carroll, 2016, p. 264). Consequently, in some families with multiple brothers, those born later have demonstrated higher rates of homosexuality.

## S e xual Orientation Discrimination

The United States is **heteronormative**, meaning that *society supports heterosexuality as the norm.* Consider, for example, that homosexuals are often asked, "When did you know you were gay?" but heterosexuals are rarely asked, "When did you know you were straight?" (Ryle, 2011). Living in a culture that privileges heterosexuality has a significant impact on the ways in which non-heterosexual people are able to develop and express their sexuality.

Open identification of one's sexual orientation may be hindered by **homophobia** *which encompasses a range of negative attitudes and feelings toward homosexuality or people who are identified or perceived as being lesbian, gay, bisexual, or transgender (LGBT).* It can be expressed as antipathy, contempt, prejudice, aversion, or hatred; it may be based on irrational fear and is sometimes related to religious beliefs (Carroll, 2016). Homophobia is observable in critical and hostile behavior, such as discrimination and violence on the basis of sexual orientations that are non- heterosexual. Recognized types of homophobia include institutionalized homophobia, *such as religious and state-sponsored homophobia* , and internalized homophobia *in which people with same-sex attractions internalize, or believe, society's negative views and/or hatred of themselves.*




Figure 15.7.4.5: Protestors and people in the LGBTQ2+ communities around the world still fight for the rights to live, love, and marry.

Gay men, lesbians, and bisexual people regularly experience stigma, harassment, discrimination, and violence based on their sexual orientation (Carroll, 2016). Research has shown that gay, lesbian, and bisexual teenagers are at a higher risk of depression and suicide due to exclusion from social groups, rejection from peers and family, and negative media portrayals of homosexuals (Bauermeister et al., 2010). Discrimination can occur in the workplace, in housing, at schools, and in numerous public settings. Much of this discrimination is based on stereotypes and misinformation. Major policies to prevent discrimination based on sexual orientation have only come into effect in the United States in the last few years.

The majority of empirical and clinical research on lesbian, gay, bisexual, and transgender (LGBT) populations are done with largely white, middle-class, well-educated samples. This demographic limits our understanding of more marginalized sub-populations that are also affected by racism, classism, and other forms of oppression. In the United States, non-Caucasian LGBT individuals may find themselves in a double minority, in which they are not fully accepted or understood by Caucasian LGBT communities, and are also not accepted by their own ethnic group (Tye, 2006). Many people experience racism in the dominant LGBT community where racial stereotypes merge with gender stereotypes.

The Canadian Mental Health Association website notes that discrimination against sexual and gender minorities is widespread in Canada, especially for transgender individuals, and especially for those of more than one marginalized group (Canadian Mental Health Association and Rainbow Health Ontario, 2019). However, the website posts a list of research-backed measures that societies and individuals can take to reduce or eliminate the harmful effects of discrimination.

Except for the paragraph above and change in the term gay to the preferred gay men, text in this chapter is taken directly from Lally & Valentine-French (2017). Photographs were collected by O'Neil, McCarthy, & Williams. Glossary definitions generally are quoted directly from the *APA*
*Dictionary of Psychology* (undated).

This page titled 15.7.4: Sexuality in Young Adulthood is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Anne Baird (eCampus Ontario) via source content that was edited to the style and standards of the LibreTexts platform.

- 4.4: Sexuality in Young Adulthood by Anne Baird is licensed CC BY-NC-SA 4.0. Original source: https://ecampusontario.pressbooks.pub/alwaysdeveloping/.

# 15.7.5: Cognitive Development in Young Adulthood

## Beyond Formal Operational Thought: Postformal Thought

According to Piaget's theory adolescents acquire formal operational thought. The hallmark of this type of thinking is the ability to think abstractly or to consider possibilities and ideas about circumstances never directly experienced. Thinking abstractly is only one characteristic of adult thought, however. If you compare a 15 year-old with someone in their late 30s, you would probably find that the latter considers not only what is possible, but also what is likely. Why the change? The adult has gained experience and understands why possibilities do not always become realities. They learn to base decisions on what is *realistic and practical, not idealistic,* and can make adaptive choices. Adults are also not as influenced by what others think. This advanced type of thinking is referred to as **postformal thought** (Sinnott, 1998).

### Dialectical Thought

In addition to moving toward more practical considerations, thinking in early adulthood may also become more flexible and balanced. Abstract ideas that the adolescent believes in firmly may become standards by which the adult evaluates reality. Adolescents tend to think in **dichotomies**; ideas are true or false; good or bad; and there is no middle ground. However, with experience, the adult comes to recognize that there is some right and some wrong in each position, some good or some bad in a policy or approach, some truth and some falsity in a particular idea. This ability to *bring together salient aspects of two opposing viewpoints or positions* is referred to as **dialectical thought** and is considered one of the most advanced aspects of postformal thinking (Basseches, 1984). Such thinking is more realistic because very few positions, ideas, situations, or people are completely right or wrong. So, for example, parents who were considered angels or devils by the adolescent eventually become just people with strengths and weaknesses, endearing qualities, and faults to the adult.

### Does everyone reach postformal or even formal operational thought?

Formal operational thought involves being able to think abstractly; however, this ability does not apply to all situations or all adults. Formal operational thought is influenced by experience and education. Some adults lead lives in which they are not challenged to think abstractly about their world. Many adults do not receive any formal education and are not taught to think abstractly about situations they have never experienced. Further, they are also not exposed to conceptual tools used to formally analyze hypothetical situations. Those who do think abstractly, in fact, may be able to do so more easily in some subjects than others. For example, psychology majors may be able to think abstractly about psychology, but be unable to use abstract reasoning in physics or chemistry. Abstract reasoning in a particular field requires a knowledge base that we might not have in all areas. Consequently, our ability to think abstractly depends to a large extent on our experiences. We can see here the societal importance of providing quality educational opportunities across the socioeconomic spectrum and across the lifespan so that each of us maximizes the dynamism of accumulating experience and skill as we get older.

Except for the last sentence, composed by Baird, text in this chapter was taken directly from Lally & Valentine-French (2017). Glossary definitions are quoted from the *APA Dictionary of Psychology* (undated).

This page titled 15.7.5: Cognitive Development in Young Adulthood is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Anne Baird (eCampus Ontario) via source content that was edited to the style and standards of the LibreTexts platform.

- 4.5: Cognitive Development in Young Adulthood by Anne Baird is licensed CC BY-NC-SA 4.0. Original source: https://ecampusontario.pressbooks.pub/alwaysdeveloping/.

# 15.7.6: Work and Education in Young Adulthood

## Education



Figure 15.7.6.1: University Grads

Tertiary or higher education systems in Canada and the United States differ markedly in several ways, including terminology, to an extent that quantitative data should be compared and contrasted with considerable caution. In particular *college* in Canada generally refers to employment-oriented programs of study offering certificates after about a year of study, diplomas after two or three years, and in some cases bachelor's degrees and graduate degrees (Miller, 2018). In the Canadian context, *university* refers to academic- and pre-professional oriented programs that offer both three- and four-year degrees. Four-year degrees typically are required for entrance to graduate study. In contrast, in the United States *college* generally is used interchangeably with university to refer to four-year academically- or professionally-oriented programs offering bachelor's degrees, the minimum needed to qualify for graduate study.

Canadians are more likely than U.S. students to attend bachelor's degree-granting programs within or near their hometowns (Miller, 2018; Ripley, 2018) and are more likely to live at home or in rented housing (Miller, 2018). In Canada there is less emphasis on camaraderie within the group entering university together. Depending on the credits accumulated students are classified as first-, second-, third-, or fourth-year, rather than freshmen, sophomores, juniors, and seniors.

In the U.S. *community* college refers to employment-oriented U.S. programs offering two-year associate degrees. Because of the high cost of U.S. college/university and the fact that some institutions require dormitory residence for part or all of the student's studies, some academically-accomplished U.S. students choose to remain at home and complete courses at a community college for the first year or more before transferring to a university/college. Just as all earned Canadian college credits may not transfer to university, especially to the student's intended major, not all U.S. community college credits transfer to U.S. colleges/universities.

One can still draw some conclusions in spite of these national differences, as well as the significant disparities between and within provinces and between and within states. First, post-high school education currently is much more affordable for individuals in Canada than in the U.S. (Miller, 2018; Ripley, 2018). Second, at the post-high school level overall more Canadians than Americans complete a certificate, diploma, or degree of some kind (Statistics Canada, 2017). Third, in both countries on average post-high school education provides lifelong benefits, including socioeconomic benefits, although currently it is reported that up to 25% of American college graduates make no more than the average high school graduate (Ripley, 2018).

Canada ranks first among OECD countries in terms of percentage of citizens completing university or college degrees or diploma (Statistics Canada 2017). In 2016 54.0% of those 25 to 64 reported having such a degree or diploma. The first rank of Canada is attributed in part to the large proportion of higher education occurring in colleges rather than universities. The proportion of Aboriginal people receiving a college diploma grew from 2006 to 2016, as did the proportion of Aboriginal people receiving a

bachelor's degree. In response to government announcements, the proportion of men 25 to 34 with an apprenticeship certificate as their highest level of educational attainment rose from 4.9% in 2006 to 7.8% in 2016.

*Text up to here in this chapter was written by Baird. The remaining text in this chapter was taken directly from Lally & Valentine-French (2017). The figures were curated and adapted from other sources by O'Neil, McCarthy, and Williams. Glossary definitions for terms introduced in this chapter were taken directly from APA Dictionary of Psychology (undated).*

According to the National Center for Higher Education Management Systems (NCHEMS) (2016a), in the United States about 84% of 18 to 24 year olds have a high school diploma or GED. Nearly 9 out of every 10 adults aged 25 and up (88%) in the United States have a high school diploma or its equivalent (Ryan & Bauman, 2016). College is an important aspect of the lives of many young adults in the United States, with 36% of 18 to 24 year olds (NCHEMS, 2016b) and 7% of 25 to 49 year olds attending college (NCHEMS, 2016c). More than half of those 25 and older (59%) have completed some college, and 1 in 3 (32.5%) have a bachelor's degree or higher, with slightly more women (33%) than men (32%) holding a college degree (Ryan & Bauman, 2016). Fifty-six percent of four-year college students earn a Bachelor's degree within six years (NCHEMS, 2016d).

The rate of college attainment has grown more slowly in the United States than in a number of other nations in recent years (OCED, 2014). This may be due to fact that the cost of attaining a degree is higher in the U.S. than in many other nations.

In 2014, 7 out of every 10 graduates in the U.S. owed an average of nearly $29,000, up 2 percent from the previous year (The Institute for College Access and Success [TICAS], 2015). As the level of State funding of higher education declines, students are finding that the cost of college is outpacing the rate of inflation, Pell grant increases, and other student scholarships. One in six students are funding their education through personal loans (TICAS, 2015).

## Is college worth the time and investment?

College is certainly a substantial investment each year, with the financial burden falling on students and their families in the U.S., and mainly by the government in Canada and many other nations. Nonetheless, the benefits both to the individual and the society outweighs the initial costs. Those in America with the most advanced degrees earn the highest income and have the lowest unemployment. **Figure** 15.7.6.2 depicts unemployment rates for Canadians across educational attainment levels in 2018, demonstrating that, in general, those with some tertiary education are employed at higher rates.

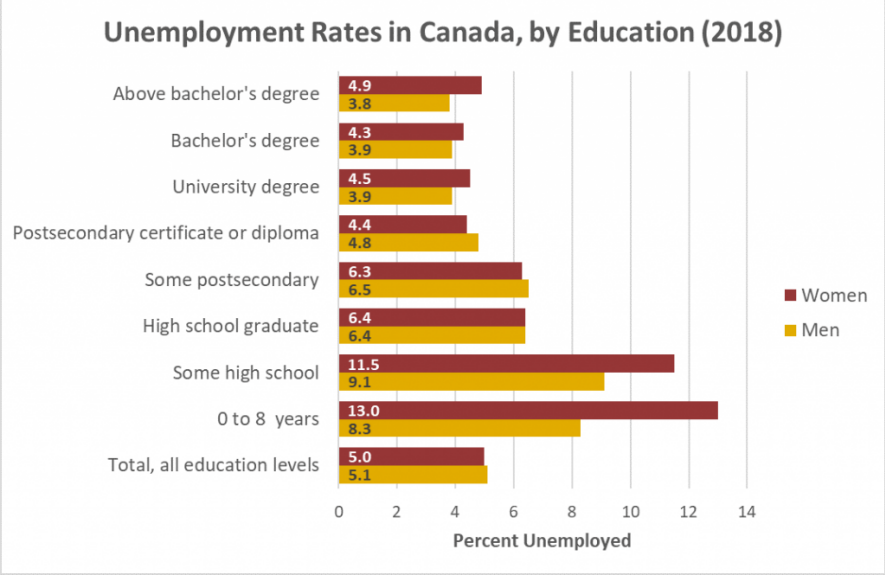



Figure 15.7.6.2: 2018 Unemployment Rates in Canada, according to educational attainment.

Worldwide, over 80% of college educated adults are employed, compared with just over 70% of those with a high school or equivalent diploma, and only 60% of those with no high school diploma (OECD, 2015). Those with a college degree will earn more over the course of their life time. Moreover, the benefits of college education go beyond employment and finances. The OECD found that around the world, adults with higher educational attainment were more likely to volunteer, felt they had more control over their lives, and thus were more interested in the world around them. Studies of U.S. college students find that they gain a more distinct identity and become more socially competent, less dogmatic and ethnocentric compared to those not in college

(Pascarella, 2006).

Thus, formal education brings benefits that last throughout life. As we will see, at any time we can return to formal education and strengthen ourselves, and throughout life we also benefit from informal educational opportunities. For most of us, the best chance at such opportunities is through our work.

# C areer Development and Employment

Work plays a significant role in the lives of people, and emerging and early adulthood is the time when most of us make choices that will establish our careers. Career development has a number of stages:

- **Stage One:** As children we may select careers based on what appears glamorous or exciting to us (Patton & McMahon, 1999). There is little regard in this stage for whether we are suited for our occupational choices.
- **S tage Two:** In the second stage, teens include their abilities and limitations, in addition to the glamour of the occupation when narrowing their choices.
- **S tage Three:** Older teens and emerging adults narrow their choices further and begin to weigh more objectively the requirements, rewards, and downsides to careers, along with comparing possible careers with their own interests, values, and future goals (Patton & McMahon, 1999). However, some young people in this stage "fall-into" careers simply because these were what were available at the time, because of family pressures to pursue particular paths, or because these were high paying jobs, rather than from an intrinsic interest in that career path (Patton & McMahon, 1999).
- **Stage Four:** Super (1980) suggests that by our mid to late thirties, many adults settle in their careers. Even though they might change companies or move up in their position, there is a sense of continuity and forward motion in their career. However, some people at this point in their working life may feel trapped, especially if there is little opportunity for advancement in a more dead-end job.

## How have things changed for Millennials compared with previous generations of early adults?

In recent years, young adults are more likely to find themselves job-hopping, and periodically returning to school for further education and retraining than in prior generations. However, researchers find that occupational interests remain fairly stable. Thus, despite the more frequent change in jobs, most people are generally seeking jobs with similar interests rather than entirely new careers (Rottinghaus, Coon, Gaffey & Zytowski, 2007).

Recent research also suggests that Millennials are looking for something different in their place of employment. According to a recent Gallup poll report (2016), Millennials want more than a paycheck, they want a purpose. Unfortunately, only 29% of Millennials surveyed by Gallup reported that they were "engaged" at work. In fact, they report being less engaged than Gen Xers and Baby Boomers; with 55% of Millennials saying they are not engaged at all with their job. This indifference to their workplace may explain the greater tendency to switch jobs. With their current job giving them little reason to stay, they are more likely to take any new opportunity to move on. Only half of Millennials saw themselves working at the same company a year later. Gallup estimates that this employment turnover and lack of engagement costs businesses $30.5 billion a year.

### NEETs

Around the world, teens and young adults were some of the hardest hit by the economic downturn in recent years (Desilver, 2016). Consequently, a number of young people have become **NEET** s, *neither employed nor in education or training* . While the number of young people who are NEETs has declined, there is concern that "without assistance, economically inactive young people won't gain critical job skills and will never fully integrate into the wider economy or achieve their full earning potential" (Desilver, 2016, para. 3). In Europe, where the rates of NEETs are persistently high, there is also concern that having such large numbers of young adults with little opportunity may increase the chances of social unrest.

In the United States, in 2015 nearly 17% of 16 to 29 year-olds were neither employed nor in school, according to data Desilver (2016) obtained from the Bureau of Labor Statistics. This is down slightly from 2013, when approximately 18.5% of this age group fit the category. As noted in Table 7.2, more women than men find themselves unemployed and not in school. Additionally, most NEETs have high school or less education, and Asians are less likely to be NEETs than any other ethnic group.

The rate of NEETs varies in European nations, with higher rates found in nations that have been the hardest hit by economic

recessions and government austerity measures. For example, more than 25% of those 15-29 (European data use a lower age group: 15 rather than 16) in Greece and Italy are unemployed and not seeking or receiving further education. In contrast, countries less affected by an economic downturn, such as Denmark, had much lower rates (7.3%).

Click **here** for an interactive graph of NEETs in OECD countries.

## What role does gender play on career and employment?

Gender also has an impact on career choices. Despite the rise in the number of women who work outside of the home, there are some career fields that are still pursued more by men than women. Jobs held by women still tend to cluster in the service sector, such as education, nursing, and child-care worker. While in more technical and scientific careers, women are greatly outnumbered by men. Jobs that have been traditionally held by women tend to have lower status, pay, benefits, and job security (Ceci & Williams, 2007).

In recent years, women have made inroads into fields once dominated by males, and today women are almost as likely as men to become medical doctors or lawyers. Despite these changes, women are more likely to have lower-status, and thus less pay than men in these professions. For instance, women are more likely to be a family practice doctor than a surgeon, or are less likely to make partner in a law firm (Ceci & Williams, 2007).

Also refer back to **Figure** 15.7.6.2 above, which shows that women generally have higher unemployment rates than men.

# Sexism

**Sexism** or **gender discrimination***is prejudice or discrimination based on a person's sex or gender*. Sexism can affect any sex that is marginalized or oppressed in a society; however, it is particularly documented as affecting females. It has been linked to stereotypes and gender roles and includes the belief that males are intrinsically superior to other sexes and genders. Extreme sexism may foster sexual harassment, rape, and other forms of sexual violence.

Sexism can exist on a societal level, such as in hiring, employment opportunities, and education. In the United States, women are less likely to be hired or promoted in male-dominated professions, such as engineering, aviation, and construction (Blau, Ferber, & Winkler, 2010; Ceci & Williams, 2011). In many areas of the world, young girls are not given the same access to nutrition, healthcare, and education as boys. Sexism also includes people's expectations of how members of a gender group should behave. For example, women are expected to be friendly, passive, and nurturing; when a woman behaves in an unfriendly or assertive manner, she may be disliked or perceived as aggressive because she has violated a gender role (Rudman, 1998). In contrast, a man behaving in a similarly unfriendly or assertive way might be perceived as strong or even gain respect in some circumstances.

**Occupational sexism** *involves discriminatory practices, statements, or actions, based on a person's sex, that occur in the workplace*. One form of occupational sexism is **wage discrimination**. In 2008, the Organisation for Economic Co-operation and Development (OECD) found that while female employment rates have expanded, and gender employment and wage gaps have narrowed nearly everywhere, on average women still have a 20 percent less chance to have a job. The Council of Economic Advisors (2015) found that despite women holding 49.3% of the jobs, they are paid only 78 cents for every $1.00 a man earns. It also found that despite the fact that many countries, including the U.S., have established anti-discrimination laws, these laws are difficult to enforce. In the United States, women account for 47% of the overall labor force, yet they make up only 6 percent of corporate CEOs and top executives. Some researchers see the root cause of this situation in the tacit discrimination based on gender, conducted by current top executives and corporate directors (who are primarily male).

Click **here** for an interactive graph depicting the wage gap across OECD countries. Canada and U.S. both have an 18.2% gap between men and women, which is above the average for OECD countries (13.5).

This page titled 15.7.6: Work and Education in Young Adulthood is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Anne Baird (eCampus Ontario) via source content that was edited to the style and standards of the LibreTexts platform.

- 4.6: Work and Education in Young Adulthood by Anne Baird is licensed CC BY-NC-SA 4.0. Original source: https://ecampusontario.pressbooks.pub/alwaysdeveloping/.

# 15.7.7: Psychosocial Development in Young Adulthood

## Temperament and Personality in Adulthood

**Temperament** is defined as *the innate characteristics of the infant, including mood, activity level, and emotional reactivity, noticeable soon after birth*. Does one's temperament remain stable through the lifespan? Do shy and inhibited babies grow up to be shy adults, while the sociable child continues to be the life of the party? Like most developmental research the answer is more complicated than a simple yes or no. Chess and Thomas (1987), who identified children as easy, difficult, slow-to-warm-up or blended, found that children identified as easy grew up to became well-adjusted adults, while those who exhibited a difficult temperament were not as well-adjusted as adults. Jerome Kagan (2002) has studied the temperamental category of inhibition to the unfamiliar in children. Infants exposed to unfamiliarity reacted strongly to the stimuli and cried loudly, pumped their limbs, and had an increased heart rate. Research has indicated that these highly reactive children show temperamental stability into early childhood, and Bohlin and Hagekull (2009) found that shyness in infancy was linked to social anxiety in adulthood.

An important aspect of this research on inhibition was looking at the response of the amygdala, which is important for fear and anxiety, especially when confronted with possible threatening events in the environment. Using functional magnetic resonance imaging (FMRIs) young adults identified as strongly inhibited toddlers showed heightened activation of the amygdala when compared to those identified as uninhibited toddlers (Davidson & Begley, 2012).

The research does seem to indicate that temperamental stability holds for many individuals through the lifespan, yet we know that one's environment can also have a significant impact. Recall from our discussion on **epigenesis** or *how environmental factors are thought to change gene expression by switching genes on and off*. Many cultural and environmental factors can affect one's temperament, including supportive versus abusive child-rearing, socioeconomic status, stable homes, illnesses, teratogens, etc. Additionally, individuals often choose environments that support their temperament, which in turn further strengthens them (Cain, 2012). In summary, because temperament is genetically driven, genes appear to be the major reason why temperament remains stable into adulthood. In contrast, the environment appears mainly responsible for any change in temperament (Clark & Watson, 1999).

Everybody has their own unique **personality***; that is, their characteristic manner of thinking, feeling, behaving, and relating to others* (John, Robins, & Pervin, 2008). Personality traits refer to these characteristic, routine ways of thinking, feeling, and relating to others. Personality integrates one's temperament with cultural and environmental influences. Consequently, there are signs or indicators of these traits in childhood, but they become particularly evident when the person is an adult. Personality traits are integral to each person's sense of self, as they involve what people value, how they think and feel about things, what they like to do, and, basically, what they are like most every day throughout much of their lives.

**Five-Factor Model:** There are hundreds of different personality traits, and all of these traits can be organized into the broad dimensions referred to as the Five-Factor Model (John, Naumann, & Soto, 2008). These five broad domains include: Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism (Think OCEAN to remember). This applies to traits that you may use to describe yourself. **Table 4.24.1** provides illustrative traits for low and high scores on the five domains of this model of personality.

*Table 4.24.1: Descriptions of the FFM Personality Traits (adapted from John, Naumann, and Soto, 2008)*

| Dimension | Description | Examples of behaviours predicted by the trait |
|---|---|---|
| **Openness to experience** | A general appreciation for art, emotion, adventure, unusual ideas, imagination, curiosity, and variety of experience | Individuals who are highly open to experience tend to have distinctive and unconventional decorations in their home. They are also likely to have books on a wide variety of topics, a diverse music collection, and works of art on display. |
| **Conscientiousness** | A tendency to show self- discipline, act dutifully, and aim for achievement | Individuals who are conscientious have a preference for planned rather than spontaneous behavior. |
| **Extraversion** | The tendency to experience positive emotions and to seek out stimulation and the company of others | Extroverts enjoy being with people. In groups they like to talk, assert themselves, and draw attention to themselves. |

| | | |
|---|---|---|
| **Agreeableness** | A tendency to be compassionate and cooperative rather than suspicious and antagonistic toward others; reflects individual differences in general concern for social harmony | Agreeable individuals value getting along with others. They are generally considerate, friendly, generous, helpful, and willing to compromise their interests with those of others. |
| **Neuroticism** | The tendency to experience negative emotions, such as anger, anxiety, or depression; sometimes called “emotional instability” | Those who score high in neuroticism are more likely to interpret ordinary situations as threatening and minor frustrations as hopelessly difficult. They may have trouble thinking clearly, making decisions, and coping effectively with stress. |

**Does personality change throughout adulthood?** Previously the answer was no, but contemporary research shows that although some people’s personalities are relatively stable over time, others’ are not Lucas & Donnellan, 2011; Roberts & Mroczek, 2008). Longitudinal studies reveal average changes during adulthood in the expression of some traits (e.g., neuroticism and openness decrease with age and conscientiousness increases) and individual differences in these patterns due to idiosyncratic life events (e.g., divorce, illness). Longitudinal research also suggests that adult personality traits, such as conscientiousness, predict important life outcomes including job success, health, and longevity (Friedman et al., 1993; Roberts, Kuncel, Shiner, Caspi, & Goldberg, 2007).

The Harvard Health Letter (2012) identifies research correlations between conscientiousness and lower blood pressure, lower rates of diabetes and stroke, fewer joint problems, being less likely to engage in harmful behaviors, being more likely to stick to healthy behaviors, and more likely to avoid stressful situations. Conscientiousness also appears related to career choices, friendships, and stability of marriage. Lastly, a person possessing both self-control and organizational skills, both related to conscientiousness, may withstand the effects of aging better and have stronger cognitive skills than one who does not possess these qualities.

## A ttachment in Young Adulthood

Hazan and Shaver (1987) described the attachment styles of adults, using the same three general categories proposed by Ainsworth’s research on young children; secure, avoidant, and anxious/ambivalent. Hazan and Shaver developed three brief paragraphs describing the three adult attachment styles. Adults were then asked to think about romantic relationships they were in and select the paragraph that best described the way they felt, thought, and behaved in these relationships (See **Table 4.24.2**).

*Table 4.24.2: Relationship Attachments (Adapted from Hazan & Shaver, 1987)*

| Which of the following best describes you in your romantic relationships? | |
|---|---|
| **Secure** | I find it relatively easy to get close to others and am comfortable depending on them and having them depend on me. I don’t often worry about being abandoned or about someone getting too close to me. |
| **Avoidant** | I am somewhat uncomfortable being close to others; I find it difficult to trust them completely, difficult to allow myself to depend on them. I am nervous when anyone gets too close, and often, love partners want me to be more intimate than I feel comfortable being. |
| **Anxious/ Ambivalent** | I find that others are reluctant to get as close as I would like. I often worry that my partner doesn’t really love me or won’t stay with me. I want to merge completely with another person, and this sometimes scares people away. |

Bartholomew (1990) challenged the categorical view of attachment in adults and suggested that adult attachment was best described as varying along two dimensions; attachment related-anxiety and attachment-related avoidance. **Attachment-related anxiety** *refers to the extent to which an adult worries about whether their partner really loves them.* Those who score high on this dimension fear that their partner will reject or abandon them (Fraley, Hudson, Heffernan, & Segal, 2015). **Attachment-related avoidance** *refers to whether an adult can open up to others, and whether they trust and feel they can depend on others*. Those who score high on attachment- related avoidance are uncomfortable with opening up and may fear that such dependency may limit their sense of autonomy (Fraley et al., 2015). According to Bartholomew (1990) this would yield four possible attachment styles in adults; secure, dismissing, preoccupied, and fearful- avoidant (see **Figure** 15.7.7.1)

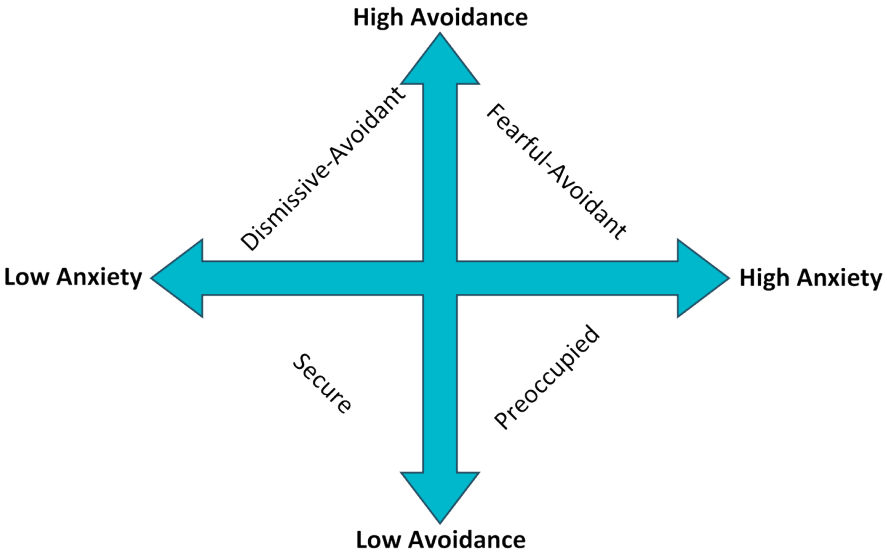



Figure 15.7.7.1: Four Category Model with Two-Dimensions of Attachment (adapted from Fraley et al., 2015, p. 335)

Securely attached adults score lower on both dimensions. They are comfortable trusting their partners and do not worry excessively about their partner's love for them. Adults with a dismissing style score low on attachment-related anxiety, but higher on attachment-related avoidance. Such adults dismiss the importance of relationships. They trust themselves, but do not trust others, thus do not share their dreams, goals, and fears with others. They do not depend on other people, and feel uncomfortable when they have to do so.

Those with a preoccupied attachment are low in attachment-related avoidance, but high in attachment-related anxiety. Such adults are often prone to jealousy and worry that their partner does not love them as much as they need to be loved. Adults whose attachment style is fearful-avoidant score high on both attachment-related avoidance and attachment-related anxiety. These adults want close relationships, but do not feel comfortable getting emotionally close to others. They have trust issues with others and often do not trust their own social skills in maintaining relationships.

Research on attachment in adulthood has found that:

- Adults with insecure attachments report lower satisfaction in their relationships (Butzer, & Campbell, 2008; Holland, Fraley, & Roisman, 2012).
- Those high in attachment-related anxiety report more daily conflict in their relationships (Campbell, Simpson, Boldry, & Kashy, 2005).
- Those with avoidant attachment exhibit less support to their partners (Simpson, Rholes, Oriña, & Grich, 2002).
- Young adults show greater attachment-related anxiety than do middle-aged or older adults (Chopik, Edelstein, & Fraley, 2013).
- Some studies report that young adults show more attachment-related avoidance (Schindler, Fagundes, & Murdock, 2010), while other studies find that middle-aged adults show higher avoidance than younger or older adults (Chopik et al., 2013).
- Young adults with more secure and positive relationships with their parents make the transition to adulthood more easily than do those with more insecure attachments (Fraley, 2013).

## Do people with certain attachment styles attract those with similar styles?

When people are asked what kinds of psychological or behavioral qualities they are seeking in a romantic partner, a large majority of people indicate that they are seeking someone who is kind, caring, trustworthy, and understanding, that is the kinds of attributes that characterize a "secure" caregiver (Chappell & Davis, 1998). However, we know that people do not always end up with others who meet their ideals. Are secure people more likely to end up with secure partners, and, vice versa, are insecure people more likely to end up with insecure partners? The majority of the research that has been conducted to date suggests that the answer is "yes." Frazier, Byer, Fischer, Wright, and DeBord (1996) studied the attachment patterns of more than 83 heterosexual couples and found that, if the man was relatively secure, the woman was also likely to be secure.

One important question is whether these findings exist because (a) secure people are more likely to be attracted to other secure

people, (b) secure people are likely to create security in their partners over time, or (c) some combination of these possibilities. Existing empirical research strongly supports the first alternative. For example, when people have the opportunity to interact with individuals who vary in security in a speed-dating context, they express a greater interest in those who are higher in security than those who are more insecure (McClure, Lydon, Baccus, & Baldwin, 2010). However, there is also some evidence that people's attachment styles mutually shape one another in close relationships. For example, in a longitudinal study, Hudson, Fraley, Vicary, and Brumbaugh (2012) found that, if one person in a relationship experienced a change in security, his or her partner was likely to experience a change in the same direction.

## Do early experiences as children shape adult attachment?



Figure 15.7.7.3: Sharing food, celebrations, and traditions are some of the ways we establish secure attachments with our loved ones from an early age.

The majority of research on this issue is retrospective; that is, it relies on adults' reports of what they recall about their childhood experiences. This kind of work suggests that secure adults are more likely to describe their early childhood experiences with their parents as being supportive, loving, and kind (Hazan & Shaver, 1987). A number of longitudinal studies are emerging that demonstrate prospective associations between early attachment experiences and adult attachment styles and/or interpersonal functioning in adulthood. For example, Fraley, Roisman, Booth-LaForce, Owen, and Holland (2013) found in a sample of more than 700 individuals studied from infancy to adulthood that maternal sensitivity across development prospectively predicted security at age 18. Simpson, Collins, Tran, and Haydon (2007) found that attachment security, assessed in infancy in the strange situation, predicted peer competence in grades one to three, which, in turn, predicted the quality of friendship relationships at age 16, which, in turn, predicted the expression of positive and negative emotions in their adult romantic relationships at ages 20 to 23.

It is easy to come away from such findings with the mistaken assumption that early experiences "determine" later outcomes. To be clear: Attachment theorists assume that the relationship between early experiences and subsequent outcomes is probabilistic, not deterministic. Having supportive and responsive experiences with caregivers early in life is assumed to set the stage for positive social development. But that does not mean that attachment patterns are set in stone. In short, even if an individual has far from optimal experiences in early life, attachment theory suggests that it is possible for that individual to develop well-functioning adult relationships through a number of corrective experiences, including relationships with siblings, other family members, teachers, and close friends. Security is best viewed as a culmination of a person's attachment history rather than a reflection of his or her early experiences alone. Those early experiences are considered important, not because they determine a person's fate, but because they provide the foundation for subsequent experiences.

## R elationships with Parents and Siblings

In early adulthood the parent-child relationship has to transition toward a relationship between two adults. This involves a reappraisal of the relationship by both parents and young adults. One of the biggest challenges for parents, especially during emerging adulthood, is coming to terms with the adult status of their children. Aquilino (2006) suggests that parents who are reluctant or unable to do so may hinder young adults' identity development. This problem becomes more pronounced when young adults still reside with their parents. Arnett (2004) reported that leaving home often helped promote psychological growth and independence in early adulthood.

Sibling relationships are one of the longest-lasting bonds in people's lives. Yet, there is little research on the nature of sibling relationships in adulthood (Aquilino, 2006). What is known is that the nature of these relationships change, as adults have a choice as to whether they will maintain a close bond and continue to be a part of the life of a sibling. Siblings must make the same

reappraisal of each other as adults, as parents have to with their adult children. Research has shown a decline in the frequency of interactions between siblings during early adulthood, as presumably peers, romantic relationships, and children become more central to the lives of young adults. Aquilino (2006) suggests that the task in early adulthood may be to maintain enough of a bond so that there will be a foundation for this relationship in later life. Those who are successful can often move away from the "older-younger" sibling conflicts of childhood, toward a more equal relationship between two adults. Siblings that were close to each other in childhood are typically close in adulthood (Dunn, 1984, 2007), and in fact, it is unusual for siblings to develop closeness for the first time in adulthood. Overall, the majority of adult sibling relationships are close (Cicirelli, 2009).

### Erikson: Intimacy vs. Isolation

Erikson's (1950, 1968) sixth stage focuses on establishing intimate relationships or risking social isolation. Intimate relationships are more difficult if one is still struggling with identity. Achieving a sense of identity is a life-long process, as there are periods of identity crisis and stability. However, once identity is established intimate relationships can be pursued. These intimate relationships include acquaintances and friendships, but also the more important close relationships, which are the long-term romantic relationships that we develop with another person, for instance, in a marriage (Hendrick & Hendrick, 2000).

## F a ctors influencing Attraction

Because most of us enter into a close relationship at some point, it is useful to know what psychologists have learned about the principles of liking and loving. A major interest of psychologists is the study of **interpersonal attraction**, *or what makes people like, and even love, each other.*

### S imilarity



Figure 15.7.7.4: Birds of a feather flock together.

One important factor in attraction is a perceived similarity in values and beliefs between the partners (Davis & Rusbult, 2001). Similarity is important for relationships because it is more convenient if both partners like the same activities and because similarity supports one's values. We can feel better about ourselves and our choice of activities if we see that our partner also enjoys doing the same things that we do. *Having others like and believe in the same things we do makes us feel validated in our beliefs.* This is referred to as **consensual validation** and is an important aspect of why we are attracted to others.

### Self-Disclosure

Liking is also enhanced by **self-disclosure**, *the tendency to communicate frequently, without fear of reprisal, and in an accepting and empathetic manner.* Friends are friends because we can talk to them openly about our needs and goals and because they listen and respond to our needs (Reis & Aron, 2008). However, self-disclosure must be balanced. If we open up about our concerns that are important to us, we expect our partner to do the same in return. If the self-disclosure is not reciprocal, the

relationship may not last.

## P r oximity

Another important determinant of liking is **proximity,** *or the extent to which people are physically near us* . Research has found that we are more likely to develop friendships with people who are nearby, for instance, those who live in the same dorm that we do, and even with people who just happen to sit nearer to us in our classes (Back, Schmukle, & Egloff, 2008).

Proximity has its effect on liking through the principle of **mere exposure** , which is *the tendency to prefer stimuli (including, but not limited to people) that we have seen more frequently* . The effect of mere exposure is powerful and occurs in a wide variety of situations. Infants tend to smile at a photograph of someone they have seen before more than they smile at a photograph of someone they are seeing for the first time (Brooks-Gunn & Lewis, 1981), and people prefer side- to-side reversed images of their own faces over their normal (nonreversed) face, whereas their friends prefer their normal face over the reversed one (Mita, Dermer, & Knight, 1977). This is expected on the basis of mere exposure, since people see their own faces primarily in mirrors, and thus are exposed to the reversed face more often.

Mere exposure may well have an evolutionary basis. We have an initial fear of the unknown, but as things become more familiar they seem more similar and safe, and thus produce more positive affect and seem less threatening and dangerous (Harmon-Jones & Allen, 2001; Freitas, Azizian, Travers, & Berry, 2005). When the stimuli are people, there may well be an added effect. Familiar people become more likely to be seen as part of the ingroup rather than the outgroup, and this may lead us to like them more. Leslie Zebrowitz and her colleagues found that we like people of our own race in part because they are perceived as similar to us (Zebrowitz, Bornstad, & Lee, 2007).

# F riendships

In our twenties, intimacy needs may be met in friendships rather than with partners. This is especially true in the United States today as many young adults postpone making long-term commitments to partners, either in marriage or in cohabitation. The kinds of friendships shared by women tend to differ from those shared by men (Tannen, 1990). Friendships between men are more likely to involve sharing information, providing solutions, or focusing on activities rather than discussion problems or emotions. Men tend to discuss opinions or factual information or spend time together in an activity of mutual interest. Friendships between women are more likely to focus on sharing weaknesses, emotions, or problems. Women talk about difficulties they are having in other relationships and express their sadness, frustrations, and joys. These differences in approaches lead to problems when men and women come together. She may want to vent about a problem she is having; he may want to provide a solution and move on to some activity. But when he offers a solution, she thinks he does not care.

Friendships between men and women become more difficult because of the unspoken question about whether the friendships will lead to a romantic involvement. Consequently, friendships may diminish once a person has a partner or single friends may be replaced with couple friends.

# Love

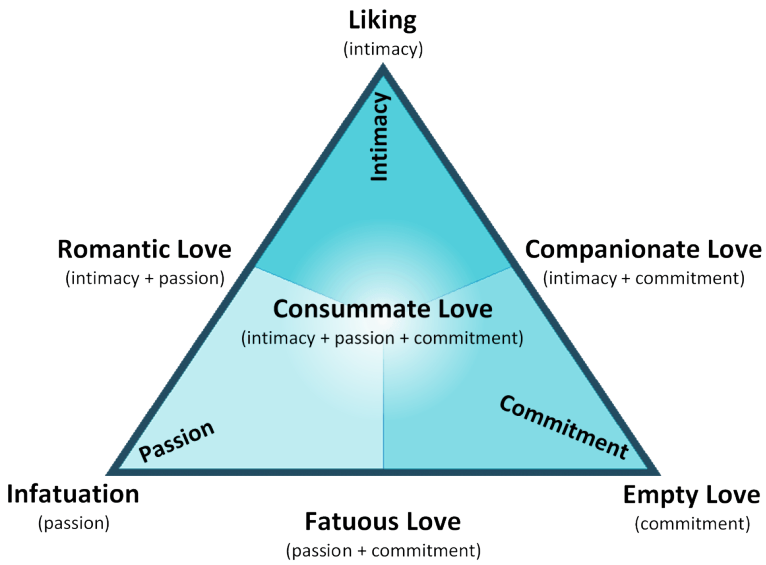



Figure 15.7.7.2: Sternberg's Triarchic Theory of Love

Sternberg (1988) suggests that there are three main components of love: Passion, intimacy, and commitment (see Figure 7.24). Love relationships vary depending on the presence or absence of each of these components. **Passion***refers to the intense, physical attraction partners feel toward one another*. **Intimacy***involves the ability the share feelings, personal thoughts and psychological closeness with the other*. **Commitment***is the conscious decision to stay together*. Passion can be found in the early stages of a relationship, but intimacy takes time to develop because it is based on knowledge of the partner. Once intimacy has been established, partners may resolve to stay in the relationship. Although many would agree that all three components are important to a relationship, many love relationships do not consist of all three. Let's look at other possibilities.

**Liking:** In this relationship, intimacy or knowledge of the other and a sense of closeness is present. Passion and commitment, however, are not. Partners feel free to be themselves and disclose personal information. They may feel that the other person knows them well and can be honest with them and let them know if they think the person is wrong. These partners are friends. However, being told that your partner "thinks of you as a friend" can be a devastating blow if you are attracted to them and seeking a romantic involvement.

**Infatuation:** Perhaps, this is Sternberg's version of "love at first sight". Infatuation consists of an immediate, intense physical attraction to someone. A person who is infatuated finds it hard to think of anything but the other person. Brief encounters are played over and over in one's head; it may be difficult to eat and there may be a rather constant state of arousal. Infatuation is rather short-lived, however, lasting perhaps only a matter of months or as long as a year or so. It tends to be based on physical attraction and an image of what one "thinks" the other is all about.

**Fatuous Love**: However, some people who have a strong physical attraction push for commitment early in the relationship. Passion and commitment are aspects of fatuous love. There is no intimacy and the commitment is premature. Partners rarely talk seriously or share their ideas. They focus on their intense physical attraction and yet one, or both, is also talking of making a lasting commitment. Sometimes this is out of a sense of insecurity and a desire to make sure the partner is locked into the relationship.

**Empty Love**: This type of love may be found later in a relationship or in a relationship that was formed to meet needs other than intimacy or passion, including financial needs, childrearing assistance, or attaining/maintaining status. Here the partners are committed to staying in the relationship for the children, because of a religious conviction, or because there are no alternatives. However, they do not share ideas or feelings with each other and have no physical attraction for one another.

**Romantic Love**: Intimacy and passion are components of romantic love, but there is no commitment. The partners spend much time with one another and enjoy their closeness, but have not made plans to continue. This may be true because they are not in a position to make such commitments or because they are looking for passion and closeness and are afraid it will die out if they commit to one another and start to focus on other kinds of obligations.

**Companionate Love**: Intimacy and commitment are the hallmarks of companionate love. Partners love and respect one another and they are committed to staying together. However, their physical attraction may have never been strong or may have just died out over time. Nevertheless, partners are good friends and committed to one another.

**Consummate Love**: Intimacy, passion, and commitment are present in consummate love. This is often perceived by western cultures as "the ideal" type of love. The couple shares passion; the spark has not died, and the closeness is there. They feel like best friends, as well as lovers, and they are committed to staying together.

*The text in this chapter is all directly from Lally & Valentine-French (2017). Two photographs have been chosen and substituted by O'Neil, McCarthy, and Williams.*

This page titled 15.7.7: Psychosocial Development in Young Adulthood is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Anne Baird (eCampus Ontario) via source content that was edited to the style and standards of the LibreTexts platform.

- 4.7: Psychosocial Development in Young Adulthood by Anne Baird is licensed CC BY-NC-SA 4.0. Original source: https://ecampusontario.pressbooks.pub/alwaysdeveloping/.

# 15.7.8: Young Adult Lifestyles

## S inglehood:

Being single is the most common lifestyle for people in their early 20s, and there has been an increase in the number of adults staying single. In 1960, only about 1 in 10 adults age 25 or older had never been married, in 2012 that had risen to 1 in 5 (Wang & Parker, 2014). While just over half (53%) of unmarried adults say they would eventually like to get married, 32 percent are not sure, and 13 percent do not want to get married. It is projected that by the time current young adults reach their mid-40s and 50s, almost 25% of them may not have married. The U.S. is not the only country to see a rise in the number of single adults. The 2016 Canadian census also showed a rise in the number of Canadians living alone (Galloway, 2017).

*Table 4.25.1: Reasons for staying single*

| | |
|---|---|
| *Have not met the right person* | 30% |
| *Do not have financial stability* | 27% |
| *Not ready to settle down* | 22% |
| *Too young to marry* | 22% |

**Table 4.25.1** (based on data from Wang & Parker 2014, Pew Research Center) lists some of the reasons young adults give for staying single. In addition, adults are marrying later in life, cohabiting, and raising children outside of wedlock in greater numbers than in previous generations. Young adults also have other priorities, such as education, and establishing their careers. This may be reflected by changes in attitudes about the importance of marriage.

In a recent Pew Research survey of Americans, respondents were asked to indicate which of the following statements came closer to their own views:

- “Society is better off if people make marriage and having children a priority”
- “Society is just as well off if people have priorities other than marriage and children”

Slightly more adults endorsed the second statement (50%) than those who chose the first (46%), with the remainder either selecting neither, both equally, or not responding (Wang & Parker, 2014). Young adults age 18-29 were more likely to endorse this view than adults age 30 to 49; 67 percent and 53 percent respectively. In contrast, those age 50 or older were more likely to endorse the first statement (53 percent).

# Hooking Up:



Figure 15.7.8.1: Hooking up has become common in young adults

North American demographic changes have significantly affected the romantic relationships among emerging and early adults. As previously described, the age for puberty has declined, while the times for one's first marriage and first child have been pushed to older ages. This results in a "historically unprecedented time gap where young adults are physiologically able to reproduce, but not psychologically or socially ready to settle down and begin a family and child rearing," (Garcia, Reiber, Massey, & Merriwether, 2012, p. 172). Consequently, according to Bogle (2007, 2008) traditional forms of dating have shifted to more casual **hookups** *that involve uncommitted sexual encounters.*

Even though most research on hooking up involves college students, 70% of sexually active 12-21 year olds reported having had uncommitted sex during the past year (Grello, Welsh, Harper, & Dickson, 2003). Additionally, Manning, Giordano and Longmore (2006) found that 61% of sexually active seventh, ninth, and eleventh graders reported being involved in a sexual encounter outside of a dating relationship.

## F ri ends with Benefits

Hookups are different than those relationships that involve continued mutual exchange. These relationships are often referred to as **Friends with Benefits** (FWB) or "Booty Calls." *These relationships involve friends having casual sex without commitment.* Hookups do not include a friendship relationship. Bisson and Levine (2009) found that 60% of 125 undergraduates reported a FWB relationship. The concern with FWB is that one partner may feel more romantically invested than the other (Garcia et al., 2012).

## Hooking up Gender Differences

When asked about their motivation for hooking up, both males and females indicated physical gratification, emotional gratification, and a desire to initiate a romantic relationship as reasons (Garcia & Reiber, 2008). Although males and females are more similar than different in their sexual behaviors, a consistent finding among the research is that males demonstrate a greater permissiveness to casual sex (Oliver & Hyde, 1993). In another study involving 16,288 individuals across 52 nations, males reported a greater desire of sexual partner variety than females, regardless of relationship status or sexual orientation (Schmitt et al., 2003). This difference can be attributed to gender role expectations for both males and females regarding sexual promiscuity. Additionally, the risks of sexual behavior are higher for females and include unplanned pregnancy, increased sexually transmitted diseases, and susceptibility to sexual violence (Garcia et al., 2012).

Although hooking up relationships have become normalized for emerging adults, some research indicates that the majority of both sexes would prefer a more traditional romantic relationship (Garcia et al., 2012). Additionally, Owen and Fincham (2011) surveyed 500 college students with experience with hookups, and 65% of women and 45% of men reported that they hoped their hookup encounter would turn into a committed relationship. Further, 51% of women and 42% of men reported that they tried

to discuss the possibility of starting a relationship with their hookup partner. Casual sex has also been reported to be the norm among gay men, but they too indicate a desire for romantic and companionate relationships (Clarke & Nichols, 1972).

## Emotional Consequences of Hooking up

Concerns regarding hooking up behavior certainly are evident in the research literature. One significant finding is the high comorbidity of hooking up and substance use. Those engaging in non-monogamous sex are more likely to have used marijuana, cocaine, and alcohol, and the overall risks of sexual activity are drastically increased with the addition of alcohol and drugs (Garcia et al., 2012). Regret has also been expressed, and those who had the most regret after hooking up also had more symptoms of depression (Welsh, Grello, & Harper, 2006). Hook ups were also found to lower self-esteem, increase guilt, and foster feelings of using someone or feeling used. Females displayed more negative reactions than males, and this may be due to females identifying more emotional involvement in sexual encounters than males.

Hooking up can best be explained by a biological, psychological, and social perspective. Research indicates that emerging adults feel it is necessary to engage in hooking up behavior as part of the sexual script depicted in the culture and media. Additionally, they desire sexual gratification. However, they also want a more committed romantic relationship and may feel regret with uncommitted sex.

# Online Dating

The ways people are finding love has changed with the advent of the Internet. In a poll, 49% of all American adults reported that either themselves or someone they knew had dated a person they met online (Madden & Lenhart, 2006). Online dating has also increased dramatically among those age 18 to 24. Today, one in five emerging adults report using a mobile dating app, while in 2013 only 5% did, and 27% report having used online dating, almost triple the rate in 2013 (Smith & Anderson, 2016). As Finkel, Burnette, and Scissors (2007) found, social networking sites and the Internet perform three important tasks. Specifically, sites provide individuals with access to a database of other individuals who are interested in meeting someone. Dating sites generally reduce issues of proximity, as individuals do not have to be close in proximity to meet. Also, they provide a medium in which individuals can communicate with others. Finally, some Internet dating websites advertise special matching strategies, based on factors such as personality, hobbies, and interests, to identify the “perfect match” for people looking for love online. Social networking sites have provided opportunities for meeting others you would not have normally met. However, social networking sites can also be forums for unsuspecting people to be duped, as the person may not be who he or she says.

Online communication differs from face-to-face interaction in a number of ways. In face-to-face meetings, people have many cues upon which to base their first impressions. A person’s looks, voice, mannerisms, dress, scent, and surroundings all provide information in face-to-face meetings, but in computer-mediated meetings, written messages are the only cues provided. Fantasy is used to conjure up images of voice, physical appearance, mannerisms, and so forth. The anonymity of online involvement makes it easier to become intimate without fear of interdependence. When online, people tend to disclose more intimate details about themselves more quickly. A shy person can open up without worrying about whether or not the partner is frowning or looking away. Someone who has been abused may feel safer in virtual relationships. It is easier to tell one’s secrets because there is little fear of loss. One can find a virtual partner who is warm, accepting, and undemanding (Gwinnell, 1998), and exchanges can be focused more on emotional attraction than physical appearance.

To evaluate what individuals are looking for online, Menkin, Robles, Wiley and Gonzaga (2015) reviewed data from an eHarmony.com relationship questionnaire completed by a cross-sectional representation of 5,434 new users. Their results indicated that users consistently valued communication and characteristics such as personality and kindness over sexual attraction. Females valued communication over sexual attraction even more when compared to males, and older users rated sexual attraction as less important than younger users. Alterovitz and Mendelsohn (2011) analyzed 600 Internet personal ads across the lifespan, and found that men sought physical attractiveness and offered status related information more than women, while women were more selective than men and sought status more than men. These findings were consistent with previous research on gender differences regarding the importance of physical/sexual attraction.

# Cohabitation

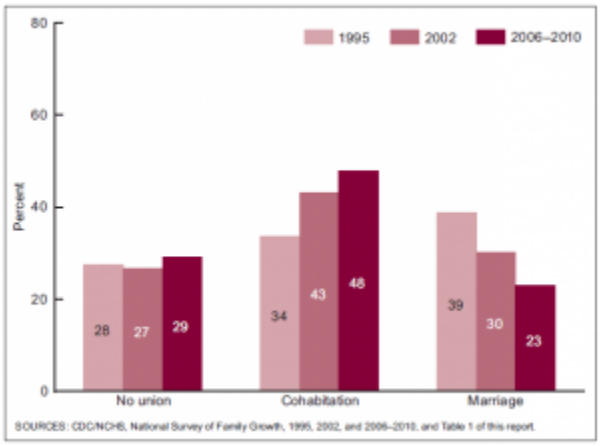



Figure 15.7.8.2: Type of first unions in American women aged 15-44

In American society, as well as in a number of other cultures, cohabitation has become increasingly commonplace. As shown in **Figure** 15.7.8.2, in 1995, 34 percent of women cohabited as the first union with their partner, and by 2010 almost half of all women did (Copen, Daniels, & Mosher, 2013). Copen and colleagues also found that from 1995 to 2010 the median length of the cohabitation relationship has increased regardless of whether the relationship resulted in marriage, remained intact, or had since dissolved. In 1995 the median length of the cohabitation relationship was 13 months, whereas it was 22 months by 2010. Cohabitation for all racial/ethnic groups, except for Asian women, increased between 1995 and 2010. Forty percent of the cohabitations transitioned into marriage within three years, 32% were still cohabiting, and 27% of cohabiting relationships had dissolved within the three years.

Three explanations have been given for the rise of cohabitation in Western cultures. The first notes that the increase in individualism and secularism, and the resulting decline in religious observance, has led to greater acceptance and adoption of cohabitation (Lesthaeghe & Surkyn, 1988). Moreover, the more people view cohabiting couples, the more normal this relationship becomes, and the more couples who will then cohabit. Thus, cohabitation is both a cause and the effect of greater cohabitation.

A second explanation focuses on the economic changes. The growth of industry and the modernization of many cultures has improved women's social status, leading to greater gender equality and sexual freedom, with marriage no longer being the only long-term relationship option (Bumpass, 1990). A final explanation suggests that the change in employment requirements, with many jobs now requiring more advanced education, has led to a competition between marriage and pursuing post-secondary education (Yu & Xie, 2015). This might account for the increase in the age of first marriage in many nations. Taken together, the greater acceptance of premarital sex, and the economic and educational changes would lead to a transition in relationships. Overall, cohabitation may become a step in the courtship process or may, for some, replace marriage altogether.

Similar increases in cohabitation have also occurred in other industrialized countries. For example, rates are high in Great Britain, Australia, Sweden, Denmark, and Finland. In fact, more children in Sweden are born to cohabiting couples than to married couples. The lowest rates of cohabitation in industrialized countries are in Ireland, Italy, and Japan (Benokraitis, 2005).

## Cohabitation in Non-Western Cultures, The Philippines and China

Similar to other nations, young people in the Philippines are more likely to delay marriage, to cohabit, and to engage in premarital sex as compared to previous generations (Williams, Kabamalan, & Ogena, 2007). Despite these changes, many young people are still not in favor of these practices. Moreover, there is still a persistence of traditional gender norms as there are stark differences in the acceptance of sexual behavior out of wedlock for men and women in Philippine society. Young men are given greater freedom. In China, young adults are cohabiting in higher numbers than in the past (Yu & Xie, 2015). Unlike many Western cultures, in China adults with higher, rather than lower, levels of education are more likely to cohabit. Yu and Xie suggest this may be due to seeing cohabitation as being a more "innovative" behavior and that those who are more highly educated may have had more exposure to Western culture.

## Marriage Worldwide

Cohen (2013) reviewed data assessing most of the world's countries and found that marriage has declined universally during the last several decades. This decline has occurred in both poor and rich countries, however, the countries with the biggest drops in marriage were mostly rich: France, Italy, Germany, Japan and the U.S. Cohen states that the decline is not only due to individuals delaying marriage, but also because of high rates of non- marital cohabitation. Delayed or reduced marriage is associated with higher income and lower fertility rates that are reflected worldwide.

## Marriage in the United States

In 1960, 72% of adults age 18 or older were married, in 2010 this had dropped to barely half (Wang & Taylor, 2011). At the same time, the age of first marriage has been increasing for both men and women. In 1960, the average age for first marriage was 20 for women and 23 for men. By 2010 this had increased to 26.5 for women and nearly 29 for men. Many of the explanations for increases in singlehood and cohabitation previously given can also account for the drop and delay in marriage.

## S ame-Sex Marriage



Figure 15.7.8.3: two women who were able to marry in New York, USA

In June 26, 2015, the United States Supreme Court ruled that the Constitution guarantees same-sex marriage. The decision indicated that limiting marriage to only heterosexual couples violated the 14th amendment's guarantee of equal protection under the law. This ruling occurred 11 years after same-sex marriage was first made legal in Massachusetts, and at the time of the high court decision, 36 states and the District of Columbia had legalized same sex marriage. Worldwide, 23 countries currently have national laws allowing gays and lesbians to marry (Pew Research Center, 2015). As can be seen in Table 7.7, these countries are located mostly in Europe and the Americas.

## Cultural Influences on Marriage

Many cultures have both explicit and unstated rules that specify who is an appropriate mate. Consequently, mate selection is not completely left to the individual. Rules of **e ndogamy** *indicate the groups we should marry within and those we should not marry in* (Witt, 2009). For example, many cultures specify that people marry within their own race, social class, age group, or religion. Endogamy reinforces the cohesiveness of the group. Additionally, these rules encourage **homogamy** *or marriage between people who share social characteristics* . The majority of marriages in the U. S. are homogamous with respect to race, social class, age and to a lesser extent, religion. Homogamy is also seen in couples with similar personalities and interests.

## Arranged Marriages and Elopement

Historically, marriage was not a personal choice, but one made by one's family. Arranged marriages often ensured proper transference of a family's wealth and the support of ethnic and religious customs. Such marriages were a marriage of families rather than of individuals. In Western Europe, starting in the 18th century the notion of personal choice in a marital partner slowly became the norm. Arranged marriages were seen as "traditional" and marriages based on love "modern". Many of these early "love" marriages were obtained by eloping (Thornton, 2005).

Around the world, more and more young couples are choosing their partners, even in nations where arranged marriages are still the norm, such as India and Pakistan. Desai and Andrist (2010) found that only 5% of the women they surveyed, aged 25-49, had a primary role in choosing their partner. Only 22% knew their partner for more than one month before they were married. However, the younger cohort of women was more likely to have been consulted by their families before their partner was chosen than were the older cohort, suggesting that family views are changing about personal choice. Allendorf (2013) reports that this 5% figure may also underestimate young people's choice, as only women were surveyed. Many families in India are increasingly allowing sons veto power over the parents' choice of his future spouse, and some families give daughters the same say.

## M arital Arrangements in India

As the number of arranged marriages in India is declining, elopement is increasing. Allendorf's (2013) study of a rural village in India, describes the elopement process. In many cases the female leaves her family home and goes to the male's home, where she stays with him and his parents. After a few days, a member of his family will inform her family of her whereabouts, and gain consent for the marriage. In other cases, where the couple anticipate some degree of opposition to the union, the couple may run away without the knowledge of either family, often going to a relative of the male. After a few days, the couple comes back to the home of his parents, where at that point consent is sought from both families. Although, in some cases families may sever all ties with their child or encourage him or her to abandon the relationship, typically, they agree to the union as the couple have spent time together overnight. Once consent has been given, the couple lives with his family and are considered married. A more formal ceremony takes place a few weeks or months later.

Arranged marriages are less common in the more urban regions of India than they are outside of the cities. In rural regions, often the family farm is the young person's only means of employment. Thus, going against family choices may carry bigger consequences. Young people who live in urban centers have more employment options. As a result, they are often less economically dependent on their families, and may feel freer to make their own choices. Thornton (2005) suggests these changes are also being driven by mass media, international travel, and general Westernization of ideas. Besides India, China, Nepal, and several nations in Southeast Asia have seen a decline in the number of arranged marriages, and an increase in elopement or couples choosing their own partners with their families' blessings (Allendorf, 2013).

## P r e d ictors of Marital Harmony

Advice on how to improve one's marriage is centuries old. One of today's experts on marital communication is John Gottman. Gottman (1999) differs from many marriage counselors in his belief that having a good marriage does not depend on compatibility. Rather, the way that partners communicate to one another is crucial. At the University of Washington in Seattle, Gottman has measured the physiological responses of thousands of couples as they discuss issues of disagreement. Fidgeting in one's chair, leaning closer to or further away from the partner while speaking, and increases in respiration and heart rate are all recorded and analyzed along with videotaped recordings of the partners' exchanges. Gottman believes he can accurately predict whether or not a couple will stay together by analyzing their communication. In marriages destined to fail, partners engage in the "marriage killers": Contempt, criticism, defensiveness, and stonewalling. Each of these undermines the politeness and respect that healthy marriages require. Stonewalling, or shutting someone out, is the strongest sign that a relationship is destined to fail.

Gottman, Carrere, Buehlman, Coan, and Ruckstuhl (2000) researched the perceptions newlyweds had about their partner and marriage. The Oral History Interview used in the study, which looks at eight variables in marriage including: Fondness/affection, we-ness, expansiveness/ expressiveness, negativity, disappointment, and three aspects of conflict resolution (chaos, volatility, glorifying the struggle), was able to predict the stability of the marriage with 87% accuracy at the four to six year-point and 81% accuracy at the seven to nine year-point. Gottman (1999) developed workshops for couples to strengthen their marriages based on the results of the Oral History Interview. Interventions include increasing the positive regard for each other, strengthening their friendship, and improving communication and conflict resolution patterns.

### Accumulated Positive Deposits

When there is a positive balance of relationship deposits this can help the overall relationship in times of conflict. For instance, some research indicates that a husband's level of enthusiasm in everyday marital interactions was related to a wife's affection in the midst of conflict (Driver & Gottman, 2004), showing that being pleasant and making deposits can change the nature of conflict. Also, Gottman and Levenson (1992) found that couples rated as having more pleasant interactions, compared with couples with less pleasant interactions, reported marital problems as less severe, higher marital satisfaction, better physical health, and less risk for divorce. Finally, Janicki, Kamarck, Shiffman, and Gwaltney (2006) showed that the intensity of conflict with a spouse predicted marital satisfaction, unless there was a record of positive partner interactions, in which case the conflict

did not matter as much. Again, it seems as though having a positive balance through prior positive deposits helps to keep relationships strong even in the midst of conflict.

## I ntimate Partner Abuse

Violence in romantic relationships is a significant concern for women in early adulthood as females aged 18 to 34 generally experience the highest rates of intimate partner violence. The last National Intimate Partner and Sexual Violence Survey (NISVS) was conducted in 2011 (Breiding et al., 2014). The NISVS examines the prevalence of intimate partner violence, sexual violence, and stalking among women and men in the United States over the respondent's lifetime and during the 12 months before the interview. A total of 6,879 women and 5,848 men completed the survey. Based on the results, women are disproportionately affected by intimate partner violence, sexual violence, and stalking.

Results included:

- Nearly 1 in 5 women and 1 in 59 men have been raped in their lifetime.
- Almost 1 in 4 women have been the victim of severe physical violence by an intimate partner, while 1 in 7 men have experienced the same.
- A little over 1 in 6 women have been stalked during their lifetime, compared to 1 in 19 men.
- More than 1 in 4 women and more than 1 in 10 men have experienced contact sexual violence, physical violence, or stalking by an intimate partner and reported significant short- or long-term impacts, such as post-traumatic stress disorder symptoms and injury.
- An estimated 1 in 2 individuals experienced at least one act of psychological aggression by an intimate partner during their lifetime.
- Female victims of intimate partner violence experience different patterns of violence (rape, physical violence, stalking) than male victims who most often experienced physical violence.
- Men and women who experienced these forms of violence were more likely to report frequent headaches, chronic pain, difficulty with sleeping, activity limitations, poor physical health, and poor mental health than men and women who did not experience these forms of violence.

# P arenthood

Parenthood is undergoing changes in the United States and elsewhere in the world. Children are less likely to be living with both parents, and women in the United States have fewer children than they did previously. The average fertility rate of women in the United States was about seven children in the early 1900s and has remained relatively stable at 2.1 since the 1970s (Hamilton, Martin, & Ventura, 2011; Martinez, Daniels, & Chandra, 2012). Not only are parents having fewer children, the context of parenthood has also changed. Parenting outside of marriage has increased dramatically among most socioeconomic, racial, and ethnic groups, although college-educated women are substantially more likely to be married at the birth of a child than are mothers with less education (Dye, 2010).

People are having children at older ages, too. This is not surprising given that many of the age markers for adulthood have been delayed, including marriage, completing education, establishing oneself at work, and gaining financial independence. In 2014 the average age for American first-time mothers was 26.3 years (CDC, 2015a). The birth rate for women in their early 20s has declined in recent years, while the birth rate for women in their late 30s has risen. In 2011, 40% of births were to women ages 30 and older. For Canadian women, birth rates are even higher for women in their late 30s than in their early 20s. In 2011, 52% of births were to women ages 30 and older, and the average first-time Canadian mother was 28.5 years old (Cohn, 2013). Improved birth control methods have also enabled women to postpone motherhood. Despite the fact that young people are more often delaying childbearing, most 18- to 29-year-olds want to have children and say that being a good parent is one of the most important things in life (Wang & Taylor, 2011).

## Influences on Parenting

Parenting is a complex process in which parents and children influence on another. There are many reasons that parents behave the way they do. The multiple influences on parenting are still being explored. Proposed influences on parenting include: Parent characteristics, child characteristics, and contextual can sociocultural characteristics. (Belsky, 1984; Demick, 1999).

## Parent C h aracteristics



Figure 15.7.8.4: A mother and daughter in Ethiopia

Parents bring unique traits and qualities to the parenting relationship that affect their decisions as parents. These characteristics include the age of the parent, gender, beliefs, personality, developmental history, knowledge about parenting and child development, and mental and physical health. Parents' personalities affect parenting behaviors. Mothers and fathers who are more agreeable, conscientious, and outgoing are warmer and provide more structure to their children. Parents who are more agreeable, less anxious, and less negative also support their children's autonomy more than parents who are anxious and less agreeable (Prinzie, Stams, Dekovic, Reijntes, & Belsky, 2009). Parents who have these personality traits appear to be better able to respond to their children positively and provide a more consistent, structured environment for their children.

Parents' developmental histories, or their experiences as children, also affect their parenting strategies. Parents may learn parenting practices from their own parents. Fathers whose own parents provided monitoring, consistent and age-appropriate discipline, and warmth were more likely to provide this constructive parenting to their own children (Kerr, Capaldi, Pears, & Owen, 2009). Patterns of negative parenting and ineffective discipline also appear from one generation to the next. However, parents who are dissatisfied with their own parents' approach may be more likely to change their parenting methods with their own children.

## Child Characteristics

Parenting is **bidirectional**. *Not only do parents affect their children, children influence their parents*. Child characteristics, such as gender, birth order, temperament, and health status, affect parenting behaviors and roles. For example, an infant with an easy temperament may enable parents to feel more effective, as they are easily able to soothe the child and elicit smiling and cooing. On the other hand, a cranky or fussy infant elicits fewer positive reactions from his or her parents and may result in parents feeling less effective in the parenting role (Eisenberg et al., 2008). Over time, parents of more difficult children may become more punitive and less patient with their children (Clark, Kochanska, & Ready, 2000; Eisenberg et al., 1999; Kiff, Lengua, & Zalewski, 2011). Parents who have a fussy, difficult child are less satisfied with their marriages and have greater challenges in balancing work and family roles (Hyde, Else-Quest, & Goldsmith, 2004). Thus, child temperament, as previously discussed in chapter 3, is one of the child characteristics that influences how parents behave with their children.

Another child characteristic is the gender of the child. Parents respond differently to boys and girls. Parents often assign different household chores to their sons and daughters. Girls are more often responsible for caring for younger siblings and household chores, whereas boys are more likely to be asked to perform chores outside the home, such as mowing the lawn (Grusec, goodnow, & Cohen, 1996). Parents also talk differently with their sons and daughters, providing more scientific explanations to their sons and using more emotion words with their daughters (Crowley, Callanan, Tenenbaum, & Allen, 2001).

## Contextual Factors and Sociocultural Characteristics

The parent–child relationship does not occur in isolation. Sociocultural characteristics, including economic hardship, religion, politics, neighborhoods, schools, and social support, also influence parenting. Parents who experience economic hardship are more easily frustrated, depressed, and sad, and these emotional characteristics affect their parenting skills (Conger & Conger, 2002). Culture also influences parenting behaviors in fundamental ways. Although promoting the development of skills necessary to function effectively in one's community is a universal goal of parenting, the specific skills necessary vary widely from culture to culture. Thus, parents have different goals for their children that partially depend on their culture (Tamis-LeMonda et al.,

2008). Parents vary in how much they emphasize goals for independence and individual achievements, maintaining harmonious relationships, and being embedded in a strong network of social relationships. Other important contextual characteristics, such as the neighborhood, school, and social networks, also affect parenting, even though these settings do not always include both the child and the parent (Brofenbrenner, 1989). Culture is also a contributing contextual factor, as discussed previously in chapter four. For example, Latina mothers who perceived their neighborhood as more dangerous showed less warmth with their children, perhaps because of the greater stress associated with living a threatening environment (Gonzales et al., 2011). The different influences are shown in **Figure** 15.7.8.3.

*Text in this chapter is taken directly and entirely from Lally & Valentine-French (2017). Some photographs in Lally & Valentine-French were replaced by O'Neil, McCarthy, & Williams.*

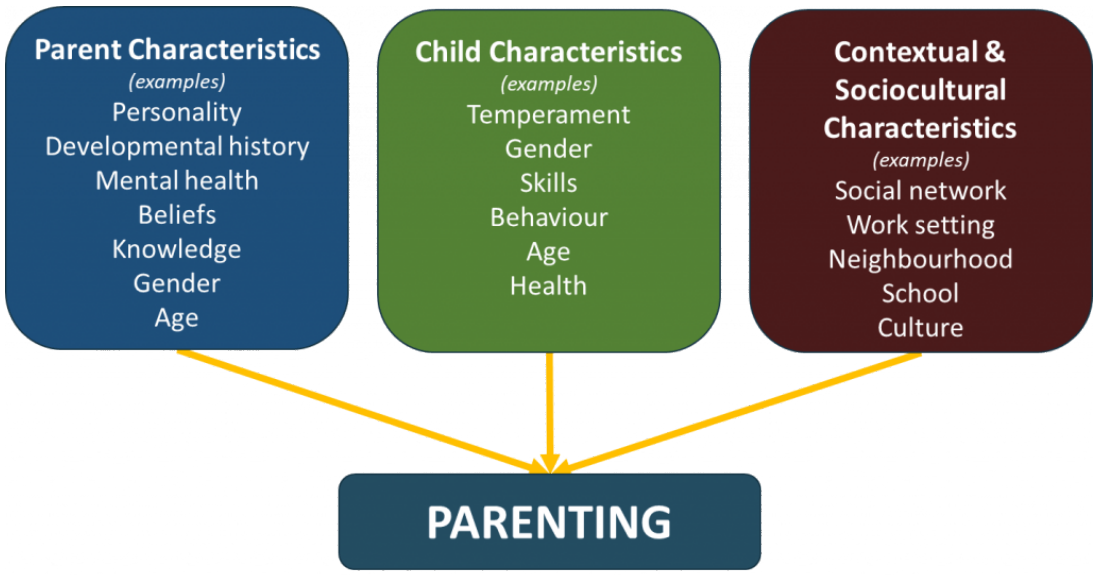



Figure 15.7.8.5: Influences on Parenting

This page titled 15.7.8: Young Adult Lifestyles is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Anne Baird (eCampus Ontario) via source content that was edited to the style and standards of the LibreTexts platform.

- 4.8: Young Adult Lifestyles by Anne Baird is licensed CC BY-NC-SA 4.0. Original source: https://ecampusontario.pressbooks.pub/alwaysdeveloping/.

# 15.7.9: Part 4 References


Allendorf, K. (2013). Schemas of marital change: From arranged marriages to eloping for love. *Journal of Marriage and Family, 75*, 453-469.

Alterovitz, S., & Mendelsohn, G. A. (2011). Partner preferences across the life span: Online dating by older adults. *Psychology of Popular Media Culture, 1(*S), 89-95.

American Psychological Association APA Committee on Aging. (2018). Life plan for the life span, 1-45. Retrieved from http://www.apa.org/pi/aging/lifespan.pdf

American Psychological Association. (2011 Updated 2014). Answers to your questions about transgender people, gender identity, and gender expression, 1-6. Retrieved from https://www.apa.org/topics/lgbt/transgender

American Psychological Association. (2008). Answers to your questions: for a better understanding of sexual orientation and homsexuality. Retrieved from https://www.apa.org/topics/lgbt/orientation

Arnett, J. J. (2000). Emerging adulthood: A theory of development from late teens through the twenties. *American Psychologist, 55*, 469-480.

Arnett, J. J. (2001). Conceptions of the transitions to adulthood: Perspectives from adolescence to midlife. *Journal of Adult Development, 8,* 133-143.

Arnett, J. J. (2003). Conceptions of the transition to adulthood among emerging adults in American ethnic groups. *New Directions for Child and Adolescent Development, 100*, 63–75.

Arnett, J. J. (2004). Conceptions of the transition to adulthood among emerging adults in American ethnic groups. In J. J. Arnett & N. Galambos (Eds.), *Cultural conceptions of the transition to adulthood: New directions in child and adolescent development*. San Francisco: Jossey-Bass.

Arnett, J. J. (2006). G. Stanley Hall's adolescence: Brilliance and non-sense. *History of Psychology, 9,* 186-197. Arnett, J.J. (2007). The long and leisurely route: Coming of age in Europe today. *Current History, 106*, 130-136.

Arnett, J. J. (2011). Emerging adulthood(s): The cultural psychology of a new life stage. In L.A. Jensen (Ed.), *Bridging cultural and developmental psychology: New syntheses in theory, research, and policy* (pp. 255–275). New York, NY: Oxford University Press.

Arnett, J. J., & Taber, S. (1994). Adolescence terminable and interminable: When does adolescence end? *Journal of Youth and Adolescence, 23*, 517–537.

Aquilino, W. S. (2006). Family relationships and support systems in emerging adulthood. In J. J. Arnett & J. L. Tanner (Eds.), *Emerging adults in America: Coming of age in the 21st century* (pp. 193-217). Washington, DC: American Psychological Association.

Back, M. D., Schmukle, S. C., & Egloff, B. (2008). Becoming friends by chance. *Psychological Science, 19*(5), 439–440. Bailey, J. M., & Pillard, R. C. (1991). A genetic study of male sexual orientation. *Archives of General Psychiatry, 48*, 1089-1096.

Bailey, J. M., Pillard, R. C., Neale, M. C. & Agyei, Y. (1993). Heritable factors influence sexual orientation in women. *Archives of General Psychology, 50,* 217-223.

Bartholomew, K. (1990). Avoidance of intimacy: An attachment perspective. *Journal of Social and Personal Relationships, 7,* 147-178. DOI: 10.1037/0022-3524.61.2.226.

Basseches, M. (1984). *Dialectical thinking and adult development*. Norwood, NJ: Ablex Pub.

Bauermeister, J. A., Johns, M. M., Sandfort, T. G., Eisenberg, A., Grossman, A. H., & D'Augelli, A. R. (2010). Relationship trajectories and psychological well-being among sexual minority youth. *Journal of Youth and Adolescence, 39*(10), 1148-1163.

Belsky, J. (1984). The determinants of parenting: A process model. *Child Development, 55*, 83–96.

Benokraitis, N. V. (2005). *Marriages and families: Changes, choices, and constraints* (5th ed.). Upper Saddle River, NJ: Pearson.

Berger, K. S. (2005). *The developing person through the life span* (6th ed.). New York: Worth.

Bisson, M. A., & Levine, T. R. (2009). Negotiating a friends with benefits relationship. *Archives of Sexual Behavior, 38,* 66–73. doi:10.1007/s10508-007-9211-2

Blanchard, R. (2001). Fraternal birth order and the maternal immune hypothesis of male homosexuality. *Hormones and Behavior, 40*, 105-114.

Blau, F. D., Ferber, M. A., & Winkler, A. E. (2010). *The economics of women, men and work.* (6th ed.). Boston, MA: Prentice Hall.

Bogaert, A. F. (2015). Asexuality: What it is and why it matters. *Journal of Sex Research, 52(*4), 362-379. doi:10.1080/00224499.2015.1015713

Bogle, K. A. (2007). The shift from dating to hooking up in college: What scholars have missed. *Sociology Compass, 1/2,* 775– 788.

Bogle, K. A. (2008). *Hooking up: Sex, dating, and relationships on campus.* New York, NY: New York University Press.

Bohlin, G., & Hagekull, B. (2009). Socio-emotional development from infancy to young adulthood. *Scandinavian Journal of Psychology, 50,* 592-601.

Boundless. (2016). Physical development in adulthood. *Boundless*. Retrieved from https://www.boundless.com/psychology/textbooks/boundless-psychology-textbook/human-development-14/early-and- middle-adulthood-74/physical-development-in-adulthood-287-12822/

Breiding, M. J., Smith, S. G., Basile, K. C., Walters, M. W., Chen, J., & Merrick, M. T. (2014). Prevalence and Characteristics of Sexual Violence, Stalking, and Intimate Partner Violence Victimization — National Intimate Partner and Sexual Violence Survey, UnitedStates, 2011. *Surveillance Summaries,* 63(SS08), 1-18.

Bronfenbrenner, U. (1989). Ecological systems theory. In R. Vasta (Ed.), *Annals of Child Development, Vol. 6* (pp. 187–251). Greenwich, CT: JAI Press.

Brooks-Gunn, J., & Lewis, M. (1981). Infant social perception: Responses to pictures of parents and strangers. *Developmental Psychology, 17*(5), 647–649.

Bumpass, L. L. (1990). What's happening to the family? Interactions between demographic and institutional change. *Demography, 27(4),* 483–498.

Butzer, B., & Campbell, L. (2008). Adult attachment, sexual satisfaction, and relationship satisfaction: A study of married couples. *Personal Relationships, 15,* 141-154.

Cain, S. (2012). *Quiet.* New York: Crown Publishing Group.

Campbell, L., Simpson, J. A., Boldry, J., & Kashy, D. A. (2005). Perceptions of conflict and support in romantic relationships: The role of attachment anxiety. *Journal of Personality and Social Psychology, 88,* 510-532.

Canadian Mental Health Association, & Rainbow Health Ontario. (2019). Lesbian, gay, bisexual, trans & queer identified people and mental health. Retrieved from https://ontario.cmha.ca/documents/lesbian-gay-bisexual-trans-queer-identified-people-and-mental-health/

Carlson, N. R. (2011). *Foundations of behavioral neuroscience* (8th ed.). Boston, MA: Pearson Education. Carroll, J. L. (2007). *Sexuality now: Embracing diversity* (2nd ed.). Belmont, CA: Thomson Learning.

Carroll, J. L. (2016). *Sexuality now: Embracing diversity* (5th ed.). Boston, MA: Cengage Learning.

CBC News. (2019). 'Alarming' increase in sexually transmitted infections found across Canada. Retrieved from https://www.cbc.ca/news/health/sti-rates-canada-1.5230987

Ceci, S. J., & Williams, W. M. (2011). Understanding current causes of women's under-representation in science. *Proceedings of the National Academy of Science of the United States of America, 108*(8), 3157-3162. doi:10.1073/pnas.1014871108

Centers for Disease Control and Prevention (2014). *Reported STDs in the United States*. Retrieved from http://www.cdc.gov/std/stats14/std-trends-508.pdf

Centers for Disease Control and Prevention (2015a). *Births and natality*. Retrieved from http://www.cdc.gov/nchs/fastats/births.htm

Centers for Disease Control and Prevention. (2015b). *Obesity and overweight*. Retrieved from http://www.cdc.gov/nchs/fastats/obesity-overweight.htm

Centers for Disease Control and Prevention. (2016). *Adult obesity causes and consequences*. Retrieved from http://www.cdc.gov/obesity/adult/causes.html

Chappell, K. D., & Davis, K. E. (1998). Attachment, partner choice, and perception of romantic partners: An experimental test of the attachment-security hypothesis. *Personal Relationships, 5*, 327–342.

Chess, S., & Thomas, A. (1987). *Origins and evolution of behavior disorders*. Cambridge, MA: Harvard University Press.

Chopik, W. J., Edelstein, R. S., & Fraley, R. C. (2013). From the cradle to the grave: Age differences in attachment from early adulthood to old age. Journal or Personality, 81 (2), 171-183 DOI: 10.1111/j. 1467-6494.2012.00793

Cicirelli, V. (2009). Sibling relationships, later life. In D. Carr (Ed.), *Encyclopedia of the life course and human development*. Boston, MA: Cengage.

Clark, L. A., Kochanska, G., & Ready, R. (2000). Mothers' personality and its interaction with child temperament as predictors of parenting behavior. *Journal of Personality and Social Psychology, 79*, 274–285.

Clark, L. A. & Watson, D. (1999). Temperament: A new paradigm for trait theory. In L.A. Pervin & O. P. John (Eds.), *Handbook of personality*. NY: Guilford.

Clarke, L., & Nichols, J. (1972). *I have more fun with you than anybody*. New York, NY: St. Martin's.

Cohen, P. (2013). *Marriage is declining globally. Can you say that?* Retrieved from https://familyinequality.wordpress.com/2013/06/12/marriage-is-declining/

Cohen-Bendehan, C. C., van de Beek, C. & Berenbaum, S. A. (2005). Prenatal sex hormone effects on child and adult sex-typed behavior: Methods and findings. *Neuroscience and Biobehavioral Reviews, 47,* 230-237.

Cohn, D. (2013). In Canada, most babies now born to women 30 and older. Pew Research Center.

Conger, R. D., & Conger, K. J. (2002). Resilience in Midwestern families: Selected findings from the first decade of a prospective longitudinal study. *Journal of Marriage and Family, 64*, 361–373.

Copen, C.E., Daniels, K., & Mosher, W.D. (2013) *First premarital cohabitation in the United States: 2006–2010 National Survey of Family Growth*. National health statistics reports; no 64. Hyattsville, MD: National Center for Health Statistics.

Côté, J., & Bynner, J. M. (2008). Changes in the transition to adulthood in the UK and Canada: the role of structure and agency in emerging adulthood. *Journal of Youth Studies, 11*(3), 251-268. doi:10.1080/13676260801946464

Council of Economic Advisors. (2015). *Gender pay gap: Recent trends and explanations*. Retrieved from https://www.whitehouse.gov/sites/default/files/docs/equal_pay_issue_brief_final.pdf

Crowley, K., Callanan, M. A., Tenenbaum, H. R., & Allen, E. (2001). Parents explain more often to boys than to girls during shared scientific thinking. *Psychological Science, 12*, 258–261.

Davidson, R. J. & Begley, S. (2012). *The emotional life of your brain*. New York: Penguin.

Davis, J. L., & Rusbult, C. E. (2001). Attitude alignment in close relationships. *Journal of Personality & Social Psychology, 81*(1), 65–84.

Demick, J. (1999). Parental development: Problem, theory, method, and practice. In R. L. Mosher, D. J. Youngman, & J. M. Day (Eds.), *Human development across the life span: Educational and psychological applications* (pp. 177–199). Westport, CT: Praeger.

Desai, S., & Andrist, L. (2010). Gender scripts and age at marriage in India. *Demography, 47*, 667-687. doi:10.1353/dem.0.0118

Desilver, D. (2016) *Millions of young people in the US and EU are neither working nor learning*. Pew Research Center (January 28, 2016). http://www.pewresearch.org/fact-tank/2016/01/28/us-eu-neet-population/

Diamond, M. (2002). Sex and gender are different: Sexual identity and gender identity are different. *Clinical Child Psychology and Psychiatry, 7*(3), 320-334.

Douglass, C. B. (2007). From duty to desire: Emerging adulthood in Europe and its consequences. *Child Development Perspectives, 1*, 101–108.

Driver, J., & Gottman, J. (2004). Daily marital interactions and positive affect during marital conflict among newlywed couples. *Family Process, 4*3, 301–314.

Dunn, J. (1984). Sibling studies and the developmental impact of critical incidents. In P.B. Baltes & O.G. Brim (Eds.), *Life-span development and behavior* (Vol 6). Orlando, FL: Academic Press.

Dunn, J. (2007). Siblings and socialization. In J. E. Grusec & P. D. Hastings (Eds.), *Handbook of socialization*. New York: Guilford.

Dye, J. L. (2010). Fertility of American women: 2008. Current Population Reports p. 20-563. Retrieved from www.census.gov/prod/2010pubs/p20-563.pdf.

Eisenberg, N., Fabes, R. A., Shepard, S. A., Guthrie, I.K., Murphy, B.C., & Reiser, M. (1999). Parental reactions to children's negative emotions: Longitudinal relations to quality of children's social functioning. *Child Development, 70*, 513-534.

Eisenberg, N., Hofer, C., Spinrad, T., Gershoff, E., Valiente, C., Losoya, S. L., Zhou, Q., Cumberland, A., Liew, J., Reiser, M., & Maxon, E. (2008). Understanding parent-adolescent conflict discussions: Concurrent and across-time prediction from youths' dispositions and parenting. *Monographs of the Society for Research in Child Development, 73*, (Serial No. 290, No. 2), 1-160.

Erikson, E. H. (1950). *Childhood and society*. New York: Norton.

Erikson, E. H. (1968). *Identity: Youth and crisis*. New York: Norton.

Finkel, E. J., Burnette J. L., & Scissors L. E. (2007). Vengefully ever after: Destiny beliefs, state attachment anxiety, and forgiveness. *Journal of Personality and Social Psychology, 92*, 871–886.

Fraley, R. C. (2013). *Attachment through the life course*. In R. Biswas-Diener & E. Diener (Eds), Noba textbook series: Psychology. Champaign, IL: DEF publishers. Retrieved from nobaproject.com.

Fraley, R. C., Hudson, N. W., Heffernan, M. E., & Segal, N. (2015). Are adult attachment styles categorical or dimensional? A taxometric analysis of general and relationship-specific attachment orientations. *Journal of Personality and Social Psychology, 109 (2),* 354-368.

Fraley, R. C., Roisman, G. I., Booth-LaForce, C., Owen, M. T., & Holland, A. S. (2013). Interpersonal and genetic origins of adult attachment styles: A longitudinal study from infancy to early adulthood. *Journal of Personality and Social Psychology, 104*, 8817-838.

Frazier, P. A, Byer, A. L., Fischer, A. R., Wright, D. M., & DeBord, K. A. (1996). Adult attachment style and partner choice: Correlational and experimental findings. *Personal Relationships, 3*, 117–136.

Freitas, A. L., Azizian, A., Travers, S., & Berry, S. A. (2005). The evaluative connotation of processing fluency: Inherently positive or moderated by motivational context? *Journal of Experimental Social Psychology, 41*(6), 636–644.

Frieden, T. (2011, January 14). *Morbidity and Mortality Weekly Report for the Centers for Disease Control* (United States, Center for Disease Control). Retrieved from http://www.cdc.gov/mmwr/preview/mmwrhtml/su6001a1.htm?s_su6001a1_w

Friedman, H. S., Tucker, J. S., Tomlinson-Keasey, C., Schwartz, J. E., Wingard, D. L., & Criqui, M. H. (1993). Does childhood

personality predict longevity? *Journal of Personality and Social Psychology, 65*, 176–185. doi:10.1037/0022-3514.65.1.176

Fry, R. (2016). *For first time in modern era, living with parents edges out other living arrangements for 18- to 34- year-olds*. Washington, D.C.: Pew Research Center.

Fryar, C. D., Carroll, M. D., & Ogden, C. L. (2014). *Prevalence of overweight, obesity, and extreme obesity among adults: United States, 1960-1962 through 2011-2012*. Retrieved from http://www.cdc.gov/nchs/data/hestat/obesity_adult_11_12/obesity_adult_11_12.htm

Galloway, G. (2017). Census 2016: More Canadians than ever are living alone, and other takeaways. *The Globe and Mail*. Retrieved from https://www.theglobeandmail.com/news/national/census-2016-statscan/article35861448/ 2/

Gallup Poll Report (2016). What millennials want from work and life. *Business Journal*. Retrieved from http://www.gallup.com/businessjournal/191435/millennials-work-life.aspx

Garcia, J. R., & Reiber, C. (2008). Hook-up behavior: A biopsychosocial perspective. *The Journal of Social, Evolutionary, and Cultural Psychology, 2,* 192–208.

Garcia, J. R., Reiber, C., Massey, S. G., & Merriwether, A. M. (2012). Sexual hookup culture: A review. *Review of General Psychology, 16*(2), 161-176. doi:10.1037/a0027911

Gates, G. J. (2011). *How many people are lesbian, gay, bisexual and transgender?* Retrieved from http://williamsinstitute.law.ucla.edu/research/census-lgbt-demographics-studies/how-many-people-are-lesbian-gay- bisexual-and-transgender/

Gonzales, N. A., Coxe, S., Roosa, M. W., White, R. M. B., Knight, G. P., Zeiders, K. H., & Saenz, D. (2011). Economic hardship, neighborhood context, and parenting: Prospective effects on Mexican-American adolescent's mental health. *American Journal of Community Psychology, 47*, 98–113. doi: 10.1007/s10464-010-9366-1

Gottman, J. M. (1999). *Couple's handbook: Marriage Survival Kit Couple's Workshop*. Seattle, WA: Gottman Institute. Gottman, J. M., Carrere, S., Buehlman, K. T., Coan, J. A., & Ruckstuhl, L. (2000). Predicting marital stability and divorce in newlywed couples. *Journal of Family Psychology, 14*(1), 42-58.

Gottman, J. M., & Levenson, R. W. (1992). Marital processes predictive of later dissolution: Behavior, physiology and health. *Journal of Personality and Social Psychology, 63*, 221–233.

Greenbaum, Z. (2019a). Opioids: A special report. Prevention as the first line of defense. *Monitor on Psychology, 50,* 50-55.

Greenbaum, Z. (2019b). Opioids: A special report. The stigma that undermines care. *Monitor on Psychology, 50*(6), 46-48.

Grello, C. M., Welsh, D. P., Harper, M. S., & Dickson, J. W. (2003). Dating and sexual relationship trajectories and adolescent functioning. *Adolescent & Family Health, 3,* 103–112.

Grusec, J. E., Goodnow, J. J., & Cohen, L. (1996). Household work and the development of concern for others. *Developmental Psychology, 32*, 999–1007.

Gwinnell, E. (1998). *Online seductions: Falling in love with strangers on the Internet*. New York: Johnson Publishing.

Hamilton, B. E., Martin, J. A., & Ventura, S. J. (2011). Births: Preliminary data for 2010. *National Vital Statistics Reports, 60*(2).

Hyattsville, MD: U.S. Department of Health and Human Services.

Harmon-Jones, E., & Allen, J. J. B. (2001). The role of affect in the mere exposure effect: Evidence from psychophysiological and individual differences approaches. *Personality & Social Psychology Bulletin, 27*(7), 889– 898.

Harvard Health Letter. (2012). *Raising your conscientiousness*. Retrieved from http://www.helath.harvard.edu

Hatfield, E., & Rapson, R. L. (2006). *Love and sex: Cross-cultural perspectives*. New York, NY: University Press of America.

Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social*

*Psychology, 52 (3),* 511-524.

Hendrick, C., & Hendrick, S. S. (Eds.). (2000). *Close relationships: A sourcebook*. Thousand Oaks, CA: Sage.

Heron, M. P., & Smith, B. L. (2007). Products – Health E Stats – Homepage. *Centers for Disease Control and Prevention*. Retrieved from http://www.cdc.gov/nchs/products/pubs/pubd/hestats/leadingdeath03/leadingdeath03.htm

Holland, A. S., Fraley, R. C., & Roisman, G. I. (2012). Attachment styles in dating couples: Predicting relationship functioning over time. *Personal Relationships, 19,* 234-246. doi: 10.1111/j.1475-6811.2011.01350.x

Hudson, N. W., Fraley, R. C., Vicary, A. M., & Brumbaugh, C. C. (2012). *Attachment coregulation: A longitudinal investigation of the coordination in romantic partners' attachment styles*. Manuscript under review.

Hyde, J. S., Else-Quest, N. M., & Goldsmith, H. H. (2004). Children's temperament and behavior problems predict their employed mothers' work functioning. *Child Development, 75*, 580–594.

Janicki, D., Kamarck, T., Shiffman, S., & Gwaltney, C. (2006). Application of ecological momentary assessment to the study of marital adjustment and social interactions during daily life. *Journal of Family Psychology, 20*, 168–172.

John, O. P., Naumann, L. P., & Soto, C. J. (2008). Paradigm shift to the integrative Big Five trait taxonomy: History, measurement, and conceptual issues. In O. P. John, R. R. Robins, & L. A. Pervin (Eds.), *Handbook of personality. Theory and research* (3rd ed., pp. 114–158). New York, NY: Guilford Press.

John, O. P., Robins, R. W., & Pervin, L. A. (2008). *Handbook of personality. Theory and research* (3rd ed.). New York, NY: Guilford Press.

Kagan, J. (2002). Behavioral inhibition as a temperamental category. In R.J. Davidson, K. R. Scherer, & H. H. Goldsmith (Eds.), *Handbook of affective sciences*. New York: Oxford University Press.

Kerr, D. C. R., Capaldi, D. M., Pears, K. C., & Owen, L. D. (2009). A prospective three generational study of fathers' constructive parenting: Influences from family of origin, adolescent adjustment, and offspring temperament. *Developmental Psychology, 45*, 1257–1275.

Kiff, C. J., Lengua, L. J., & Zalewski, M. (2011). Nature and nurturing: Parenting in the context of child temperament. *Clinical*

*Child and Family Psychology Review, 14*, 251–301. doi: 10.1007/s10567011-0093-4

Kinsey, A., Pomeroy, W.B., & Martin, C. E. (1948). *Sexual behavior in the human male*. Philadelphia, PA: Saunders.

Krebs, C., Lindquist, C., Warner, T., Fisher, B., & Martin, S. (2009). College women's experiences with physically forced, alcohol or other drug-enabled, and drug-facilitated sexual assault before and since entering college. *Journal of American College Health, 57*(6), 639-649.

Laursen, B., & Jensen-Campbell, L. A. (1999). The nature and functions of social exchange in adolescent romantic relationships. In W. Furman, B. B. Brown, & C. Feiring (Eds.), *The development of romantic relationships in adolescence* (pp. 50–74). New York: Cambridge University Press.

Lesthaeghe, R. J., & Surkyn, J. (1988). Cultural dynamics and economic theories of fertility change. *Population and Development Review 14(1),* 1–45.

Lucas, R. E. & Donnellan, A. B. (2011). Personality development across the life span: Longitudinal analyses with a national sample from Germany. *Journal of Personality and Social Psychology, 101*, 847–861

Madden, M. & Lenhart, A. (2006). Americans who are seeking romance use the Internet to help them in their search, but there is still widespread public concern about safety of online dating. Pew/Internet and American Life Project. Retrieved from http://www.pewinternet.org/Reports/2006/OnlineDating.aspx

Manning, W. S., Giordano, P. C., & Longmore, M. A. (2006). Hooking up: The relationship contexts of "nonrelationship" sex. *Journal of Adolescent Research, 21,* 459–483. doi:10.1177/0743558406291692

Martinez, G., Daniels, K., & Chandra, A. (2012). Fertility of men and women aged 15-44 years in the United States: National Survey of Family Growth, 2006-2010. *National Health Statistics Reports, 51*(April). Hyattsville, MD: U.S., Department of Health and Human Services.

McClure, M. J., Lydon., J. E., Baccus, J., & Baldwin, M. W. (2010). A signal detection analysis of the anxiously attached at speed-dating: Being unpopular is only the first part of the problem. *Personality and Social Psychology Bulletin, 36*, 1024–1036.

Menkin, J. A., Robles, T. F., Wiley, J. F., & Gonzaga, G. C. (2015). Online dating across the life sp an: Users' relationship goals. *Psychology and Aging, 30*(4), 987-993.

Miller, Z. (2018, 11/30/2018). 12 of the biggest differences between attending a university in the US and in Canada. Retrieved from https://www.insider.com/college-canada-us-differences-2018-11

Mita, T. H., Dermer, M., & Knight, J. (1977). Reversed facial images and the mere-exposure hypothesis. *Journal of Personality & Social Psychology, 35*(8), 597–601.

National Center for Transgender Equality. (2015). *National transgender discrimination survey*. Retrieved from http://www.transequality.org/issues/national-transgender-discrimination-survey

National Institute on Alcohol Abuse and Alcoholism. (2015). *College Drinking*. Retrieved from http://pubs.niaaa.nih.gov/publications/CollegeFactSheet/CollegeFact.htm

National Institute on Alcohol Abuse and Alcoholism. (2016). *Alcohol facts and statistics*. Retrieved from http://pubs.niaaa.nih.gov/publications/AlcoholFacts&Stats/AlcoholFacts&Stats.htm

National Institute on Drug Abuse. (2015). *College-age and young adults*. Retrieved from https://www.drugabuse.gov/related-topics/college-age-young-adults/college-addiction-studies-programs

NCHEMS. (2016a). *Percent of adults 18 to 24 with a high school diploma*. National Center for Higher Education Management Systems http://www.higheredinfo.org/dbrowser/?level=nation&mode=graph&state=0&submeasure=344

NCHEMS. (2016b). *Percent of adults 18 to 24 who are attending college*. National Center for Higher Education Management Systems http://www.higheredinfo.org/dbrowser/index.php?submeasure=331&year=2009&level=nation&mode=graph&state=0

NCHEMS. (2016c). *Percent of adults 25 to 49 who are attending college*. National Center for Higher Education Management Systems http://www.higheredinfo.org/dbrowser/index.php?submeasure=332&year=2009&level=nation&mode=graph&state=0

NCHEMS. (2016d). *Percent who earn a Bachelor's degree within 6 years*. National Center for Higher Education Management Systems http://www.higheredinfo.org/dbrowser/?level=nation&mode=graph&state=0&submeasure=27

Nelson, L. J., Badger, S., & Wu, B. (2004). The influence of culture in emerging adulthood: Perspectives of Chinese college students. *International Journal of Behavioral Development, 28*, 26–36.

OECD. (2014). *Education at a Glance 2014: United States*, OECD Publishing. Retrieved from https://www.oecd.org/unitedstates/United%20States-EAG2014-Country-Note.pdf

OECD. (2015). *Education at a Glance 2015: OECD Indicators*, OECD Publishing. Retrieved from http://dx.doi.org/10.1787/eag-2015-en

Oliver, M. B., & Hyde, J. S. (1993). Gender differences in sexuality: A meta-analysis. *Psychological Bulletin, 114,* 29–51. doi:10.1037/0033-2909.114.1.29

Orpana, H. M., Lang, J. J., Baxi, M., Halverson, J., Kozloff, N., Cahill, L., . . . Morrison, H. (2018). Canadian trends in opioid-related mortality and disability from opioid use disorder from 1990 to 2014 through the lens of the Global Burden of Disease Study. *Health promotion and chronic disease prevention in Canada: research, policy and practice, 38*(6), 234-243.

Owen, J., & Fincham, F. D. (2011). Young adults' emotional reactions after hooking up encounters. *Archives of Sexual Behavior, 40,* 321–330. doi:10.1007/s10508-010-9652-x

Pascarella, E.T. (2006). How college effects students: Ten directions for future research. *Journal of College Student Development,*

*47*, 508-520.

Patton, W. & McMahon, M. (1999). *Career development and systems theory: A new relationship*. Brooks Cole Publishers. Pew Research Center. (2015*). Gay marriage around the world*. Retrieved from http://www.pewforum.org/2015/06/26/gay-marriage-around-the-world-2013/

Phinney, J. S. & Baldelomar, O. A. (2011). Identity development in multiple cultural contexts. In L. A. Jensen (Ed.), *Bridging cultural and developmental psychology: New syntheses in theory, research and policy* (pp. 161-186). New York, NY: Oxford University Press.

Potard, C., Courtois, R., & Rusch, E. (2008). The influences of peers on risky behavior during adolescence. *European Journal of Contraception and Reproductive Health Care, 13*(30, 264-270.

Prinzie, P., Stams, G. J., Dekovic, M., Reijntjes, A. H., & Belsky, J. (2009). The relations between parents' Big Five personality factors and parenting: A meta-review. *Journal of Personality and Social Psychology, 97*, 351–362.

Rankin, L. A. & Kenyon, D. B. (2008). Demarcating role transitions as indicators of adulthood in the 21st century. Who are they? *Journal of Adult Development, 15*(2), 87-92. doi: 10.1007/s10804-007-9035-2

Reis, H. T., & Aron, A. (2008). Love: What is it, why does it matter, and how does it operate? *Perspectives on Psychological Science, 3*(1), 80–86.

Ripley, A. (2018, 9/11/2018). Why is college in America so expensive? The outrageous price of a U.S. degree is unique in the world. *The Atlantic,* 10.

Roberts, B. W., Kuncel, N., Shiner, R., N., Caspi, A., & Goldberg, L. R. (2007). The power of personality: The comparative validity of personality traits, socioeconomic status, and cognitive ability for predicting important life outcomes. *Perspectives on Psychological Science, 2(4)*, 313–345. doi:10.1111/j.1745-6916.2007.00047.

Roberts, B. W., & Mroczek, D. K. (2008). Personality trait change in adulthood. *Current Directions in Psychological Science, 17*, 31–35.

Rosenberger, N. (2007). Rethinking emerging adulthood in Japan: Perspectives from long-term single women. *Child Development Perspectives, 1*, 92–95.

Rottinghaus, P. J., Coon, K. L., Gaffey, A. R., & Zytowski, D. G. (2007). Thirty-year stability and predictive validity of vocational interests. *Journal of Career Assessment, 15 (1),* 5-23.

Rudman, L. A. (1998). Self-promotion as a risk factor for women: The costs and benefits of counterstereotypical impression management. *Journal of Personality and Social Psychology, 74*(3), 629-645.

Ryan, C. L. & Bauman, K. (March 2016). *Educational Attainment in the United States: 2015*. U.S. Department of Commerce Economics and Statistics Administration. Retrieved from https://www.census.gov/content/dam/Census/library/publications/2016/demo/p20-578.pdf

Ryle, R. (2011). *Questioning gender*. Los Angeles, CA: Sage Publishing.

Schindler, I., Fagundes, C. P., & Murdock, K. W. (2010). Predictors of romantic relationship formation: Attachment style, prior relationships, and dating goals. *Personal Relationships, 17,* 97-105.

Schmitt, D. P., Alcalay, L., Allik, J., Ault, L., Austers, I., Bennett, K. L., . . . Zupane`ie`, A. (2003). Universal sex dif ferences in the desire for sexual variety: Tests from 52 nations, 6 continents, and 13 islands. *Journal of Personality and Social Psychology, 85*, 85–104. doi:10.1037/ 0022-3514.85.1.85

Schwartz, G., Kim, R., Kolundzija, A., Rieger, G., & Sanders, A. (2010). Biodemographic and physical correlates of sexual orientation in men. *Archives of Sexual Behavior, 39*, 93-109.

Simpson, J. A., Collins, W. A., Tran, S., & Haydon, K. C. (2007). Attachment and the experience and expression of emotions in adult romantic relationships: A developmental perspective. *Journal of Personality and Social Psychology, 92*, 355–367.

Simpson, J. A., Rholes, W. S., Oriña, M. M., & Grich, J. (2002). Working models of attachment, support giving, and support seeking

in a stressful situation. *Personality and Social Psychology Bulletin, 28*, 598-608.

Sharratt, A. (November 2, 2018). Canadian University Report Cannabis: Universities' plans around cannabis legalization focused on student awareness and safety. *The Globe and Mail*. Retrieved from https://www.theglobeandmail.com/canada/education/canadian-university-report/article-universities-plans-around-cannabis-legalization-focused-on-student/

Sinnott, J. D. (1998). *The development of logic in adulthood*. NY: Plenum Press.

Smith, A., & Anderson, M. (2016). 5 facts about online dating. Pew Research Center (February 29, 2016) http://www.pewresearch.org/fact-tank/2016/02/29/5-facts-about-online-dating

Society for the Study of Emerging Adulthood (SSEA). (2016). *Overview*. Retrieved from http://ssea.org/about/index.htm

Statistics Canada. (2017). *Education in Canada: Key results from the 2016 Census*. (Component of Statistics Canada catalogue no. 11-001-X). The Daily: Statistics Canada Retrieved from https://www150.statcan.gc.ca/n1/daily-quotidien/171129/dq171129a-eng.pdf.

Statistics Canada. (2018). *Obesity in Canadian adults, 2016 and 2017* (11-627-M). Ottawa: Statistics Canada Retrieved from https://www150.statcan.gc.ca/n1/pub/11-627-m/11-627-m2018033-eng.htm2

Sternberg, R. (1988). *A triangular theory of love*. New York: Basic.

Super, D. E. (1980). A life-span life-space approach to career development. *Journal of Vocational Behavior, 13*, 282-298.

Tamis-LeMonda, C. S., Way, N., Hughes, D., Yoshikawa, H., Kalman, R. K., & Niwa, E. Y. (2008). Parents' goals for ch ildren: The dynamic coexistence of individualism and collectivism in cultures and individuals. *Social Development, 17*, 183–209. doi:10.1111/j.1467.9507.2007.00419.x

Tannen, D. (1990). *You just don't understand: Women and men in conversation*. New York: Morrow.

Thornton, A. (2005). *Reading history sideways: The fallacy and enduring impact of the developmental paradigm on family life*. Chicago: University of Chicago Press.

TICAS. (2015). *Student debt and the class of 2014,* The Institute for College Access & Success. Retrieved from http://ticas.org/sites/default/files/pub_files/classof2014.pdf

Tye, M. H. (2006). Social inequality and well-being: Race-related stress, self-esteem, and life satisfaction among African American gay and bisexual men. *Dissertation Abstracts International: Section B, 67*(4-B), 0419-4217.

UNdata (2010). Gross enrollment ratio in tertiary education. United Nations Statistics Division. Retrieved November 5, 2010, from http://data.un.org/Data.aspx?d=GenderStat&f=inID:68

United Nations Development Programme (UNDP). (2011). *Human development report*. NY: Oxford University Press.

Untied, A., Orchowski, L., Mastroleo, N., & Gidycz, C. (2012). College students' social reactions to the victim in a hypothet ical sexual assault scenario: The role of victim and perpetrator alcohol use. *Violence and Victims, 27*(6), 957-972.

Volko, N. D. (2004, September 19). *Exploring the Whys of Adolescent Drug Use*. (United States, National Institute on Drug Abuse). Retrieved from http://www.drugabuse.gov/NIDA_notes/NNvol19N3/DirRepVol19N3.html

Wang, W., & Parker, K. (2014). Record share of Americans have never married: As values, economics and gender patterns change. Washington, DC: Pew Research Center. http://www.pewsocialtrends.org/files/2014/09/2014-09-24_Never- Married-Americans.pdf

Wang, W., & Taylor, P. (2011). *For Millennials, parenthood trumps marriage*. Washington, DC: Pew Research Center.

Welsh, D. P., Grello, C. M., & Harper, M. S. (2006). No strings attached: The nature of casual sex in college students. *Journal of Sex Research, 43,* 255–267. doi:10.1080/00224490609552324

World Health Organization. (2019). Sexually transmitted infections (STIs). [August 5, 2019]. *Newsroom/Fact sheets*. Retrieved from World Health Organization website: https://www.who.int/news-room/fact-sheets/detail/sexually-transmitted-infections-(stis)

Wighton, K. (2016). World's obese population hits 640 million, according to largest ever study. *Imperial College*. Retrieved from http://www3.imperial.ac.uh/newsandeventspggrp/imperialcollege/newssummary/news_311-3-2016-22-34-39

Williams, L., Kabamalan, M., & Ogena, N. (2007). Cohabitation in the Philippines: Attitudes and behaviors among young women and men. *Journal of Marriage and Family, 69*(5), 1244–1256.

Witt, J. (2009). *SOC*. New York: McGraw Hill.

Yu, J., & Xie, Y. (2015). Cohabitation in China: Trends and determinants. *Population & Development Review, 41 (4),* 607-628.

Zebrowitz, L. A., Bronstad, P. M., & Lee, H. K. (2007). The contribution of face familiarity to ingroup favoritism and stereotyping. *Social Cognition, 25*(2), 306–338.

This page titled 15.7.9: Part 4 References is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Anne Baird (eCampus Ontario) via source content that was edited to the style and standards of the LibreTexts platform.

- 4.9: Part 4 References by Anne Baird is licensed CC BY-NC-SA 4.0. Original source: https://ecampusontario.pressbooks.pub/alwaysdeveloping/.

# 15.8: PHYSICAL AND COGNITIVE DEVELOPMENT IN ADOLESCENCE (AGES 12 TO 18)


15.8.1: What Does Psychology Say?

15.8.2: Physical Growth and Development in Adolescence

15.8.3: Puberty, Sexual Behavior, and Sexual Health in Adolescence

15.8.4: Cognition in Adolescence

15.8.5: Decision-Making and Risky Behaviors in Adolescence

15.8.6: Key Terms

15.8.7: Summary

15.8.8: Review Questions

15.8.9: Check Your Understanding Questions

15.8.10: Personal Application Questions

15.8.11: Essay Questions



This page titled 15.8: Physical and Cognitive Development in Adolescence (Ages 12 to 18) is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

- 9: Physical and Cognitive Development in Adolescence (Ages 12 to 18) by OpenStax is licensed CC BY 4.0. Original source: https://openstax.org/details/books/lifespan-development.

# 15.8.1: What Does Psychology Say?



Figure 9.1 Adolescence is a time of significant change in both body and mind. (credit: modification of work “CGvsWebb-2” by Ron B/Flickr, CC BY 2.0)

Fourteen-year-old Miguel jumps down the stairs with just minutes to go before the morning school bus. He overslept again and didn’t lay out his baseball practice uniform the previous night. He grunts an empty apology to his mother whom he now towers over as he packs his backpack. Later that day, his French teacher says he can’t use the restroom because of the school policy limiting restroom use to one student at a time; he finds himself arguing with the teacher that the policy doesn’t make any sense. At lunch, he and his friends trade jokes and have good laughs. After honors algebra class ends, Miguel is off to a two-hour baseball practice. He comes home exhausted, eager to listen to music, play video games, and relax before doing his homework. Later that night, his mother checks on him, finds him asleep but still in his clothes, and straightens the books and papers on his desk.

Miguel’s behaviors and interactions firmly situate him within adolescence—a transition period leading him from childhood toward adulthood in many dimensions. Miguel and those in his life will likely have many questions as he moves through this stage, including the following:

- Is arguing with authority figures a typical part of adolescence?
- Are the changes in sleep needs and habits coming from a lack of motivation, a need for more sleep, or something else?
- How do adolescents think through risky decisions?
- Is academic achievement just a matter of ability, or do other factors influence educational outcomes for adolescents?

In this chapter you will explore these questions and others about the significant leaps in physical and cognitive development that occur during adolescence.

This page titled 15.8.1: What Does Psychology Say? is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

- 9.0: What Does Psychology Say? by OpenStax is licensed CC BY 4.0. Original source: https://openstax.org/details/books/lifespan-development.

# 15.8.2: Physical Growth and Development in Adolescence

**Learning Objectives**

By the end of this section, you will be able to:

- Identify the milestones of physical development in adolescence
- Describe major aspects of brain development in adolescence
- Explain the general health-care needs of adolescents

It's the sex ed unit in health class, and Latisha is learning some helpful information but also navigating the awkwardness she feels in the classroom. The teacher has explained the technical stuff and tries to make a joke here and there to be relatable, but she gives off a vibe of being uncomfortable, and that makes it harder for Latisha to bring up questions she has. The teacher showed a diagram and used the word “vulva,” but Latisha doesn't feel sure she knows what part of the female body that is and is too embarrassed to ask. Other students in the class have questions and observations running through their minds. “I'm starting to get stinky armpits after gym class and am not sure what to do about that.” “Does everyone notice when my voice cracks?” "I know I'm supposed to get underarm and pubic hair, but I found a dark hair near my nipple. Is this normal?"

It's normal for adolescents to have many questions about the developments their bodies are undergoing. In this section, you will learn more about the physical changes of the teen years and how to support healthy physical growth at this stage of the lifespan.

## Physical Development and Activity

The lifespan period of adolescence entails the physical, cognitive, social, and emotional transitions of an individual from childhood to adulthood. The physical changes of adolescence are often dramatic and noticeable. Although growth and development typically occur in spurts, there is an expected order of physical development associated with the adolescent period.

From a purely physical standpoint, adolescence is the period of growth and development that transforms a child’s body into a fully grown adult body. During periods of rapid growth, developing teens may report temporary discomfort in the form of bodily aches and growing pains. Specifically, growing pains mainly affect children between four and fourteen years of age (Lehman & Carl, 2017; Pavone et al., 2011). With these new bodies comes re-learning how to move about fluidly through gross motor skills, as evidenced by the occasional physical awkwardness that often accompanies adolescent growth periods.

Muscle mass and fat tissue increase along with height, but the distribution of muscle and fat is typically different for adolescent males and females. In males, the shoulder to waist ratio increases with broader shoulders and a thinner waist, whereas in females, the hips increase relative to the shoulders and waist. These biological sex differences in muscle and fat distribution often result in slight to moderate size differences as well as differences in muscle strength, cardiovascular endurance, running speed, throwing velocity, and jumping ability over the course of adolescence. These sex-based differences are largely genetically and biologically based, although cultural and social expectations about the activities children participate in likely come into play as well (Beltran-Valls et al., 2019; Courtright, et al., 2013; Hyde, 2005). Children’s height and weight can also vary based on racial and ethnic background. Generally, children from African countries are a bit taller than those of European or North American descent, who in turn are a bit taller than those of Asian descent (Roser et al., 2021).

Though we see some physical differences based on things like ethnoracial heritage and sex assigned at birth, it is important to also note that there is wide individual variability. This individual variability in physical growth is based on a host of factors like inherited genes, nutrition and access to other environmental resources, like clean air and water. For example, several studies have found that people who live in less polluted areas are likely to be taller and have better skeletal maturation (Schell & Rousham, 2022).

In psychology, we are often interested in understanding both the group-level differences and the individual diversity and variability. For example, in competitive ice swimming, we often see that professional male swimmers often swim faster that professional female swimmers due to higher muscle mass and taller stature. However, females are more likely to close that distance when swimming longer distance, perhaps due in part to better protective insulation and buoyancy from having a higher body fat percentage (Oppermann et al., 2022). This demonstrates that multiple factors can impact and influence physical

differences and how they in turn impact performance or skill differences.

Adolescence is also a crucial time during which individuals develop lifestyles and behavioral patterns that will endure across their lifetime. For this reason, routines promoting health, such as regular exercise, should be instilled as early lifestyle habits (Kumar et al., 2015). Several motivational factors influence teens' interest and participation in physical activity and exercise, which in turn leads to differences in physical growth and overall strength. While research shows that adolescents give competition, social recognition, challenge, affiliation, fun or well-being as the main reasons for doing physical activity, other factors like parental guidance, body image, social anxiety, and lack of time may pose barriers (Peykari et al., 2015; Portela-Pino et al., 2019).

Social factors can also influence differences in physical activity and health behaviors. Gender differences are noted in adolescent participation in sport, exercise, and physical activity. For instance, Slater and Tiggemann (2010) noted that girls aged thirteen to fifteen years stopped participating in sports and exercise due to worries about their appearance. A follow-up study showed that teasing and body image issues further contributed to reduced participation in sports and other physical activities among girls aged twelve to sixteen years (Slater & Tiggemann, 2011). Overall, physical activity during adolescence is influenced by many factors including access to exercise and sports programs, and individuals' motor competence and interests.

## Brain Development

The same hormones that trigger physical development also lead to dramatic brain growth and development during adolescence. Over the past few decades, there has been a surge of research into the developing adolescent brain. We now know that the teenage brain, although undergoing rapid development, is immature until the midtwenties (e.g., American College of Pediatricians, 2022; Blakemore, 2008; Guyer et al., 2016). Adolescence marks the point where the brain achieves its full adult size and weight of roughly 3 pounds, yet brain development continues in several areas in early adulthood. This means that although we should expect growth across the period of adolescence, brain maturation continues beyond the adolescent period.

Several brain structures undergo particularly important developments during adolescence. The frontal lobe and the prefrontal cortex are the center of executive functioning—where rationality, decision-making, planning, and organization take place. A fully mature frontal lobe helps to regulate many of the brain's structures and functions, especially through the process of inhibition of behaviors that may not be appropriate socially or for other reasons. Additionally, a collection of sub-cortical brain structures, known as the limbic system, is also developing over the course of adolescence. The limbic system includes the amygdala, responsible for emotional processing; hippocampus, which governs memory formation; thalamus, which controls sensory input and response; and hypothalamus, which is the control center for hormone production. Each of these brain structures connect and coordinate with other areas of the brain, especially the frontal lobe and prefrontal cortex (Figure 9.2).

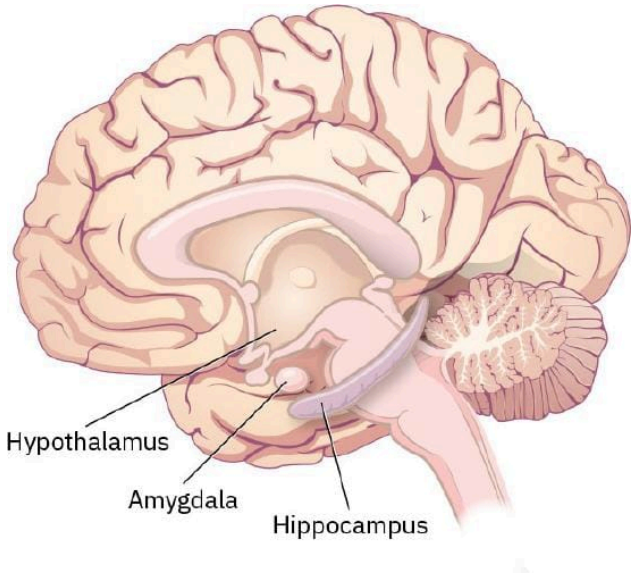



Figure 9.2 The limbic system regulates emotion and other behaviors. It includes parts of the cerebral cortex located near the center of the brain, including the hippocampus as well as the thalamus, hypothalamus, and amygdala. (CC BY 4.0; Rice University & OpenStax)

As stated earlier, the frontal lobe is intricately connected to the limbic system. This connection is crucial for regulating emotional responses and making decisions based on both logic and feelings. Research has shown that during adolescence, the development

of the frontal lobe and its connections to the limbic system are still maturing; this can be associated with difficulties in managing emotions and impulsivity (Casey et al., 2008). This means adolescents are likely to sometimes have difficulties with things like inhibition, emotional regulation, and attention. For example, you might remember a time when you got really excited (limbic system activation) and found yourself blurting out something that you wish you hadn't said before you could stop yourself (frontal lobe contribution).

Research confirms that developmental immaturities in the areas of response inhibition, cognitive control, attentional regulation, and other related complex cognitive skills result from gradual maturing of the prefrontal cortex and other frontal regions (Spear, 2013). Common behavioral experiences in adolescence—like testing risky behaviors, being distracted or having difficulty staying engaged, or failing to consider consequences of choices—result from the stage of brain development at this age. However, the frontal lobe develops swiftly during adolescence, allowing for increasingly complex cognitive tasks. It is the last structure to mature in humans, at around age twenty-five years.

Adolescents steadily increase their ability to recognize, process, and think in more sophisticated ways about emotional experiences, but the relative lack of coordination and integration between the limbic system and the prefrontal cortex means that emotions can frequently override careful planning and decision-making. For example, a fifteen-year-old might feel insulted by a friend's poorly worded comment, though the insult might be very slight and have a history of complicated friendship experiences behind it. But because the frontal lobe isn't yet efficiently connected to the amygdala, the offended teen lacks the fully developed ability to think through and weigh the consequences of her next move. We shouldn't be surprised when she yells at her friend. This lack of impulse control is a marker of psychosocial immaturity during adolescence (Casey & Caudle, 2013; Icenogle & Cauffman, 2021; Steinberg & Scott, 2003).

To summarize, the connections between the decision-making center (prefrontal cortex) and the emotional areas (a.k.a. limbic system) of teens' brains are still growing but not always at the same pace. Because of this, teenagers who are experiencing a lot of emotional arousal might find it difficult to articulate their thoughts or explain their actions as they are doing something.

With age and life experiences of adolescence, the brain's synaptic connections increase, resulting in significant improvements in thinking and processing skills (American College of Pediatricians, 2022). At the same time, neural circuits or pathways that are not used are eliminated through synaptic pruning. You might guess that the loss of synapses, the connections between neurons, would result in loss of function or ability, but the opposite is true—synaptic pruning ensures that brain pathways that are more frequently used, and consequently are more important, are reinforced and strengthened.

**Link to Learning**

Cognitive neuroscientist Sarah-Jayne Blakemore examines the differences between the prefrontal cortex of adolescents and that of adults to illustrate how "teenage" behaviors typically stem from the growing and developing brain.

## Nutrition, Sleep, and Health Care

Adolescents' bodies and brains undergo a tremendous amount of change that is taxing both physically and emotionally. What can adolescents and their caregivers do to help make this transition as healthy as possible? The answer may sound familiar: remind adolescents about the building blocks of a healthy life and model good health behaviors for them. In other words, proper nutrition, adequate sleep, and regular visits with a health-care provider.

Proper nutrition is essential for the rapid growth and development of adolescence. Dietary choices and habits established during adolescence greatly influence future health, and many studies report that teens consume few fruits and vegetables and insufficient calcium, iron, vitamins, and minerals for healthy development (Christian & Smith, 2018). Current recommendations for females and males at various points in adolescence and adulthood are shown in Figure 9.3. Females in mid-adolescence need an average of 1,800 calories per day, while males require an average of 2,200. Calcium, iron, and zinc are recommended essential nutrients, along with steady intake of other vitamins and nutrients (Das et al., 2017). For example, nine- to thirteen-year-old males and females require 8 mg of iron per day, but this increases to 11 mg for males and 15 mg for females from ages fourteen to eighteen years (NIH, 2013). This difference is due to differences in the role of puberty in the body.

| Dietary Reference Intakes (DRIs) Recommendations | | | | | | |
|---|---|---|---|---|---|---|
| Macronutrients, Minerals & Vitamins | Females | | | Males | | |
| | 9–13 | 14–18 | 19–30 | 9–13 | 14–18 | 19–30 |
| Calories | 1,600 | 1,800 | 2,000 | 1,800 | 2,200 | 2,400 |
| Protein (g) | 34 | 46 | 46 | 34 | 52 | 56 |
| Fiber (g) | 22 | 25 | 28 | 25 | 31 | 34 |
| Calcium (mg) | 1,300 | 1,300 | 1,000 | 1,300 | 1,300 | 1,000 |
| Iron (mg) | 8 | 15 | 18 | 8 | 11 | 8 |
| Zinc (mg) | 8 | 9 | 8 | 8 | 11 | 11 |
| Vitamin A (mcg) | 600 | 700 | 700 | 600 | 900 | 900 |
| Vitamin C (mg) | 45 | 65 | 75 | 45 | 75 | 90 |
| Vitamin B-12 (mcg) | 1.8 | 2.4 | 2.4 | 1.8 | 2.4 | 2.4 |

Source: USDA. (2020). Dietary Guidelines for Americans, 2020–2025.

Figure 9.3 Though the numbers are often quite similar the nutritional needs of adolescents vary between sexes and at different age range. Notice the increased calorie need over the adolescent development stage and the lowered suggested calcium once adolescents reach age nineteen years. (data source: USDA; attribution: Copyright Rice University, OpenStax, under CC BY 4.0 license)

Adolescents' nutritional status, which is the extent to which they meet their bodies' nutritional needs, is influenced by their social, economic, and political contexts. For example, economic factors and local food systems affect families' access to both nutritious and unhealthy foods. Cultural factors influence the foods on a teen's plate and the prevalence (or absence) of home-cooked meals (Keats et al., 2018). Globally, total energy, protein, and fat intakes are higher among younger adolescent females than older females. Protein and fat intake is also higher in urban areas. Fruit and vegetable intake is relatively low, with just over one-third of females reporting eating vegetables daily and fewer than half reporting daily fruit consumption (Keats et al., 2018).

Sleep is an essential part of a healthy life and serves a restorative function for adolescents' developing bodies and brains. The human growth hormone is secreted primarily during the deepest portions of sleep, making sleep particularly critical during the growth periods of childhood and adolescence. However, the prevalence of social media and excessive screen use at night have increased markedly in recent decades, and these habits can disrupt sleep onset and quality for teens (Cain et al., 2010). Significant health and educational concerns have been associated with even mild sleep deprivation, including greater risk for accidents and injuries, hindered learning, memory loss, aggression, metabolism changes, and poor self-esteem (Sharman & Illingworth, 2020).

Our sleep needs change across the lifespan. Based on sleep research, the Centers for Disease Control (CDC) provides guidelines for sleep requirements during adolescence: children ages six through twelve years need nine to twelve hours of sleep per night, whereas teens ages thirteen through eighteen years need eight to ten hours per night. Given these guidelines, data from the United States show that only 40 percent of middle school students and just 30 percent of high school students get the recommended amount of sleep. In other words, teens in the United States are sleep deprived. Only about 20 percent of U.S. teenagers sleep the recommended 9.25 hours a night (Hirshkowitz et al., 2015; National Sleep Foundation [NSF] 2006). This lack of sleep contributes to a variety of poor academic, physical, and mental health outcomes (Owens, 2014; Sharman & Illingworth, 2020; Winsler et al., 2015), despite the fact that adolescents tend to average two more hours of sleep on weekends than on school days (Galina et al., 2021; National Academy of Sciences, 2000; Wheaton et al., 2018).

### Link to Learning

Getting enough sleep is important for people of all ages to stay in good health. Learn how much sleep you need each day, check the CDC recommendations.

A recent study of United States high school students found the odds of a sleep-deprived student feeling sad and hopeless increased by 38 percent for each recommended hour of sleep a student missed. Additionally, the odds of reporting serious suicidal ideation increased by 42 percent and the odds of having attempted suicide increased by 58 percent. (Winsler et al., 2015). The relationship between sleep duration and suicidal ideation was stronger for male teens, while sleep duration was more

strongly associated with hopelessness for Native American and White students than for other minoritized students. While this study reveals a strong link between sleep deprivation and mental health issues in adolescents, we can't say for sure that one causes the other. It's also possible that pre-existing mental health problems or substance use can lead to poor sleep.

Psychologists have also uncovered another major change in adolescents' sleep–wake cycle. The circadian rhythm is the body's biologically based pattern of physiological events that follow a daily rhythm, including alertness levels, hunger, blood pressure, and sleepiness. Mary Carskadon and colleagues discovered that adolescents experience a phase shift in their sleep–wake cycle leading them to naturally wake up later and go to bed later if allowed (Taylor et al., 2005). This tendency is thought to result from an internal biological process related to pubertal changes in the secretion of melatonin (a hormone that aids sleep), as well as changes in adolescents' sensitivity to ambient light. Further studies of adolescent sleep patterns support this finding. The American Academy of Pediatrics (2014) published a policy statement strongly recommending middle and high schools adjust start times to encourage and allow students to get adequate sleep, in turn improving physical and mental health, academic performance, safety, and quality of life. A literature review noted starting school later for adolescents led to general improvements in attendance and lower rates of tardiness, falling asleep in class, depression symptoms, and motor vehicle crashes (Wheaton et al., 2017).

### Link to Learning

The lack of proper or disrupted sleep can lead to significant health issues, yet identifying sleep problems isn't always straightforward. That is why keeping a sleep diary is a useful tool. Keeping a sleep diary helps track sleep patterns, monitor habits, and document any issues with sleep.

Adolescents continue to need routine preventive health-care, including care that is sensitive and responsive to new health issues brought about by the developmental changes of adolescence. Older children (ages twelve to seventeen years) in the United States were less likely to receive sufficient preventive care, one or more visits in a year, compared to younger children (birth to eleven years) (Conmy et al., 2023). Preventive care includes any prevention or routine appointment with a doctor, dentist, nurse, or other health-care professional and includes screening for physical and mental health needs. For example, seeing a dentist for a cleaning every six months is a form of preventive dental care. Similarly, having your vision screened at an annual doctor's appointment is preventive vision care. In terms of mental health preventive care, children and adolescents should be screened for abuse or unstable home environment, stress or anxiety, and depression. By adolescence, these screenings should also include suicide risk screenings. Notably, adolescents face a higher risk of depression and suicide risk compared to younger children, raising concerns about potential missed behavioral health issues. Overall, children of all ages received less preventive care in 2020 and 2021 compared to previous years (Conmy et al., 2023).

The American Academy of Pediatrics recommends checking the following during a teen's annual medical checkup, which should include a physical exam: height and weight, body mass index (BMI), blood pressure, and condition of the skin and spine. Some providers may test for anemia, depression, cholesterol, hearing, vision, HIV, oral health, sexually transmitted infections (STIs), tuberculosis, and use of tobacco, alcohol, or drugs (Hagan et al., 2017). The routine immunization chart recommends following a continued vaccination schedule including vaccines that protect against meningitis and bloodstream infections, tetanus and human papillomavirus (HPV) (AAP, 2023).

Although adolescents are legally minors, professional organizations and state legislatures alike have recognized that teens need to be able to discuss their health concerns, make certain health-care decisions, and access certain health-related services with medical professionals in a confidential manner (Harris, 2017; Schapiro & Mihaly, 2021). Psychological research has shown that adolescents are nearly as capable as young adults of making informed, complex decisions (Icenogle & Cauffman, 2021; Steinberg, 2014). This marks a transition from childhood indicating that many adolescents may benefit from increased privacy, confidentiality, and more independence and consent rights when deciding whether or not, and how, to receive medical care (Berlin & Bravender, 2009; Sharko et al., 2018).

### Intersections and Contexts: Supporting Pubertal Development for LGBTQ+ Adolescents

Most of what we know about the health of LGBTQ+ youth comes from limited research and focuses on mental health. For example, factors like being a sexual minority, facing bullying, and experiencing family rejection can increase suicidal thoughts and attempts among LGBTQ+ youth (Ryan et al., 2009).

There is limited research attending to the physical health of LGBTQ+ youth, partly because, like non-LGBTQ+ youth, they usually do not struggle with chronic physical diseases. For some transgender youth, puberty can mean increasing mental health risks, such as anxiety as their changing body may be incongruent with how they see themselves and identify. However, when teens have support from family members and medical health care that provides them with as much consent and individual rights as possible, they experience much lower risks of depression and anxiety (Brierley et al., 2024).

Teens with persistent gender dysphoria -- persistent psychological distress resulting from incongruence between their sex assigned at birth and their gender identity -- during early stages of puberty who have parental support are often considered eligible for a variety of medical supports and potential interventions such as the administration of puberty-delaying hormones (Garofalo, 2011; Hembree et al., 2017). The use of puberty-delaying hormones, under the close supervision of a medical doctor with appropriate expertise, may allow some youth extra time for the youth's gender identity development while alleviating the dysphoria associated with the incongruent development of secondary sex characteristics during puberty (Hembree et al., 2017). This medical care, known as puberty suppression, is reversible and involves complex individual patient-doctor care choices (Jorgensen et al., 2024).

Transgender and gender-diverse individuals often face stigma and discrimination, resulting in mental and physical health disparities. Delays in initiating interventions can lead to disadvantages for this marginalized group, as puberty progresses before the treatment begins. Additional barriers, such as cost, insurance coverage, lack of education, and delays in treatment initiation persist, with the average age of initiation falling well beyond the start of puberty in the United States (Hembree et al., 2017). There are many individual differences in the best choices for any form of medical care or intervention and some youth may experience certain risks from puberty suppression, such as fatigue or headache or bone mass changes (Betsi et al., 2024). However, research on transgender youth and their families also finds that those who receive safe and medically supported puberty suppression and well-rounded medical care show improvements in quality of life, well-being, and psychological health (Betsi et al., 2024; Horton, 2024). While there is still much to learn in the field of best clinical and medical care for children and adolescents with gender dysphoria, pediatric groups like the European Academy of Paediatrics have concluded that all treatments should be evaluated to support "the child's right to an open future" (i.e., that youth should be provided as many rights in making choices that impact their future autonomous adult lives as possible (Brierley et al., 2024; Jorgensen et al., 2024).

# Health Risks during Adolescence

While most adolescents are healthy, unique health challenges that may impact their overall well-being still exist. Some of these challenges include sleep disruptions, eating disorders, substance use, mental health issues, and self-harm. The leading causes of death in adolescence are accidents, homicide, and suicide (CDC, 2022). Many of these health and mortality risks can be prevented through prevention and intervention efforts that focus on promoting protective factors (e.g., mental health and socioemotional support) and reducing risk factors (e.g., sleep issues and victimization).

## Sleep Disorders, Mental Health, and Suicide Risk

As discussed earlier in this section, getting adequate sleep is important for adolescents' growing brains and bodies. Although insufficient sleep accounts for most sleep issues, adolescents may also be at risk for particular sleep disorders. The most common sleep disorders in this age group include delayed sleep-wake phase disorder, insomnia, and obstructive sleep apnea (Moore & Meltzer, 2014). It's critical to recognize that sleep disruption can significantly impact adolescents' physical and mental health.

With all of the rapid changes that occur during adolescence, it is no surprise that mental health may become a challenge. The *Youth Risk Behavior Survey Data Summary and Trends Report* showed that from 2011 to 2021, the rate of adolescents reporting poor mental health increased dramatically (CDC, 2024). The National Institute of Mental Health (NIMH) estimates that around 50 percent of adolescents have a mental health disorder, with that number increasing across adolescence from around 45 percent in ages thirteen to fourteen years to 56.7 percent in ages seventeen to eighteen years (NIMH, 2023). Depression and anxiety are among the most common mental health disorders (NIMH, 2017). In adolescence, approximately 31.9 percent of individuals have an anxiety disorder and 40.6 percent have experienced at least one major depressive episode (NIMH, 2017).

One reason that anxiety and depression risk is higher in adolescence than in childhood is the increased disruptions in emotion regulation typical to that stage of the lifespan (Young et al., 2020). As you may recall, adolescents' brains are still developing, particularly in those regions responsible for emotion regulation. Adolescents with a greater number of adverse childhood experiences (ACEs) are also at a greater risk of anxiety and depression (Lee et al., 2020). These statistics highlight the need for

increased mental health awareness, early intervention, and accessible support services.

Unfortunately, without adequate support, adolescents facing mental health challenges may turn to unhealthy coping mechanisms such as substance use or self-harm. A meta-analysis on adolescent substance use found that mental health and substance use often occurred together (Halladay et al., 2020). Self-harm behaviors include any deliberate physical harm to the self and may be nonsuicidal or suicidal behavior. In particular, adolescents who have experienced childhood abuse and/or neglect are at the highest risk for self-harm behaviors, followed by those with psychological issues including personality disorders, depression, and anxiety (McEvoy et al., 2023). When left untreated or undetected, struggles with mental health and self-harm behaviors in adolescence can lead to an increased risk of suicide.

Suicide is the second leading cause of death among youth aged ten to twenty-four years in the United States (CDC, 2023). A report of high school students disclosed that in 2023, more than one in five contemplated suicide, and one in ten attempted suicide (CDC, 2024). While these statistics are staggering, the data showed that females and LGBTQ+ are at a higher risk of suicidal thoughts and behaviors, and attempted suicide. Some of these disparities in risk may be due to health-care disparities, higher risk factors, fewer protective factors, and increased victimization risks experienced by these groups (Gaylor et al., 2023). Research recommends that suicide prevention in adolescence focus on creating equitable health-care access, reducing risk factors, and promoting socioemotional and mental health support (Gaylor et al., 2023). Suicide prevention in adolescence is an urgent priority, and while some strides have been made in inventions, continued research is necessary (Wasserman et al., 2021).

## Maladaptive Eating and Eating Disorders

When all goes right, adolescents get the nutrition they need through healthy eating habits. However, this stage of development also marks a vulnerable period for the emergence of maladaptive eating behaviors and eating disorders. Between 2018 and 2022, the number of times young people under age seventeen years in the United States sought medical help for eating disorders more than doubled (Pastore et al., 2023). While eating disorders can affect anyone, they are more prevalent in women than in men, and individuals in Western countries are at a higher risk than those in Asian countries (Qian et al., 2022). Asian American and non-Hispanic White youth are also at a higher risk of eating disorders, though it is likely that eating disorders are underdiagnosed and less likely to be detected in Black, Hispanic, and other minoritized youth, and these youth may be at an increased risk of specific eating disorders (Barakat et al., 2023; Gorrell et al., 2021). The consequences of these disorders extend far beyond unhealthy eating habits, with individuals facing an increased risk of depression, substance use, and long-term physical health problems. In many cases, eating disorders begin with maladaptive eating behaviors.

Maladaptive eating behaviors can include eating too much or too little in terms of nutritional needs and can occur in bodies of any size (Brytek-Matera, 2021). Risk factors for maladaptive eating behaviors include difficulties with emotion regulation, unhealthy attitudes toward food, stress and mental health struggles, perfectionism, and cultural pressures such as pressures to diet or adhere to a certain body image (Barakat et al., 2023; Brytek-Matera, 2021; Hampton-Anderson & Craighead, 2021). In males and females, internalizing societal and media messages about ideal physical appearance is also associated with increased risks of maladaptive eating behaviors and disordered eating (Vankerckhoven et al., 2024). For example, if an adolescent believes that their body must meet a thin ideal or muscular ideal as portrayed by the media, they are more likely to struggle with maladaptive eating.

The American Psychiatric Association (2022) defines eating disorders as involving long-term struggles with eating that alters food consumption and impairs physical and/or psychological health. The most prevalent eating disorders include anorexia N=nervosa, bulimia nervosa, and binge eating disorder (Crone et al., 2023). Anorexia nervosa typically involves food restriction. Bulimia nervosa includes episodes of binge eating followed by purging through vomiting or excessive exercise. Regular episodes of uncontrollable overeating indicate binge eating disorder. Other eating disorders that may be diagnosed include avoid/restrictive food intake disorder or an unspecified eating disorder (American Psychiatric Association, 2022). It's important to note that not all individuals with eating disorders are underweight, and individuals who are in a normal weight to overweight range may still struggle with an eating disorder.

While each of these eating disorder diagnoses is distinctive, many of the symptoms can overlap (Table 9.1). Behaviors associated with an eating disorder left untreated may lead to malnourishment and health consequences across a wide range of body systems, including the skin, hair, nails, blood, major organs, and brain functioning (NIMH, 2017).

*Table 9.1 Common Symptoms and Health Consequences of Eating Disorders Sources: American Psychiatric Association (2022; NIMH (2024)).*

| Symptoms | Health Consequences |
|---|---|
| Restricted eating | Anemia and blood pressure problems |
| Intense fear of weight gain | Muscle loss and weakness |
| Distorted body image | Brittle hair and nails |
| Excessive thoughts related to body size | Problems with the skin including dry skin |
| Underweight | Fatigue |
| Unusual eating patterns such as over or undereating, binge eating, or fasting | Gastrointestinal problems including damage to organs, ulcers, constipation, reflux, and diarrhea |
| Forced vomiting, use of laxatives or diuretics, or other purging behaviors | Throat, neck, and jaw problems (especially in cases of forced vomiting) |
| Excessive exercise | Dehydration and electrolyte imbalance |
| Lack of appetite | Organ failure and damage to heart functioning |
| Sudden or dramatic weight change | Brain damage |

Eating disorders are complex mental health issues that can be harmful to both physical and emotional well-being (Smink et al., 2014). Having a supportive family environment, high self-esteem, and self-efficacy, as well as a positive body image can all be protective factors for teens at risk of maladaptive eating and eating disorders. Prevention and intervention efforts that focus on promoting resilience, healthy identity development, and positive body image can help reduce the risk of eating disorders (Vankerckhoven et al., 2024). For those adolescents who struggle with eating disorders, cognitive behavioral therapy has been shown to be an effective treatment for a range of eating disorder types (Hay, 2020; Q da Luz et al., 2020).

### Link to Learning

Worldwide, around 10 percent of people will have an eating disorder at some point in their lifetime. However, eating disorders are often misunderstood which can make identifying symptoms and finding treatment a challenge. Learn more about the truths versus the misconceptions about eating disorders in this video.

## References

Adair LS. Size at birth predicts age at menarche. Pediatrics 2001;107:e59. doi:10.1542/peds.107.4.e59pmid:http://www.ncbi.nlm.nih.gov/pubmed/11335780

Agarwal, K.N. (2015). The Growth: Infancy to Adolescence (3rd ed.). New Delhi: CBS Publishers

Aksglaede L, Sorensen K, Petersen JH, Skakkebaek NE, Juul A: Recent decline in age at breast development: the Copenhagen Puberty Study. Pediatrics 2009;123:e932–e939.

Allard, M. (2008). Visual essay: high school students' time use. How high school students use time. U.S. Dept. of Labor, Bureau of Labor Statistics report. www.bls.gov/opub/mlr/2008/11/art4full.pdf

American Academy of Pediatrics (AAP) (2023). Child and adolescent immunization schedule by age. Recommendations for ages 18 years or younger, United States, 2024.

American College of Pediatricians (2022). The teenage brain: under construction. https://acpeds.org/assets/positionpa...22-for-PDF.pdf

American Psychiatric Association. (2022). *Diagnostic and statistical manual of mental disorders* (5th ed., text rev.). https://doi.org/10.1176/appi.books.9780890425787

Anderson PM, Butcher KF, Schanzenbach DW. Understanding recent trends in childhood obesity in the United States. Econ Hum Biol. 2019; 34:16–25.

Barakat, S., McLean, S. A., Bryant, E., Le, A., Marks, P., Touyz, S., & Maguire, S. (2023). Risk factors for eating disorders: findings from a rapid review. *Journal of eating disorders*, *11*(1), 8.

Barnett, T. A., O'Loughlin, J., & Paradis, G. (2002). One-and two-year predictors of decline in physical activity among inner-city schoolchildren. American journal of preventive medicine, 23(2), 121-128.

Beltran-Valls, M. R., Janssen, X., Farooq, A., Adamson, A. J., Pearce, M. S., Reilly, J. K., ... & Reilly, J. J. (2019). Longitudinal changes in vigorous intensity physical activity from childhood to adolescence: Gateshead Millennium Study. Journal of science and medicine in sport, 22(4), 450-455.

Betsi, G., Goulia, P., Sandhu, S., & Xekouki, P. (2024). Puberty suppression in adolescents with gender dysphoria: an emerging issue with multiple implications. *Frontiers in Endocrinology*, *15*, 1309904.

Blakemore, SJ. The social brain in adolescence. Nat Rev Neurosci 9, 267–277 (2008).

Bleil, M. E., Booth-LaForce, C., & Benner, A. D. (2017). Race disparities in pubertal timing: Implications for cardiovascular disease risk among African American women. Population Research and Policy Review, 36(5), 717–738. 10.1007/s11113-017-9441-5

Blum WF. Leptin: the voice of the adipose tissue. Horm Res. 1997;48 Suppl 4:2-8.

Brand, S., Kalak, N., Gerber, M., Clough, P. J., Lemola, S., Sadeghi Bahmani, D., ... & Holsboer-Trachsler, E. (2017). During early to mid adolescence, moderate to vigorous physical activity is associated with restoring sleep, psychological functioning, mental toughness and male gender. Journal of sports sciences, 35(5), 426-434.

Brierley, J., Larcher, V., Hadjipanayis, A. A., & Grossman, Z. (2024). European Academy of Paediatrics statement on the clinical management of children and adolescents with gender dysphoria. *Frontiers in Pediatrics*, *12*, 1298884.

Brytek-Matera, A. (2021). Negative affect and maladaptive eating behavior as a regulation strategy in normal-weight individuals: A narrative review. *Sustainability*, *13*(24), 13704.

Bygdell, M., Kindblom, J. M., Jansson, J. O., & Ohlsson, C. (2021). Revisiting the critical weight hypothesis for regulation of pubertal timing in boys. *The American Journal of Clinical Nutrition*, *113*(1), 123-128.

Cain N, Gradisar M. Electronic media use and sleep in school-aged children and adolescents: a review. Sleep Med. 2010;11(8):735–742

Casey, B. J., & Caudle, K. (2013). The teenage brain: Self control. Current directions in psychological science, 22(2), 82-87.

Casey, B. J., Getz, S., & Galvan, A. (2008). The adolescent brain. Developmental review, 28(1), 62-77.

Castellanos-Ryan, N., Parent, S., Vitaro, F., Tremblay, R. E., & Séguin, J. R. (2013). Pubertal development, personality, and substance use: a 10-year longitudinal study from childhood to adolescence. Journal of abnormal psychology, 122(3), 782.

Centers for Disease Control and Prevention, National Center for Health Statistics. National Vital Statistics System, Mortality 2018-2022 on CDC WONDER Online Database, released in 2024. Data are from the Multiple Cause of Death Files, 2018-2022, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at http://wonder.cdc.gov/ucd-icd10-expanded.html

CDC (2024). *Youth Risk Behavior Survey Data Summary & Trends Report: 2013–2023*. U.S. Department of Health and Human Services; 2024. https://www.cdc.gov/yrbs/dstr/index.html

Choudhury, S., Charman, T., & Blakemore, S. J. (2008). Development of the teenage brain. Mind, Brain, and Education, 2(3), 142-147.

Christian, P., & Smith, E. R. (2018). Adolescent undernutrition: global burden, physiology, and nutritional risks. Annals of Nutrition and Metabolism, 72(4), 316-328.

Conmy, A. B., Peters, C., De Lew, N., & Sommers, B. D. (2023). Children's Health Coverage Trends: Gains in 2020-2022 Reverse Previous Coverage Losses. emergency (PHE), 19, 20.

Courtright, S. H., McCormick, B. W., Postlethwaite, B. E., Reeves, C. J., & Mount, M. K. (2013). A meta-analysis of sex differences in physical ability: Revised estimates and strategies for reducing differences in selection contexts. Journal of Applied Psychology, 98(4), 623–641.

Craggs, C., Corder, K., van Sluijs, E. M., & Griffin, S. J. (2011). Determinants of change in physical activity in children and adolescents: a systematic review. American journal of preventive medicine, 40(6), 645-658.

Crone, C., Fochtmann, L. J., Attia, E., Boland, R., Escobar, J., Fornari, V., ... & Medicus, J. (2023). The American Psychiatric Association practice guideline for the treatment of patients with eating disorders. *American Journal of Psychiatry*, *180*(2), 167-171.

Darling, A. M., Sunguya, B., Ismail, A., Manu, A., Canavan, C., Assefa, N., ... & Guwattude, D. (2020). Gender differences in nutritional status, diet and physical activity among adolescents in eight countries in sub-Saharan Africa. Tropical Medicine & International Health, 25(1), 33-43.

Das, J. K., Salam, R. A., Thornburg, K. L., Prentice, A. M., Campisi, S., Lassi, Z. S., ... & Bhutta, Z. A. (2017). Nutrition in adolescents: physiology, metabolism, and nutritional needs. Annals of the New York Academy of Sciences, 1393(1), 21-33.

Dobbs, D. (2012). Beautiful brains. National Geographic, 220(4), 36.

Dudovitz, R.N., Chung, P.J., Elliott, M.N., Davies, S.L., Tortolero, S,... Baumler, E. (2015). Relationship of Age for Grade and Pubertal Stage to Early Initiation of Substance Use. Preventing Chronic Disease, 12:150234. http://dx.doi.org/10.5888/pcd12.150234

Eckert-Lind, C., Busch, A. S., Petersen, J. H., Biro, F. M., Butler, G., Bräuner, E. V., & Juul, A. (2020). Worldwide secular trends in age at pubertal onset assessed by breast development among girls: a systematic review and meta-analysis. JAMA pediatrics, 174(4), e195881-e195881.

Escribano, L. G., Fernández-Marcote, A. E., Casas, A. G., López, P. J. T., & Marcos, M. L. T. (2017). Revisión y análisis de la influencia del entorno afectivo y los motivos de práctica de actividad física actual en adolescentes. Journal of Negative and No Positive Results: JONNPR, 2(1), 23-28.

Evans, M. C., Campbell, R. E., & Anderson, G. M. (2022). Physiological regulation of leptin as an integrative signal of reproductive readiness. Current Opinion in Pharmacology, 67, 102321.

Galina, S. D., Souza, J. C., Valdez, P., & Azevedo, C. V. (2021). Daily light exposure, sleep–wake cycle and attention in adolescents from different urban contexts. Sleep Medicine, 81, 410-417.

Garofalo, R. (2011). The health of lesbian, gay, bisexual, and transgender people: Building a foundation for better understanding. The National Academies Press.

Gaydosh, L., Belsky, D. W., Domingue, B. W., Boardman, J. D., & Harris, K. M. (2018). Father absence and accelerated reproductive development in non-Hispanic white women in the United States. Demography, 55(4), 1245-1267.

Glass, D. J., Geerkens, J. T., & Martin, M. A. (2022). Psychosocial and energetic factors on human female pubertal timing: a systematized review. Evolutionary human sciences, 4, e28. https://doi.org/10.1017/ehs.2022.24

Gorrell, S., Le Grange, D., Blalock, D. V., Mehler, P. S., Johnson, C., Manwaring, J., Duffy, A., Huston, E., McClanahan, S., & Rienecke, R. D. (2021). Gender identity, race/ethnicity and eating pathology in a treatment-seeking community sample. *Journal of behavioral and cognitive therapy*, *31*(1), 77–89. https://doi.org/10.1016/j.jbct.2020.11.006

Guyer A. E., Silk J. S., Nelson E. E. (2016). The neurobiology of the emotional adolescent: From the inside out. Neurosci. Biobehav. Rev. 70 74–85. 10.1016/j.neubiorev.2016.07.037

Hagan JF, Shaw JS, Duncan PM, eds. Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents. 4th ed. American Academy of Pediatrics; 2017.

Halladay, J., Woock, R., El-Khechen, H., Munn, C., MacKillop, J., Amlung, M., ... & Georgiades, K. (2020). Patterns of substance use among adolescents: A systematic review. *Drug and alcohol dependence*, *216*, 108222.

Hamlat, E. J., Stange, J. P., Abramson, L. Y., & Alloy, L. B. (2014). Early pubertal timing as a vulnerability to depression symptoms: Differential effects of race and sex. Journal of Abnormal Child Psychology, 42(4), 527–538.

Hampton-Anderson, J. N., & Craighead, L. W. (2021). Psychosociocultural contributors to maladaptive eating behaviors in African American youth: recommendations and future directions. *American Journal of Lifestyle Medicine*, *15*(6), 621-633.

Harris, L. J. (2017). Teen health care decisions: How maturity and social policy affect four hard cases. In Studies in Law, Politics, and Society (pp. 185-217). Emerald Publishing Limited.

Hay, P. (2020). Current approach to eating disorders: a clinical update. *Internal medicine journal*, *50*(1), 24-29.

Hembree, W. C., Cohen-Kettenis, P. T., Gooren, L., Hannema, S. E., Meyer, W. J., Murad, M. H., ... & T'Sjoen, G. G. (2017). Endocrine treatment of gender-dysphoric/gender-incongruent persons: an endocrine society clinical practice guideline. The Journal of Clinical Endocrinology & Metabolism, 102(11), 3869-3903.

Hirshkowitz, M., Whiton, K., Albert, S. M., Alessi, C., Bruni, O., DonCarlos, L., ... & Ware, J. C. (2015). National Sleep Foundation's updated sleep duration recommendations. Sleep health, 1(4), 233-243.

Horton, C. (2024). Experiences of puberty and puberty blockers: Insights from trans children, trans adolescents, and their parents. *Journal of Adolescent Research*, *39*(1), 77-103.

Hossain, M. G., Islam, S., Aik, S., Zaman, T. K., & Lestrel, P. E. (2010). Age at menarche of university students in Bangladesh: secular trends and association with adult anthropometric measures and socio-demographic factors. Journal of Biosocial Science, 42(5), 677-687.

Hoyt, L. T., Niu, L., Pachucki, M. C., & Chaku, N. (2020). Timing of puberty in boys and girls: Implications for population health. SSM-population health, 10, 100549.

Hyde, J. (2005). The gender similarities hypothesis. American Psychologist, 60, 581-592.

Icenogle, G., & Cauffman, E. (2021). Adolescent decision making: A decade in review. Journal of research on adolescence, 31(4), 1006-1022.

Jansen, E. C., Herrán, O. F., & Villamor, E. (2015). Trends and correlates of age at menarche in Colombia: results from a nationally representative survey. Economics & Human Biology, 19, 138-144.

Jorgensen, S. C., Athéa, N., & Masson, C. (2024). Puberty Suppression for Pediatric Gender Dysphoria and the Child's Right to an Open Future. *Archives of Sexual Behavior*, *53*(5), 1941-1956.

Kaplowitz, P. B. (2008). Link between body fat and the timing of puberty. *Pediatrics*, *121*(Supplement_3), S208-S217.

Keats, Emily C., Aviva I. Rappaport, Reena Jain, Christina Oh, Shailja Shah, Zulfiqar A. Bhutta. 2018. Diet and Eating Practices among Adolescent Girls in Low- and Middle-Income Countries: A Systemic Review. Arlington, VA: Strengthening Partnerships, Results, and Innovations in Nutrition Globally (SPRING) project.

Kelly, Y., Zilanawala, A., Sacker, A., Hiatt, R., & Viner, R. (2016). Early puberty in 11-year-old girls: Millennium Cohort Study findings. Archives of disease in childhood, archdischild-2016.

Kindblom, J. M., Lorentzon, M., Norjavaara, E., Lonn, L., Brandberg, J., Angelhed, J. E., ... & Ohlsson, C. (2006). Pubertal timing is an independent predictor of central adiposity in young adult males: the Gothenburg osteoporosis and obesity determinants study. *Diabetes*, *55*(11), 3047-3052.

Kumar, B., Robinson, R., & Till, S. (2015). Physical activity and health in adolescence. Clinical Medicine, 15(3), 267.

Lee, G. (2020). Exploring environmental constraints that hinder the physical activity of middle school girls in daily life: Photo-Voice. Korean Journal of Sport Science, 31(2), 275-292.

Lehman, P. J., & Carl, R. L. (2017). Growing pains: when to be concerned. Sports Health, 9(2), 132-138.

Lee, H. Y., Kim, I., Nam, S., & Jeong, J. (2020). Adverse childhood experiences and the associations with depression and anxiety

in adolescents. *Children and youth services review*, *111*, 104850.

McEvoy, D., Brannigan, R., Cooke, L., Butler, E., Walsh, C., Arensman, E., & Clarke, M. (2023). Risk and protective factors for self-harm in adolescents and young adults: an umbrella review of systematic reviews. *Journal of psychiatric research*.

Mendle, J., Turkheimer, E., & Emery, R. E. (2007). Detrimental psychological outcomes associated with early pubertal timing in adolescent girls. Developmental review, 27(2), 151-171.

Merikangas KR, He JP, Burstein M, Swanson SA, Avenevoli S, Cui L, Benjet C, Georgiades K, Swendsen J. Lifetime prevalence of mental disorders in U.S. adolescents: results from the National Comorbidity Survey Replication--Adolescent Supplement (NCS-A). J Am Acad Child Adolesc Psychiatry. 2010 Oct;49(10):980-9.

Moore, M., & Meltzer, L. J. (2008). The sleepy adolescent: causes and consequences of sleepiness in teens. *Paediatric respiratory reviews*, *9*(2), 114-121.

Murray & Clayton, 2013

Nieh, H. P., Chang, L. Y., Chang, H. Y., Chiang, T. L., & Yen, L. L. (2019). Pubertal timing, parenting style, and trajectories of pornography use in adolescence: Peer pornography use as the mediator. The Journal of Sex Research.

National Institute of Mental Health (NIMH) (2024). Eating Disorders. https://www.nimh.nih.gov/health/topi...ting-disorders

Ohlsson, C., Bygdell, M., Nethander, M. *et al.* Early puberty and risk for type 2 diabetes in men. *Diabetologia 63*, 1141–1150 (2020). https://doi.org/10.1007/s00125-020-05121-8

Onyiriuka, A. N., & Egbagbe, E. E. (2013). Anthropometry and menarcheal status of adolescent Nigerian urban senior secondary school girls. International Journal of Endocrinology and Metabolism, 11(2), 71.

Oppermann, J., Knechtle, B., Seffrin, A. *et al.* Sex Difference in Female and Male Ice Swimmers for Different Strokes and Water Categories Over Short and Middle Distances: A Descriptive Study. *Sports Med - Open 8*, 63 (2022). https://doi.org/10.1186/s40798-022-00451-w

Owens J; Adolescent Sleep Working Group; Committee on Adolescence. Insufficient sleep in adolescents and young adults: an update on causes and consequences. Pediatrics. 2014 Sep;134(3):e921-32.

Pastore, M., Indrio, F., Bali, D., Vural, M., Giardino, I., & Pettoello-Mantovani, M. (2023). Alarming increase of eating disorders in children and adolescents. *The Journal of pediatrics*, *263*.

Pavone, V., Lionetti, E., Gargano, V., Evola, F. R., Costarella, L., & Sessa, G. (2011). Growing pains: a study of 30 cases and a review of the literature. Journal of Pediatric Orthopaedics, 31(5), 606-609.

Peykari, N., Eftekhari, M. B., Tehrani, F. R., Afzali, H. M., Hejazi, F., Atoofi, M. K., ... & Djalalinia, S. (2015). Promoting physical activity participation among adolescents: The barriers and the suggestions. International journal of preventive medicine, 6.

Piras, G. N., Bozzola, M., Bianchin, L., Bernasconi, S., Bona, G., Lorenzoni, G., ... & Perissinotto, E. (2020). The levelling-off of the secular trend of age at menarche among Italian girls. Heliyon, 6(6).

Portela-Pino et al., 2019

Q da Luz, F., Hay, P., Wisniewski, L., Cordas, T., & Sainsbury, A. (2021). The treatment of binge eating disorder with cognitive behavior therapy and other therapies: An overview and clinical considerations. *Obesity Reviews*, *22*(5), e13180.

Qian, J., Wu, Y., Liu, F., Zhu, Y., Jin, H., Zhang, H., ... & Yu, D. (2021). An update on the prevalence of eating disorders in the general population: a systematic review and meta-analysis. *Eating and Weight Disorders-Studies on Anorexia, Bulimia and Obesity*, 1-14.

Rapee, R. M., Oar, E. L., Johnco, C. J., Forbes, M. K., Fardouly, J., Magson, N. R., & Richardson, C. E. (2019). Adolescent development and risk for the onset of social-emotional disorders: A review and conceptual model. Behaviour research and therapy, 123, 103501.

Roser, M., Appel, C., & Ritchie, H. (2021). Human Height. Published online at OurWorldInData.org. Retrieved on Feb 14, 2024 from https://ourworldindata.org/human-height

Rubin C, Maisonet M, Kieszak S, Monteilh C, Holmes A, Flanders D, Heron J, Golding J, McGeehin M, Marcus M: Timing of maturation and predictors of menarche in girls enrolled in a contemporary British cohort. Paediatr Perinat Epidemiol 2009; 23:492–504.

Ryan, C., D. Huebner, R. M. Diaz, and J. Sanchez. (2009). Family rejection as a predictor of negative health outcomes in white and Latino lesbian, gay, and bisexual young adults. Pediatrics 123(1):346–352.

Schapiro, N. A., & Mihaly, L. K. (2021). The 21st Century Cures Act and challenges to adolescent confidentiality. Journal of Pediatric Health Care, 35(4), 439-442.

Schell, L. M., & Rousham, E. K. (2022). Environmental effects on growth. In *Human growth and development* (pp. 261-315). Academic Press.

Seaton, E. K., & Carter, R. (2018). Pubertal timing, racial identity, neighborhood, and school context among Black adolescent females. Cultural Diversity & Ethnic Minority Psychology, 24(1), 40–50. doi.org/10.1037/cdp0000162

Seaton, E. K., White, R. M. B., Pasco, M. C., & Sheehan, C. (2022). The associations among racial discrimination, pubertal timing, neighborhoods, and mental health among U.S. Mexican boys. The American Psychologist, 77(5), 678–690. doi.org/10.1037/amp0000977.

Sharko, M., Wilcox, L., Hong, M. K., & Ancker, J. S. (2018). Variability in adolescent portal privacy features: how the unique privacy needs of the adolescent patient create a complex decision-making process. Journal of the American Medical Informatics Association, 25(8), 1008-1017.

Sharman, R., & Illingworth, G. (2020). Adolescent sleep and school performance—the problem of sleepy teenagers. Current opinion in physiology, 15, 23-28.

Slater, A., & Tiggemann, M. (2011). Gender differences in adolescent sport participation, teasing, self-objectification and body image concerns. Journal of Adolescence, 34,455463. doi: 10.1016/j.adolescence.2010.06.007

Slater, A., & Tiggemann, M. (2010). "Uncool to do sport": A focus group study of adolescent girls' reasons for withdrawing from physical activity. Psychology of Sport and Exercise, 77(6), 619-626. doi:10.1016/j.psychsport.2010.07.006

Smink, F.R.; van Hoeken, D.; Oldehinkel, A.J.; Hoek, H.W. Prevalence and severity of DSM-5 eating disorders in a community cohort of adolescents. Int. J. Eat. Disord. 2014, 47, 610–619.

Sørensen, K., Mouritsen, A., Aksglaede, L., Hagen, C. P., Mogensen, S. S., & Juul, A. (2012). Recent secular trends in pubertal timing: implications for evaluation and diagnosis of precocious puberty. Hormone research in paediatrics, 77(3), 137-145.

Spear, L. P. (2013). Adolescent neurodevelopment. Journal of adolescent health, 52(2), S7-S13.

Steinberg, L. (2014). Age of opportunity: Lessons from the new science of adolescence. Houghton Mifflin Harcourt.

Steinberg, L., & Scott, E. S. (2003). Less Guilty by Reason of Adolescence: Developmental Immaturity, Diminished Responsibility, and the Juvenile Death Penalty. American Psychologist, 58(12), 1009–1018.

Susie Lee, D., & Semenchenko, H. (2023). Father absence and pubertal timing in Korean boys and girls. Evolution, Medicine, and Public Health, 11(1), 174-184.

Taylor, D., Jenni, O., Acebo, C., & Carskadon, M. (2005). Sleep tendency during extended wakefulness: insights into adolescent sleep regulation and behavior. Journal of Sleep Research, 14, 239-244.

Udo, T., & Grilo, C. M. (2018). Prevalence and correlates of DSM-5–defined eating disorders in a nationally representative sample of US adults. Biological psychiatry, 84(5), 345-354.

U.S. Department of Health and Human Services, National Institute of Mental Health. (2017). *Any anxiety disorder*. https://www.nimh.nih.gov/health/stat...xiety-disorder

U.S. Department of Health and Human Services, National Institute of Mental Health. (2017). *Major depression*. https://www.nimh.nih.gov/health/stat...jor-depression

U.S. Department of Health and Human Services, National Institute of Mental Health. (2023). https://www.nimh.nih.gov/health/stat...ness#part_2632

Vankerckhoven, L., Claes, L., Raemen, L. *et al*. Longitudinal Associations among Identity, Internalization of Appearance Ideals, Body Image, and Eating Disorder Symptoms in Community Adolescents and Emerging Adults: Adaptive and Maladaptive Pathways. *J. Youth Adolescence* (2024). https://doi.org/10.1007/s10964-024-02058-8

Wasserman, D., Carli, V., Iosue, M., Javed, A., & Herrman, H. (2021). Suicide prevention in childhood and adolescence: a narrative review of current knowledge on risk and protective factors and effectiveness of interventions. *Asia-Pacific Psychiatry*, *13*(3), e12452.

Wheaton et al., 2017

Wheaton AG, Jones SE, Cooper AC, Croft JB. Short Sleep Duration Among Middle School and High School Students - United States, 2015. MMWR Morb Mortal Wkly Rep. 2018 Jan 26;67(3):85-90.

White, R. M. B., Deardorff, J., Liu, Y., & Gonzales, N. A. (2013). Contextual Amplification or Attenuation of the Impact of Pubertal Timing on Mexican-Origin Boys' Mental Health Symptoms. Journal of Adolescent Health, 53(6), 692–698.

Winsler, A., Deutsch, A., Vorona, R. D., Payne, P. A., & Szklo-Coxe, M. (2015). Sleepless in Fairfax: the difference one more hour of sleep can make for teen hopelessness, suicidal ideation, and substance use. Journal of youth and adolescence, 44, 362-378.

Wohlfahrt-Veje, C., Mouritsen, A., Hagen, C. P., Tinggaard, J., Mieritz, M. G., Boas, M., ... & Main, K. M. (2016). Pubertal onset in boys and girls is influenced by pubertal timing of both parents. The Journal of Clinical Endocrinology & Metabolism, 101(7), 2667-2674.

Young, K. S., Sandman, C. F., & Craske, M. G. (2019). Positive and negative emotion regulation in adolescence: links to anxiety and depression. *Brain sciences*, *9*(4), 76.

Zimmer-Gembeck, M. J., Webb, H. J., Farrell, L. J., & Waters, A. M. (2018). Girls' and boys' trajectories of appearance anxiety from age 10 to 15 years are associated with earlier maturation and appearance-related teasing. Development and Psychopathology, 30(1), 337-350.

This page titled 15.8.2: Physical Growth and Development in Adolescence is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

- 9.1: Physical Growth and Development in Adolescence by OpenStax is licensed CC BY 4.0. Original source: https://openstax.org/details/books/lifespan-development.

# 15.8.3: Puberty, Sexual Behavior, and Sexual Health in Adolescence

**Learning Objectives**

By the end of this section, you will be able to:

- Explain the changes involved in puberty and the ranges of pubertal timing
- Describe current statistics on adolescent sexual behavior
- Describe factors related to early sexual intercourse and associated health risks including unplanned pregnancy and STIs
- Identify the various types of sex education and the ways they impact sexual health and behaviors

Braden and Ashley were both sixteen years old when they met and have been in a relationship for two years. They became each other's first sexual partners and have been enjoying that intimacy for the past year. Ashley began taking the birth control pill a few months after they started having intercourse, and they agreed to use external condoms as a backup method of contraception and to prevent contracting any STIs. Recently, though, Ashley calls Braden less often and the frequency of sexual activity has also declined, as their relationship changes over time. During puberty and the adolescent period, many teens become curious about their bodies and may begin having sexual experiences and relationships; physical and emotional development and characteristics, sociocultural differences, self-esteem, and sexuality all influence the scope, timing, and pace of these experiences.

## Puberty

The term puberty describes the process of a child's transition to physical and reproductive maturity, and the period during which it occurs. Puberty lasts for about four years on average. It typically begins between the ages of eight and thirteen years in females, and between nine and fourteen years in males (NIH, 2024). Its onset is influenced by many factors, both biological and environmental.

The visible signs of puberty are evident in physical developments that are categorized into primary sex characteristics and secondary sex characteristics. The primary sex characteristics are physical developments that are directly related to the ability to reproduce: changes in the ovaries and uterus in females, and the testes and penis in males. For males, spermarche (sometimes called semenarche) is the first ejaculation; this marks the start of the ability to reproduce. This first ejaculation is often experienced as a nocturnal emission, or while they are asleep. For females, menarche, the onset of menstruation, marks this stage. The secondary sex characteristics are physical developments that accompany primary sex characteristics but are not directly related to the ability to reproduce. These include breast development in females (called thelarche), growth of underarm and pubic hair (adrenarche) in both sexes, and facial hair and a deepening voice in males.

The timing of the onset of puberty varies from individual to individual, but typically these developments follow the same sequence of changes. Biological, environmental, and sociocultural factors play a role in this timing. Figure 9.4 shows the typical timelines for various aspects of pubertal development in males and females. Notice, for example, that some of the earliest changes for females are growth of the ovaries and breasts, while for males, growth of the testis occurs before other aspects of puberty.

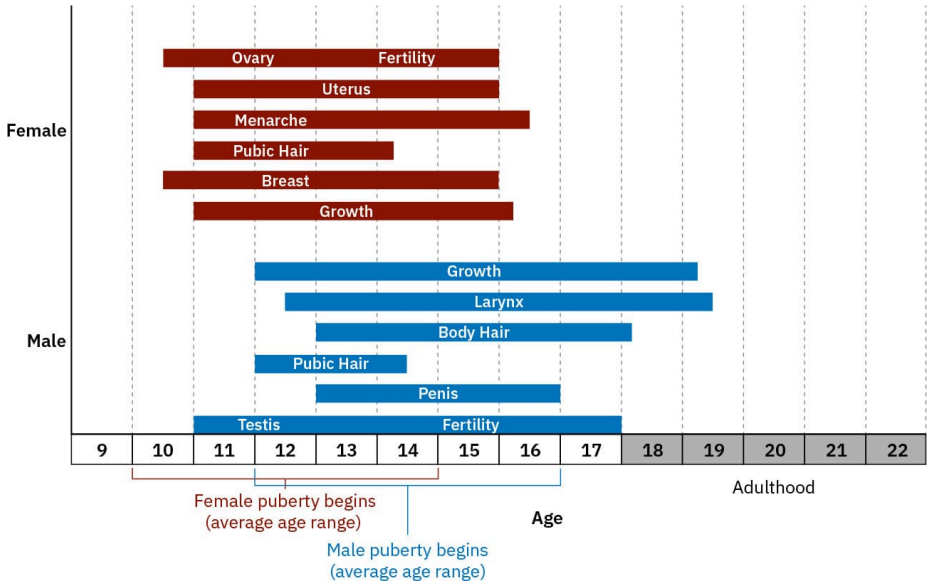



Figure 9.4 On average, the onset of puberty begins earlier for females than it does for males. The duration of puberty is roughly similar for males and females, typically lasting around four to five years. (CC BY 4.0; Rice University & OpenStax)

## Biological Factors Affecting Pubertal Development and Timing

The onset of puberty is influenced by a variety of biological factors, including genetics, physical changes in the body's muscle and fat mass, production of hormones, the functioning of the hypothalamus-pituitary (HPA) axis, and the development of puberty-related glands (Figure 9.5).

| Gland and Hormone Function in Puberty | | |
|---|---|---|
| **Female** | **GLAND and HORMONES** | **Male** |
| Regulation of circadian rhythm and onset of fertility | Pineal<br>*Melatonin* | Regulation of circadian rhythm and timing of puberty |
| Osmoregulation<br>Menstrual cycle<br>Cell growth and division<br>Labor contractions<br>Milk production | Pituitary<br>*ADH*<br>*FSH/LH*<br>*Growth hormone*<br>*Oxytocin*<br>*Prolactin* | Osmoregulation<br>Cell growth and division |
| Metabolism | Thyroid<br>*Thyroxin* | Metabolism |
| Fight-or-flight response<br>Stress regulation | Adrenal<br>*Adrenaline*<br>*Cortisol* | Fight-or-flight response<br>Stress regulation |
| Blood sugar regulation | Pancreas<br>*Insulin*<br>*Glucagon* | Blood sugar regulation |
| Menstrual cycle<br>Secondary sexual characteristics | Ovaries<br>*Estrogen*<br>*Progesterone* | |
| | Testes<br>*Testosterone* | Secondary sexual characteristics |

Figure 9.5 Glands and hormones are responsible for initiating and regulating pubertal development in males and females, and there are key similarities and differences between the sexes. (CC BY 4.0; Rice University & OpenStax)

The HPA is essential for physical and sexual development during puberty (Figure 9.6). At the beginning of puberty, the hypothalamus signals the pituitary gland to release sex-specific hormones that act on the testes in males and ovaries and females. The brain releases a hormone called gonadotropin-releasing hormone (GnRH). GnRH triggers the pituitary gland—a small but significant gland that controls the production of several major hormones—to secrete follicle-stimulating hormone (FSH) and luteinizing hormone (LH) into the bloodstream. This in turn begins the series of changes that are associated with puberty, transforming the body to be capable of reproduction.

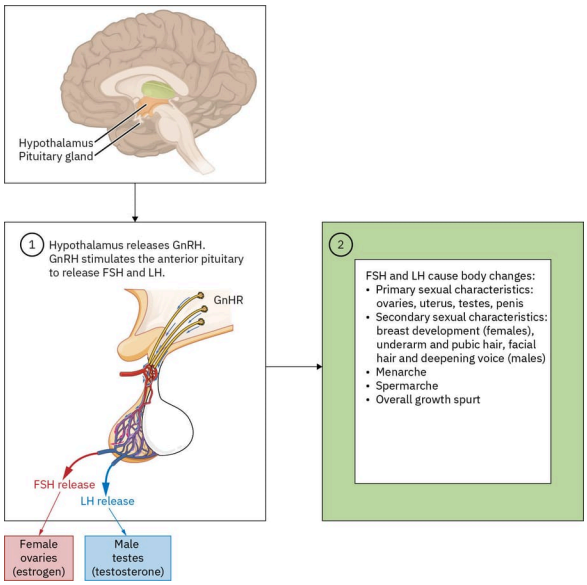



Figure 9.6 The hypothalamus triggers the pituitary gland to release hormones that stimulate the testes in males and the ovaries in females, leading to the physical and sexual changes associated with puberty. (CC BY 4.0; Rice University & OpenStax)

## Link to Learning

Watch this 2-minute neuroscience video about the hypothalamus and pituitary gland to understand their roles and how they interact.

Factors such as early activation of the HPA, family history, genetic variations, and dealing with additional stressors are known predictive factors for early onset of puberty in females and males (Farello et al., 2019; Gaydosh et al., 2018). Additionally, in females, a certain amount of body fat is necessary for the onset of puberty for two reasons: first, a body composition that is low in fat might not have enough energy stored to support the physical changes that come with puberty. Second, body fat is linked to the production of estrogen, a key hormone in the development of the female reproductive system and the maintenance of its functions. Adequate levels of estrogen are needed for the development of primary sexual characteristics like the regulation of the menstrual cycle, as well as secondary sexual characteristics like breast development. The hormone leptin is also thought to play a role in triggering puberty (Ahmed et al., 1999; Blum et al., 1997; Evans et al., 2022), and it is released into the bloodstream by adipose tissue (fat stores). When fat stores are at a level sufficient to indicate a healthy adolescent, leptin may signal the hypothalamus to begin releasing the cascade of hormones that sets puberty in motion (Murray & Clayton, 2013). Thus, the intricate interplay between genetics, stress, body fat, and hormones influences the timing of puberty in females.

In males, the timing of puberty is less understood. Similar to females, higher levels of central fat mass distribution were found to be associated with early onset of puberty (Kindblom et al., 2006); however, the role of leptin and the underlying mechanism of its role were not clear (Kaplowitz, 2008). A longitudinal study found that the higher weight prior to puberty could predict the onset of puberty and could be a better predictor of puberty onset than BMI (Bygdell et al., 2021). Additionally, other researchers have found a link to earlier onset of puberty and higher type 2 diabetes risk (Ohlsson et al., 2020), which might have implications for males as they get older.

The timing of puberty has a strong genetic component (Hoyt et al., 201). The age at which an individual's biological parents went through puberty is a strong determinant in the timing of puberty for their adolescent offspring (Wohlfahrt-Veje et al., 2016). Although timing of parents' puberty is the strongest predictor of puberty, sociocultural factors also play a role. For example, a study on Korean adolescents found that boys without their fathers present in the household experienced spermarche about three months earlier than those with their fathers present, though there were no differences in timing of menarche for girls (Susie Lee & Semenchanko, 2023). In contrast, a study on adolescents in the United States found that girls whose fathers were absent experienced puberty earlier (Gaydosh et al., 2018). Additionally, Arim et al (2011) found that low socioeconomic status (SES) predicted early puberty in Canadian males and females. Researchers still do not fully understand these sociocultural influences, though many speculate that factors like family stress may speed up the onset of puberty. It is important to consider the implications of both nature and nurture as well as the ways nature and nurture interact to shape development.

# Environmental and Sociocultural Factors Affecting Pubertal Development and Timing

Psychologists most often measure the timing of puberty by self-report. Adolescent girls are asked to report the date of their first menstrual cycle, while boys are often asked about the development of various secondary sex characteristics (Hoyt et al., 2020). Recall that for males, puberty starts with the first ejaculation, but often males are not able to clearly recall that event, whereas females can often accurately identify their first menstrual cycle. These data are key to understanding potential links to health outcomes later in life. Pubertal timing can influence age at sexual initiation, learning and growth, and physiological health (Leone & Brown, 2020; Torvik et al., 2021).

Environmental factors related to the timing of puberty have been most extensively explored in females, potentially because of concerns related to the health risks commonly found in early-maturing girls, such as unplanned and early pregnancies and increased risks of gender-based violence (Sommer et al., 2014). Research on males may have also been less common because adolescent males are less likely to discuss spermarche (Frankel, 2002). In fact, even though adolescent males commonly learned about puberty from their parents, most report that nobody talked to them about spermarche, either before or after (Frankel, 2002; Mercer, 2021). This may be in part because spermarche is most common at night during sleep, which affords males some greater privacy in the experience, whereas menarche's timing is less predictable. Most adolescent females report having advance knowledge or conversations in preparation for menarche, most often with their mother (Sooki et al., 2016).

In females, individual and environmental factors in pubertal timing include nutrition, body weight, household composition, exercise, environmental chemicals, and overall levels of stress. While acute stress may delay puberty for teens of disadvantaged SES in lower- and middle-income countries due to stunted growth (because of the lack of ample nutritious foods), emotional and behavioral difficulties could bring puberty onset forward by reducing physical activity and encouraging an unhealthy diet (Kelly et al., 2016). On the contrary, a lower SES is typically linked to a higher risk of overweight/obesity and a faster pace of physical and sexual maturation in high-resource environments like the United States. Furthermore, disparities in the timing of puberty among historically oppressed groups reflect the stress and impacts of systemic racism (Bleil et al., 2017; Glass et al., 2022).

Psychologists studying pubertal timing also ask adolescents whether they feel they look older than (an indicator of early puberty), younger than (an indicator of late puberty), or the same age (on time) as their peers. This is called peer-relative timing. In researching the consequences of pubertal timing, psychologists often measure two possibilities—whether early onset of puberty alone is associated with various outcomes or whether the significant factor is being "off-time"—whether early or late relative to peers. For instance, developmental research indicates that girls who experience early puberty are more likely to engage in risk-taking behaviors, begin sexual activity earlier, use tobacco and alcohol more frequently, and experience higher rates and higher severity of depression, anxiety and other mental health risks, and an increased risk of relationship difficulties (Graber, 2013; Mendle et al., 2007; Rapee et al., 2019). Overall, earlier pubertal timing, both objectively and relative to peers, put both girls and boys at risk during adolescence, while later timing was somewhat protective (Table 9.2).

*Table 9.2 Common Outcomes of Early-Onset and Late-Onset Pubertal Timing in Adolescent Females and Males (sources: Graber, 2013; Hoyt et al., 2020, Mendle et al., 2007; Rapee et al., 2019; and Zimmer-Gembeck et al., 2018)*

| Females | | Males | |
|---|---|---|---|
| Adolescent Health Outcomes | | Adolescent Health Outcomes | |
| Early-Onset | Late-Onset | Early-Onset | Late-Onset |
| More socioemotional symptoms including depression and anxiety | Less antisocial behaviors | More antisocial behaviors | More depressive symptoms |
| More risk-taking behavior | Lower risk-taking behaviors | More risk-taking behaviors | Less antisocial behaviors |
| Victim of bullying/teasing | Less physical activity | Less sleep hours | Less physical activity |
| Higher BMI | Lower BMI | Higher BMI | Lower BMI |
| Higher self-reported good health in young adulthood | More depressive symptoms | Lower screen time in young adulthood | More sleep hours |

Hoyt and colleagues (2020) used a nationally representative longitudinal data set that followed adolescents into young adulthood. Their findings are consistent with previous studies that supported the early-timing hypothesis. If a teen hits puberty very early

(before 84 percent of their peers), it is associated with several negative consequences. In females, it is linked to increased health risks and higher BMI. Higher BMI can, in turn, result in early physical maturation, growth of breasts, and teasing about appearance. Thus, early-maturing females are at a higher risk of appearance-related anxiety, eating disorders, and body dysmorphia symptoms (Zimmer-Gembeck et al., 2018). Males who enter puberty earlier than peers report more risk-taking behavior, more drug use (Dudovitz et al., 2015), more sex partners, more sleep, and higher BMI (Hoyt et al., 2020). Late-onset puberty for boys, however, may increase some risks such as depressive symptoms and lower physical activity (Hoyt et al., 2020). When it comes to the timing of puberty, research overall indicates it is a little easier for youth who are on time or late-onset, than for those who are early-onset.

Adolescents experiencing early-onset puberty have additional challenges: their bodies might be changing before they are emotionally mature enough to handle the impacts presented by secondary sexual characteristics such as breasts. This can put them at risk of gaining attention from older teens and adults who may expose them to behaviors they are unprepared for, such as early sexual experiences (Mendle et al., 2007), exposure to pornography (Nieh et al., 2019), or experimentation with substance use (Castellanos-Ryan et al., 2013). Being at a higher risk does not mean the adolescent will definitely experience negative outcomes, and many early-onset adolescents overcome the challenges of early puberty in adulthood or never experience these risks due to a supportive environment. For example, there are many protective factors that can reduce risks related to off-time puberty, especially high-quality caregiving including higher warmth (e.g., authoritative parent), better communication, and the caregiver having more awareness of how the adolescent spends their time (Mrug et al., 2008).

On a historical note, a long-standing trend is apparent in the timing of pubertal onset. In Western regions like the United States and Europe, age at menarche declined dramatically from about seventeen years in the early nineteenth century to about thirteen years by the middle of the twentieth century. Starting in the 1960s, the age of onset of puberty seemed to have leveled off in Europe and the United States, although minor but significant declines of two and a half to four months have been reported during the past twenty-five years (Aksglaede et al., 2009; Eckert-Lind et al., 2020; Rubin et al., 2009; Sorensen et al., 2012). This tendency is an example of a secular trend. A secular trend is a long-term trend that lasts for several years or even decades as it manifests in the living conditions of a population and highlights any imbalance in health trends within the same population.

The most likely explanation for the decline in age of menarche is that nutrition has steadily improved, generation over generation, allowing for the body to more effectively prepare for the physical changes of puberty. Higher SES is also predictive of an earlier age of menarche, most likely because greater access to resources typically allows for greater nutritional access. In some countries, a similar link has been found between higher socioeconomic status and declining age at menarche. For instance, in the Philippines, earlier menarche was characteristic of girls who lived in urban, higher SES households, characterized by higher maternal education, better housing, and household asset ownership (Adair, 2001). Also, studies in Nigeria and Bangladesh found that girls from families of higher SES, as indicated by parental education and/or occupation, had an earlier age at menarche compared to girls from families of lower SES (Hossain et al., 2010; Onyiriuka & Egbagbe, 2013). One study done in Italy additionally suggests that the age at menarche has started to level off because socioeconomic conditions such as nutrition and hygiene have stopped improving (Piras et al., 2020).

The timing of puberty and related experiences also varies considerably by race and ethnicity. Black girls experience pubertal changes such as breast growth, pubic hair development, and menarche earlier than non-Black girls (Keenan et al., 2014; Osinubi et al., 2022). Early childhood stress and trauma due to discrimination and racism may disproportionately affect Black girls' HPA activation resulting in earlier puberty (Warner, 2017). For Black, White, and Hispanic girls, household stress and instability are often associated with both earlier puberty and earlier menarche, though this association was not found for Asian and Pacific Islander youth (Aghaee et al., 2020).

Extensive research suggests that sociocultural experiences during puberty can have long-lasting effects on youth development. Specifically, social-contextual factors, including parental and peer relationships, school experience, and neighborhood conditions, are associated with increased risks of delinquency or lower social competence for boys with earlier puberty (Klopack et al., 2020). For girls who experience puberty earlier, peer pressure, harsh parenting, and environmental uncertainty increase risks of delinquency and other externalizing behaviors (Klopack et al., 2020; Najman et al., 2009).

Additionally, researchers have found that how puberty timing affects mental health can vary based on race and ethnicity, especially when considering other environmental factors. For example, early-maturing Hispanic females and males experienced more mental health issues when inhabiting areas with a significant proportion of White population (Seaton et al., 2022; White et al., 2013). Relatively late maturing African American females reported more difficulty internalizing after facing peer victimization (Hamlat et al., 2014), and those with a strong sense of racial identity experienced more difficulties in predominantly White schools (Seaton & Carter, 2018). Thus, minoritized teens undergoing off-time puberty display higher risk for psychological problems within low ethnic minority schools and communities.

Link to Learning

Watch this overview of what adolescence means and the role of puberty during this time. This helpful recap highlights the biological basis of puberty and discusses some of the social factors teens experience.

## Adolescent Sexual Behaviors

The development of an adolescent's sexuality and sexual behavior involves exploring the motivational and functional components of sexuality, such as sexual desire, sexual arousal, and sexual function, that are critical to understanding adult sexual life. Adolescent sexuality is shaped by a variety of contextual factors from the individual level (e.g., biological and neurological growth, personality, gender identity) to social-contextual environmental levels (e.g., influences from parents and peers, school and neighborhood influences) to the broader cultural contextual levels (e.g., media, cultural values) (Kar et al., 2015). This results in wide variability in adolescent sexual behaviors, interests, and overall sexuality.

Sexual activity encompasses a wide range of behaviors aimed at experiencing pleasure or intimacy, including both solitary activities (like masturbation) and partnered activities (like kissing, touching, oral sex, vaginal intercourse, and anal intercourse). Partnered activities may or may not involve physical contact. For example, sending sexual text messages (sexts) or other verbal communication is still a form of sexual activity. "Having sex" commonly refers to sexual intercourse, which involves penetration (e.g., of the mouth, vagina, or anus), which may be done using a penis, fingers, or other objects. However, sex may also be the word used to describe other forms of sexual activity such as external stimulation of genitalia or other erogenous zones (e.g., nipples). Remember, sexual activity should always be consensual, and respecting diverse sexual orientations is crucial.

Adolescence is often a time of self-exploration, including different types of sexual practices, such as masturbation. However, teens in this developmental phase may also engage in risky sexual behaviors such as unprotected penile-vaginal intercourse (PVI) (Thoma et al., 2013) and intercourse under the influence of alcohol or drugs (Rosario et al., 2014). Hence, the development of adolescent sexuality can lead to undesirable consequences for some teens, including emotional distress, the risk of contracting STIs, and unplanned pregnancy.

The Centers for Disease Control and Prevention (CDC) has researched adolescent behaviors for several decades using a survey called the Youth Risk Behavior Surveillance System (YRBSS). Data are collected every two years on a nationally representative sample of more than 10,000 U.S. high school students in grades nine through twelve. The questionnaires are answered anonymously, and results for individual years are reported as well as trends that emerge across multiple years. These data provide a comprehensive picture of mental and physical health-related behaviors in teens.

In 2021, 30 percent of high school students reported having had sexual intercourse (CDC, 2021). Females and males reported similar rates (31 and 30 percent, respectively), and this pattern held true across ethnoracial groups, except for Asian American teens, with only 11 percent responding they had ever had sex. Further, LGBTQ+ teens reported having had sex at a slightly higher but not significantly different rate than their heterosexual peers (33 versus 29 percent, respectively).

The ten-year trend results from the YRBSS show a marked and steady decline in sexual activity. In 2011, the proportion of high school students who had ever had sex was 49 percent, but in 2021 that dropped to 30 percent. This means more than two-thirds of high school students have not had sexual intercourse. When asked to report whether they are currently sexually active, 21 percent of teens reported in the affirmative. Note that the word "intercourse" was not defined to the high school students who completed the survey, so they may have varied understandings of what counts as sexual activity or intercourse. While greater than 90 percent of adolescents are likely to think of sexual intercourse as meaning PVI, only around 60 percent think of anal sex as intercourse, and only around 20 percent think of oral sex as a form of intercourse (Lindberg et al., 2021). Since the YRBSS is not defining sexual intercourse and many adolescents interpret the term differently, any findings are subject to differences in individual knowledge and perspective. However, there is likely underreporting on surveys as many adolescents may underestimate the behaviors that count as sex or may have never had intercourse defined to them (Figure 9.7).

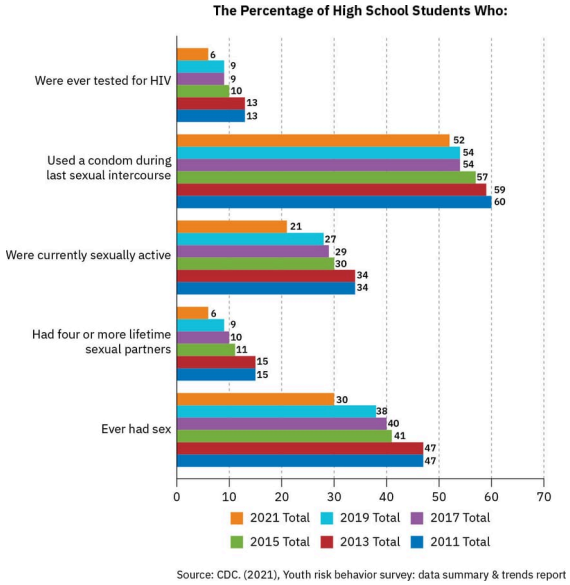



Figure 9.7 There was a decrease in various types of sexual related behaviors reported by high school students over the past decade. (data source: CDC; attribution: Copyright Rice University, OpenStax, under CC BY 4.0 license)

Knowledge and attitudes regarding sexual behavior are heavily influenced by where they acquire their knowledge—most often from parents, peers, or the media. While around 61 percent of adolescents learn some level of sex education and contraception knowledge from their parents, the next most common source of information is peers (Bleakley et al., 2018). Moreover, researchers have found that teenagers who engage in frequent discussions with their peers about sex tend to have more favorable perceptions regarding potential social advantages (such as increased popularity through sexual activity) and enjoyment linked to sex, while being less inclined to anticipate social consequences (like stigma or loss of self-esteem) associated with it (Bleakley et al., 2018; Ragsdale et al., 2014). Adolescents were also twice as likely to talk about sex with their mother/woman caregiver than their father/man caregiver, though they strongly preferred communicating with peers over either caregiver (Ragsdale et al., 2014).

Very few respondents to the 2021 YRBSS indicated they had had four or more sexual partners so far—just 6 percent—also down from the 2011 figures (18 percent for males, 13 percent for females). Of those who reported being sexually active, 52 percent reported using a condom during their most recent intercourse, 33 percent reported using hormonal birth control (such as the pill), and 10 percent reported effectively using both condoms and hormonal birth control together. The most used contraceptive method among teens between 2011 and 2015 remained the condom (reported by 97 percent of teen females), followed by withdrawal (60 percent) and the pill (56 percent) (Harper et al., 2018). These low rates of effective contraception increase the risks for unplanned pregnancy and for spreading an STI. A sexually transmitted infection (STI) is caused by a virus, bacteria, fungus, or parasite that can be spread through sexual contact. Several STIs such as HPV and chlamydia, often show no symptoms, so individuals might have an infection without realizing it. When an STI leads to noticeable symptoms, it is called a sexually transmitted disease (STD) (CDC, 2023).

## Link to Learning

Teens and young adults are at a higher risk of STIs among sexually active individuals. Knowing the statistics and being informed, along with protecting yourself and getting tested for STIs, is important. Learn more about teen sexual health by watching this video.

Adolescent sexual behaviors other than intercourse have also been studied. According to the CDC, 33 percent of adolescents (aged fifteen to seventeen years) have engaged in oral sex at least once (CDC, 2020). Adolescents may be more likely to engage in oral sex over vaginal intercourse because many do not consider it to "count" as sex or see its potential for leading to STI transmission (Buhi & Goodson, 2007; Strome et al., 2022). From these findings, oral sex is an important component of adolescent sexual experience and should receive attention from parents, educators, and health-care professionals.

The YRBSS also asks teens to report whether they had ever experienced any kind of sexual violence (including unwanted touching and kissing) or been forced to have sex. With an overall level of 11 percent of teens reporting such an experience, 18 percent of female adolescents and 5 percent of male adolescents have experienced some form of sexual violence. A higher

proportion of American Indian/Alaskan Native youth (16 percent), multiracial youth (15 percent), and LGBTQ+ youth (22 percent) reported experiencing sexual violence compared to their peers from other racial andethnic groups. Sexual health education that includes defining sexuality and sexual behaviors while also educating adolescents on consequences, healthy relationships, and communication can reduce both the risk factors of early sexual behavior and the risks of sexual violence. For example, education on establishing communication around sexual behavior and respecting the boundaries of others can reduce perpetration of sexual violence.

## Sexual Health: Early Intercourse, Adolescent Childbearing, and Sex Education

Psychologists have focused on the individual and environmental factors that predict and explain earlier first sexual intercourse, often defined as younger age at first sexual intercourse. The earlier initial intercourse happens, the greater is the increase in chances for negative health consequences. Research suggests that engaging in sexual intercourse at an early age may increase the likelihood of experiencing negative sexual health outcomes, including reproductive health problems, injuries, pregnancy complications, and socioemotional challenges with future sexual relationships. However, for some individuals, early sexual intercourse has also been associated with positive outcomes like healthier sexual function, including less pain during vaginal penetration, better orgasmic function, and reduced sexual inhibition (Peragine et al., 2022). Some of the positive outcomes of early sexual behavior are more specifically related to sexual stimulation and orgasm, not necessarily intercourse (Peragine et al., 2022). Some research indicates that in evaluating the long-term impacts of first interpersonal sexual experiences, whether the experience was perceived as positive and enjoyable including who you are with may matter more (Peragine et al., 2023).

Psychologists have identified many factors related to early first intercourse. Studies have consistently shown that early sexual intercourse is associated with early pubertal timing (e.g., Mrug et al., 2014; Price & Hyde, 2009), likely because older or similarly maturing adolescents may give extra attention, wanted or unwanted, and even pressure early-maturing adolescents into earlier sexual activity. Early sexual activity is also negatively correlated with school achievement, which means struggling in school or not having strong academic background is a risk factor for early sexual intercourse (Lanari et al., 2020; Price & Hyde, 2009; Wheeler, 2010). Individuals with high levels of aggression and diagnoses of conduct disorders also tend to have sexual intercourse earlier (Fairchild et al., 2019).

Data from U.S. ninth-grade and eleventh-grade children who completed the Minnesota Student Survey show that the relationship between adverse childhood experiences and adolescent sexual risk behaviors and teen pregnancy is strong (Anda et al., 2006; Song & Qian, 2020). A study of teenagers in Brazil found that both personal factors like living in institutions or on the street (versus with families), repeating a school year, and using illegal drugs, as well as family factors like feeling less supported by parents and having more independence from the family, were linked to when teenagers started having sex (Furlanetto et al., 2020).

Parent-child closeness has been shown as a factor in early sexual activity. When parents are distant, adolescents may bond more strongly with their peers, who may serve as positive or negative social influences (Giletta et al., 2021). A qualitative study done in South Africa found that household poverty, family conflict, detached parenting, and lack of sex education all had a negative influence on adolescent well-being and promoted early sexual behaviors (Anyanwu et al., 2020). Taking part in religious activities has also been found to delay first sexual intercourse, especially for males. For instance, religiosity serves as a factor for abstaining from sexual activity among youth in Nigeria (Somefun, 2019).

Thus, family, school, and religious environments can affect teen behaviors and sexual activities. Some protective factors against early sexual initiation include higher socioeconomic status, affiliation with a religious group, sex education, parental monitoring, and knowledge about reproductive health (Lara & Abdo, 2016; Stephenson et al., 2014).

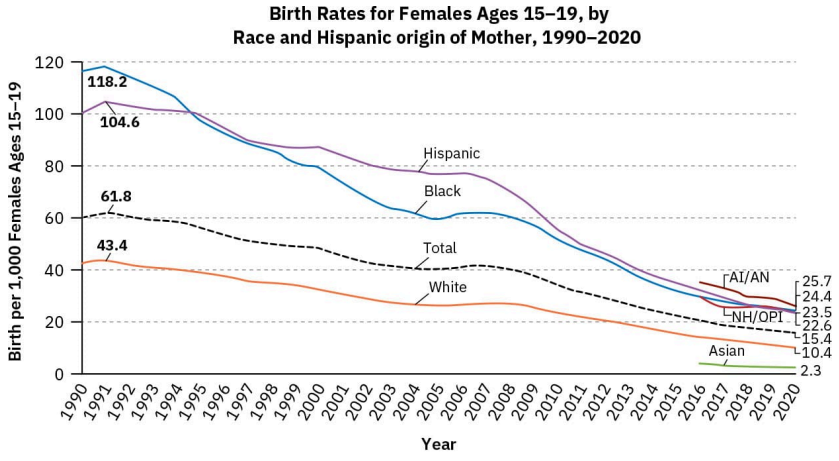
## Adolescent Pregnancy and Childbearing

The impact of adolescents bearing their own children is well documented. Adolescents themselves are not finished with development and maturation and are thereby not as well prepared to begin raising another person. For example, a younger age of childbearing can reduce access to educational and socioeconomic advantages later in life (Wolfe et al., 2023). Indeed, adolescent parenthood hinders normative psychological development and is related to poorer psychological functioning (Huang et al., 2013; Mollborn & Morningstar, 2009). Early age of becoming a parent is also associated with a higher risk of poor parenting and intergenerational transmission of unhealthy behavioral risks, such as greater externalizing problems in children of younger caregivers (Lorber & Egeland, 2009). About 75 percent of teenage pregnancies are unplanned (Finer & Zolna, 2016).

Pregnancy and childbirth significantly affect girls' high school dropout rates. While about 90 percent of females who do not give birth as teenagers graduate from high school, the rate of high school completion for teen parents is 50 percent by the age of twenty-two years (Perper et al., 2010). Teenage mothers therefore attain a lower level of education, have lower earnings, and become more likely to use social welfare services (Gorry, 2019). Teenage mothers are also less likely to attend college and less likely to complete college when they do attend (Diaz & Fiel, 2016). Overall, being a teenage mother often brings emotional, psychological, and social difficulties, although not all teenage mothers have the same experiences (H.H.S., 2023). Having children may motivate some teen parents to complete their education to pursue "a better life" (Harden et al., 2006) and strive for self-sufficiency (Harding et al., 2020).

Research on the experience of teenage fathers is more scarce, for several reasons. Teen mothers are less likely to put fathers' information on the birth certificate (Landry & Forrest, 1995), and teen males are less likely than older fathers to affirm paternity (Paschal, 2013). Nonetheless, paternal involvement is important, and traits linked with young fatherhood might lead to situations that increase the chances of their offspring engaging in risky sexual behavior and becoming teenage parents themselves (Bamishigbin et al., 2019). For instance, sons of teen fathers were almost twice as likely to become teenage fathers compared to sons of older fathers, even when other risk factors were taken into consideration (Sipsma et al., 2010).

A positive development is that the U.S. teen birth rate (births per 1,000 females aged fifteen to nineteen years) has been declining since 1991. Birth rates dropped from 17.4 per 1,000 females in 2018 to 15.4 in 2020, a record low (Martin et al., 2021). Rates vary significantly among ethnoracial groups, but the downward trend is occurring in all groups. In 2020, American Indian/Alaskan Native adolescent females had the highest birth rate, followed by Hispanic and Black adolescents and then White adolescents (CDC, 2017, 2022) (Figure 9.8).




Sources:
For 1990–2015: Centers for Disease Control and Prevention. (2017). Births: Final data for 2015. *National Vital Statistics Reports, 66*(1).

For 2016–2020: Centers for Disease Control and Prevention. (2022). Births: Final data for 2020. *National Vital Statistics Reports, 70*(17).

Figure 9.8 The U.S. teen birth rate has been declining since 1991 and reached a record low in 2020. The downward trend is evident across all ethnoracial groups. (data source: CDC; attribution: Copyright Rice University, OpenStax, under CC BY 4.0 license)

What accounts for these declines in adolescent childbearing rates? It is likely a combination of factors: greater access to and use of hormonal birth control and condoms, increased access to comprehensive sex education, access to family planning clinics, and an overall decline in sexual activity among teens (e.g., Lindbert et al., 2020). Evidence-based teen pregnancy prevention programs, youth-friendly reproductive health services, and parental and community support can continue to reduce teen pregnancy rates (Goodreau et al., 2020).

## Sex Education

Sex education is an important tool not only in encouraging safe and healthy sexual behavior and choices but also in preventing STIs and unplanned pregnancies. In the United States, abstinence-only education, abstinence-plus education, and comprehensive sex education are the three main types of sex education programs:

- Abstinence-only education teaches that people should wait until marriage to engage in sexual intercourse and usually doesn't include information about using contraception or condoms to prevent pregnancy and STIs. This type of education also may

not define what counts as sexual intercourse.
- Abstinence-plus education also promotes waiting until marriage to have sex but provides information about contraception and condoms.
- Comprehensive sex education gives accurate, age-appropriate information on topics like sexual development, behaviors (including abstinence), healthy relationships, life skills, communication, sexual orientation, and gender identity.

Current recommendations are to offer comprehensive sex education to adolescents in schools (Goldfarb & Lieberman, 2021). Several scientific, governmental, and non-profit organizations in the United States have been at the forefront of establishing the core features of a comprehensive sex education curriculum. The National Sexuality Education Standards, first released in 2012, included the following broad topics: healthy relationships, consent, anatomy and physiology, puberty and sexual development, gender identity, sexual orientation, sexual health, and interpersonal violence (Future of Sex Education Initiative, 2020).

How effective is such educational programming? A review of more than 1,500 published studies on all aspects of comprehensive sex education concludes this approach is a resounding success across multiple outcome measures (Goldfarb & Lieberman, 2021). The review highlights the importance of introducing such education as early in adolescence as possible, with some suggesting age-appropriate introduction as early as second or third grade (Lashof-Sullivan, 2015), carefully tailoring information to local needs and developmental appropriateness. Comprehensive sex education, in particular when it includes dating and communication content, has shown the following successful outcomes: reduced adolescent childbearing and STI transmission, improved prevention of and knowledge of dating violence, improved communication in romantic and dating relationships, greater appreciation of sexual diversity, reduced bullying of LGBTQ+ youth, reduced risk of sexual abuse, increased empathy and respect for others, improved positive self-image, a better sense of self-control and safety, increased gender awareness (knowledge and understanding of the concept of gender, the division of roles, and gender equality), and improved overall knowledge and socioemotional skills related to staying safe (Goldfarb & Lieberman, 2021). In short, it is an effective part of the conversation on adolescent sexuality.

Researchers recommend that comprehensive sex education be taught across multiple grades. Before puberty, children should be educated on their own anatomy at a very basic level (e.g., learning the accurate term for the overall external genitalia, such as vulva), know how to assert boundaries about their own boundaries (stay safe), and know how to communicate with a trusted adult if they are at risk or experience harm (Walsh et al., 2018). Additionally, as children approach puberty, in middle childhood and early adolescence, they should get more detail on healthy relationships and be taught in more detail about their own bodies and anatomy (e.g., being able to identify the parts of the external and internal genitalia). For example, multiple studies find that a minority of middle and high school youth can accurately identify the parts of the female and male reproductive system, and many do not have basic knowledge related to STIs and sex (Deshmukh & Chaniana, 2020; Nayoan et al., 2020). In a research study of older students, it was found that around two-thirds were still unable to identify female and male reproductive system parts including the labia and clitoris (Ampatzidis et al., 2019). Finally, by puberty, transparent and open comprehensive sex education that includes discussing of healthy and unhealthy relationships, defining sexual behavior fully, and teaching about safe sex should be provided to all students to improve their physical and socioemotional health and well-being (Goldfarb & Liberman, 2021). Thinking back to your learning in Chapter 2 Genetic, Prenatal, and Perinatal Health, can you identify all the parts of the female and male reproductive systems (Figure 2.12)?

A related concept, sex positivity refers to individuals and communities that focus on openness, nonjudgmental attitudes, independence, and emancipation regarding sexuality and sexual expression (Donaghue, 2015). With a sex-positive approach, open discussions with parents and health-care providers can help educate teens about their sexual desires and behaviors (Kågesten et al., 2016). Having comprehensive sex education and knowledge of reproductive system parts can also increase long-term sexual health and well-being into adulthood (Dienberg et al., 2023).

## Consent Culture and Sex Education

Consent culture refers to a societal framework that prioritizes and promotes mutual agreement, respect, and communication in all types of interpersonal interactions, particularly those of a sexual nature. In a consent culture, individuals are encouraged to seek and provide explicit and affirmative consent before engaging in any activity or behavior that may affect others. It emphasizes the understanding that consent must be freely given, reversible, informed, enthusiastic, and specific to each interaction. It aims to create an environment where all individuals feel empowered to assert their boundaries and where consent is valued as a fundamental aspect of healthy relationships and interactions. This shift toward advocating for affirmative consent, often known as “yes-means-yes” approaches, aims to foster open communication between partners and reduce instances of sexual assault (Im et al., 2021; Jozkowski, 2015). These approaches acknowledge affirmative consent as a clear and voluntary agreement, communicated either verbally or nonverbally, among all parties involved in sexual activity (Willis & Jozkowski, 2018).

A study of U.S. high school students found that adolescents' overall have favorable views toward affirmative consent (Javidi et al., 2021). The study also explored the correlations between attitudes toward affirmative consent and factors such as gender, beliefs about gender roles, and sexual activity status. Females and teens with more egalitarian views on gender roles exhibited more positive attitudes toward affirmative consent compared to males and those with less egalitarian views on gender roles (Javidi et al., 2021). These findings are consistent with previous research that noted college-aged women prefer a more explicit and affirmative consent process than college men (Muehlenhard et al., 2016). Favorable perceptions of affirmative consent could potentially contribute to a reduction in sexual assault incidents among youth by minimizing misunderstandings between partners, providing clarity on legal definitions of sexual misconduct, and fostering sexual interactions characterized by enthusiasm and mutual agreement.

### Life Hacks: Sex-Positive Parenting Tips

Creating a sex-positive climate in the home is an important aspect of contemporary parenting (Saady, 2022). The statements, behaviors, and attitudes that make up this kind of parenting don't mean caregivers are encouraging their teenager to have sex. Rather, they recognize that sex and sexuality are a natural, healthy, and pleasurable part of life, and they set the stage for safe exploration, boundary setting, and open communication. Teaching about consent is a key part of this approach to sexuality.

Like those who adopt the authoritative parenting style, parents who approach their teen's emerging sexuality in a sex-positive way clearly communicate expectations for their teen regarding sexual behavior. When these expectations are not met, sex-positive parents communicate their disappointment and reinforce the agreed-upon parameters for future behavior. Shame and guilt are actively avoided.

Here are some other sex-positive parenting tips and practices:

- Use medically correct terms for sexual body parts and acts from early childhood onward.
- Discuss options for birth control and STI prevention.
- Discuss masturbation in healthy terms, including appropriate places to do it.
- Focus on the functionality of body parts rather than on their appearance.
- Model healthy sexuality with parents' own adult partners, including showing affectionate and romantic aspects of sex like hand-holding, kissing, and cuddling.
- Have periodic and ongoing age-appropriate discussions about sex, tailored to the teen's current knowledge and experiences.

In these ways, parents acknowledge adolescents' emerging sexuality and take an active part in setting their child up for positive decisions and experiences around sexuality.

## References

Aghaee, S., Deardorff, J., Greenspan, L. C., Quesenberry, C. P., Jr, Kushi, L. H., & Kubo, A. (2020). Early life household intactness and timing of pubertal onset in girls: A prospective cohort study. *BMC Pediatrics*, *20*(1), 464. https://doi.org/10.1186/s12887-020-02345-w

Anda, R. F., Felitti, V. J., Bremner, J. D., Walker, J. D., Whitfield, C. H., Perry, B. D., ... & Giles, W. H. (2006). The enduring effects of abuse and related adverse experiences in childhood: A convergence of evidence from neurobiology and epidemiology. *European archives of psychiatry and clinical neuroscience*, *256*, 174-186.

Ampatzidis, G., Georgakopoulou, D., & Kapsi, G. (2019). Clitoris, the unknown: what do postgraduate students of educational sciences know about reproductive physiology and anatomy? *Journal of Biological Education, 55*(3), 254–263. doi.org/10.1080/00219266.2019.1679658

Anyanwu, F. C., Akinsola, H. A., Tugli, A. K., & Obisie-Nmehielle, N. (2020). A qualitative assessment of the influence of family dynamics on adolescents' sexual risk behaviour in a migration-affected community. *International journal of qualitative studies on health and well-being*, *15*(1), 1717322.

American Psychological Association (APA). (2023). Transgender people, gender identity and gender expression. Retrieved on March 15, 2024 from https://www.apa.org/topics/lgbtq/tra...der-expression

Arım, R. G., Tramonte, L., Shapka, J. D., Susan Dahinten, V., & Douglas Willms, J. (2011). The family antecedents and the subsequent outcomes of early puberty. *Journal of Youth and Adolescence*, *40*, 1423-1435.

Bamishigbin Jr, O. N., Schetter, C. D., & Stanton, A. L. (2019). The antecedents and consequences of adolescent fatherhood: A systematic review. *Social Science & Medicine*, *232*, 106-119.

Bleakley, A., Khurana, A., Hennessy, M., & Ellithorpe, M. (2018). How Patterns of Learning About Sexual Information Among Adolescents Are Related to Sexual Behaviors. Perspectives on sexual and reproductive health, 50(1), 15–23. doi.org/10.1363/psrh.12053

Buhi ER, Goodson P. Predictors of adolescent sexual behavior and intention: a theory-guided systematic review. J Adolesc Health. 2007 Jan;40(1):4-21.

CDC. (2020, February 10). Teen substance use & risks. Retrieved February 19, 2024 from www.cdc.gov/healthyyouth/fac...heet-basic.htm

CDC. (2023, July 7). Sexually Transmitted Diseases (STDs): Diseases & Related Conditions. Retrieved on March 15, 2024 from www.cdc.gov/std/general/default.htm

Deshmukh, D. D., & Chaniana, S. S. (2020). Knowledge about sexual and reproductive health in adolescent school-going children of 8th, 9th, and 10th standards. *Journal of psychosexual Health, 2*(1), 56–62. doi.org/10.1177/2631831819898916

Diaz CJ, Fiel JE. The Effect(s) of Teen Pregnancy: Reconciling Theory, Methods, and Findings. Demography. 2016 Feb;53(1):85-116.
Donaghue, C. (2015). *Sex outside the lines: Authentic sexuality in a sexually dysfunctional culture*. Dallas, TX: Benbella Books.

Dienberg, M. F., Oschatz, T., Kosman, E., & Klein, V. (2023). Does clitoral knowledge translate into orgasm? The interplay between clitoral knowledge, gendered sexual scripts, and orgasm experience. *Journal of Sex & Marital Therapy, 49*(5), 484–496. doi.org/10.1080/0092623X.2022.2147112

Fairchild, G., Hawes, D. J., Frick, P. J., Copeland, W. E., Odgers, C. L., Franke, B., ... & De Brito, S. A. (2019). Conduct disorder. *Nature Reviews Disease Primers*, *5*(1), 43.

Farello, G., Altieri, C., Cutini, M., Pozzobon, G., & Verrotti, A. (2019). Review of the literature on current changes in the timing of pubertal development and the incomplete forms of early puberty. Frontiers in pediatrics, 7, 147. https://doi.org/10.3389/fped.2019.00147

Finer LB, Zolna MR. Declines in Unintended Pregnancy in the United States, 2008-2011. N Engl J Med. 2016 Mar 3;374(9):843-52. doi: 10.1056

Frankel, L. (2002). "I've never thought about it": Contradictions and taboos surrounding American males' experiences of first ejaculation (semenarche). *The Journal of Men's Studies*, *11*(1), 37–54. doi.org/10.3149/jms.1101.37

Furlanetto, M. F., Ghedin, D. M., Gonçalves, T. R., & Marin, A. H. (2020). Individual and contextual factors associated with sexual initiation among adolescents. *Psicologia: Reflexão e Crítica*, *32*.

Future of Sex Education Initiative (2020). https://www.futureofsexed.org/

Gaydosh, L., Belsky, D. W., Domingue, B. W., Boardman, J. D., & Harris, K. M. (2018). Father absence and accelerated reproductive development in non-Hispanic white women in the United States. *Demography*, *55*, 1245-1267.

Giletta, M., Choukas-Bradley, S., Maes, M., Linthicum, K. P., Card, N. A., & Prinstein, M. J. (2021). A meta-analysis of longitudinal peer influence effects in childhood and adolescence. *Psychological Bulletin, 147*(7), 719–747. doi.org/10.1037/bul0000329

Goldfarb ES, Lieberman LD. Three decades of research: the case for comprehensive sex education. *J Adolesc Health*. 2021;68(1):13–27.

Goodreau, S. M., Pollock, E. D., Wang, L., Li, J., Aslam, M. V., Katz, D. A., ... & Rosenberg, E. S. (2022). Declines in Pregnancies among US Adolescents from 2007 to 2017: Behavioral Contributors to the Trend. *Journal of pediatric and adolescent gynecology*, *35*(6), 676-684.

Gorry D. Heterogeneous Consequences of Teenage Childbearing. Demography. 2019 Dec;56(6):2147-2168.

Graber, J. A. (2013). Pubertal timing and the development of psychopathology in adolescence and beyond. *Hormones and behavior, 64*(2), 262–269. https://doi.org/10.1016/j.yhbeh.2013.04.003

Hall, W. J., and Rodgers, G. K. (2019). Teachers' attitudes toward homosexuality and the lesbian, gay, bisexual, and queer community in the United States. Soc. Psychol. Educ. 22, 23–41. doi: 10.1007/s11218-018-9463-9

Harden, A., Brunton, G., Fletcher, A., Oakley, A., Burchett, H., & Backhans, M. (2006). *Young people, pregnancy and social exclusion: A systematic synthesis of research evidence to identify effective, appropriate and promising approaches for prevention and support*. London, UK: EPPI-Centre.

Harding, J. F., Knab, J., Zief, S., Kelly, K., & McCallum, D. (2020). A systematic review of programs to promote aspects of teen parents' self-sufficiency: Supporting educational outcomes and healthy birth spacing. Maternal and Child Health Journal, 24, 84-104.

Harper, C. R., Steiner, R. J., Lowry, R., Hufstetler, S., & Dittus, P. J. (2018). Variability in condom use trends by sexual risk behaviors: Findings from the 2003–2015 National Youth Risk Behavior Surveys. Sexually transmitted diseases, 45(6), 400-405.

Health and Human Services (2023). Trends in teen pregnancy and childbearing. opa.hhs.gov/adolescent-healt...d-childbearing

Huang, C. Y., Costeines, J., Kaufman, J. S., & Ayala, C. (2014). Parenting stress, social support, and depression for ethnic minority adolescent mothers: Impact on child development. *Journal of child and family studies, 23*, 255–262. https://doi.org/10.1007/s10826-013-9807-1

Im, J., Dimond, J., Berton, M., Lee, U., Mustelier, K., Ackerman, M. S., & Gilbert, E. (2021, May). Yes: Affirmative consent as a theoretical framework for understanding and imagining social platforms. In Proceedings of the 2021 CHI conference on human factors in computing systems (pp. 1-18).

Javidi, H., Maheux, A. J., Widman, L., Kamke, K., Choukas-Bradley, S., & Peterson, Z. D. (2020). Understanding Adolescents' Attitudes Toward Affirmative Consent. Journal of sex research, 57(9), 1100–1107. doi.org/10.1080/00224499.2019.1711009

Jozkowski, K. N. (2015). "Yes means yes"? Sexual consent policy and college students. Change: The Magazine of Higher Learning, 47(2), 16-23.

Kågesten, A., Gibbs, S., Blum, R. W., Moreau, C., Chandra-Mouli, V., Herbert, A., & Amin, A. (2016). Understanding factors that shape gender attitudes in early adolescence globally: A mixed-methods systematic review. PloS One, 11, 1–36.

Kar, S. K., Choudhury, A., & Singh, A. P. (2015). Understanding normal development of adolescent sexuality: A bumpy ride. Journal of human reproductive sciences, 8(2), 70-74.

Keenan, K., Culbert, K. M., Grimm, K. J., Hipwell, A. E., & Stepp, S. D. (2014). Timing and tempo: Exploring the complex association between pubertal development and depression in African American and European American girls. *Journal of Abnormal Psychology*, *123*(4), 725–736. doi.org/10.1037/a0038003

Klopack, E. T., Simons, R. L., & Simons, L. G. (2020). Puberty and girls' delinquency: A test of competing models explaining the relationship between pubertal development and delinquent behavior. *Justice Quarterly*, *37*(1), 25–52. doi.org/10.1080/07418825.2018.1472291

Klopack, E. T., Sutton, T. E., Simons, R. L., & Simons, L. G. (2020). Disentangling the effects of boys' pubertal timing: The importance of social context. *Journal of Youth and Adolescence*, *49*(7), 1393–1405. https://doi.org/10.1007/s10964-019-01141-9

Lanari, D., Mangiavacchi, L., & Pasqualini, M. (2020). Adolescent sexual behaviour and academic performance of Italian students. *Genus*, *76*(1), 1-18.

Landry, D. J., & Forrest, J. D. (1995). How old are US fathers?. *Family planning perspectives*, 159-165.

Lara, L. A., & Abdo, C. H. (2016). Age at time of initial sexual intercourse and health of adolescent girls. *Journal of Pediatric and Adolescent Gynecology*, *29*(5), 417-423.

Lashof-Sullivan, M. (2015). Sex education in schools. GEO. J. GENDER & L., 16, 263-264.

Leone, T., & Brown, L. J. (2020). Timing and determinants of age at menarche in low-income and middle-income countries. *BMJ Global Health*, *5*(12), e003689. doi.org/10.1136/bmjgh-2020-003689

Lindberg, L. D., Scott, R. H., Desai, S., & Pleasure, Z. H. (2021). Comparability of estimates and trends in adolescent sexual and contraceptive behaviors from two national surveys: National Survey of Family Growth and the Youth Risk Behavior Survey. *Plos one*, *16*(7), e0253262.

Lorber, M. F., & Egeland, B. (2009). Infancy parenting and externalizing psychopathology from childhood through adulthood: developmental trends. *Developmental psychology, 45*(4), 909–912. doi.org/10.1037/a0015675

Marshal MP, Dietz LJ, Friedman MS, Stall R, Smith HA. 2011. Suicidality and depression disparities between sexual minority and heterosexual youth: a meta-analytic review. J. Adolesc. Health 49:115–23

Mercer, J. (2021). Developmental changes in children and adolescents: Relevance for parental alienation discussions. In *Challenging parental alienation: New directions for professionals and parents*.

Mollborn, S., & Morningstar, E. (2009). Investigating the relationship between teenage childbearing and psychological distress using longitudinal evidence. *Journal of health and social behavior, 50*(3), 310–326. doi.org/10.1177/002214650905000305

Mrug S, Elliott M, Gilliland MJ, et al. Positive Parenting and Early Puberty in Girls: Protective Effects Against Aggressive Behavior. *Arch Pediatr Adolesc Med.* 2008;162(8):781–786. doi:10.1001/archpedi.162.8.781

Mrug, S., Elliott, M. N., Davies, S., Tortolero, S. R., Cuccaro, P., & Schuster, M. A. (2014). Early puberty, negative peer influence, and problem behaviors in adolescent girls. *Pediatrics, 133*(1), 7-14.

Muehlenhard, C. L., Humphreys, T. P., Jozkowski, K. N., & Peterson, Z. D. (2016). The complexities of sexual consent among college students: A conceptual and empirical review. The Journal of Sex Research, 53(4-5), 457-487.

Mustanski, B., Kuper, L., and Greene, G. J. (2014). "Development of sexual orientation and identity. In APA handbook of sexuality and psychology," in Person-Based Approaches. Vol. 1. eds. D. L. Tolman and L. M. Diamond (United States: American Psychological Association), 597–628.

Najman, J. M., Hayatbakhsh, M. R., McGee, T. R., Bor, W., O'Callaghan, M. J., & Williams, G. M. (2009). The impact of puberty on aggression/delinquency: Adolescence to young adulthood. *Australian and New Zealand Journal of Criminology*, *42*(3), 369–386.

Nayoan, C. R., Hoban, E., & Williams, J. (2020). How young female adolescents understand their pubertal body changes and reproductive system. *International Journal of Adolescence and Youth, 25*(1), 872–881. doi.org/10.1080/02673843.2020.1767662

NIH. (2024). Puberty and precocious puberty. https://www.nichd.nih.gov/health/top...sheets/puberty

Osinubi, A., Lewis-de Los Angeles, C. P., Poitevien, P., & Topor, L. S. (2022). Are black girls exhibiting puberty earlier? Examining implications of race-based guidelines. *Pediatrics*, *150*(2), e2021055595.

Paschal, A. M. (2013). Voices of African American teen fathers: I'm doing what I got to do. Routledge.

Peragine, D. E., Skorska, M. N., Maxwell, J. A., Impett, E. A., & VanderLaan, D. P. (2022). The Risks and Benefits of Being "Early to Bed": Toward a Broader Understanding of Age at Sexual Debut and Sexual Health in Adulthood. *The Journal of Sexual Medicine*, *19*(9), 1343-1358.

Peragine, D.E., Kim, J.J., Maxwell, J.A. et al. (2023). Not Who You Are, But Who You Are With: Re-examining Women's Less Satisfying Sexual Debuts. *Arch Sex Behav 52*, 3405–3427. https://doi.org/10.1007/s10508-023-02667-7

Perper K, Peterson K, Manlove J. *Diploma Attainment Among Teen Mothers. Child Trends, Fact Sheet* Publication #2010-01: Washington, DC: Child Trends; 2010.

Price, M.N., Hyde, J.S. When Two Isn't Better Than One: Predictors of Early Sexual Activity in Adolescence Using a Cumulative Risk Model. J Youth Adolescence 38, 1059–1071 (2009).

Ragsdale, K., Bersamin, M. M., Schwartz, S. J., Zamboanga, B. L., Kerrick, M. R., & Grube, J. W. (2014). Development of sexual expectancies among adolescents: Contributions by parents, peers and the media. The Journal of Sex Research, 51(5), 551-560.

Reis LF, Surkan PJ, Atkins K, Garcia-Cerde R, Sanchez ZM. Risk Factors for Early Sexual Intercourse in Adolescence: A Systematic Review of Cohort Studies. Child Psychiatry Hum Dev. 2023 Mar 25:1–14.

Rosario, M., Corliss, H. L., Everett, B. G., Reisner, S. L., Austin, S. B., Buchting, F. O., & Birkett, M. (2014). Sexual orientation disparities in cancer-related risk behaviors of tobacco, alcohol, sexual behaviors, and diet and physical activity: pooled Youth Risk Behavior Surveys. *American journal of public health*, *104*(2), 245-254.

Russell, S. T., & Fish, J. N. (2016). Mental health in lesbian, gay, bisexual, and transgender (LGBT) youth. *Annual review of clinical psychology*, *12*, 465-487.

Ryan, R. M., & Deci, E. L. (2017). Self-determination theory: Basic psychological needs in motivation, development, and wellness. Guilford publications.

Saady, M. (2022). Sex-Positive Parenting: What You Need to Know. Parents Together.

Saewyc, E. M. (2011). Research on adolescent sexual orientation: Development, health disparities, stigma, and resilience. Journal of research on adolescence, 21(1), 256-272.

Salerno JP, Williams ND, Gattamorta KA. LGBTQ populations: psychologically vulnerable communities in the COVID-19 pandemic. Psychol Trauma. 2020;12(suppl 1):S239–S242.

Sipsma, H., Biello, K. B., Cole-Lewis, H., & Kershaw, T. (2010). Like father, like son: The intergenerational cycle of adolescent fatherhood. *American journal of public health*, *100*(3), 517-524.

Somefun, O. D. (2019). Religiosity and sexual abstinence among Nigerian youths: does parent religion matter?. *BMC public health, 19*, 1-11.

Sommer, M., Likindikoki, S., & Kaaya, S. (2014). Tanzanian adolescent boys' transitions through puberty: the importance of context. American journal of public health, 104(12), 2290-2297.

Song, W., & Qian, X. (2020). Adverse Childhood Experiences and Teen Sexual Behaviors: The Role of Self-Regulation and School-Related Factors. Journal of school health, 90(11), 830-841.

Sooki, Z., Shariati, M., Chaman, R., Khosravi, A., Effatpanah, M., & Keramat, A. (2016). The role of mother in informing girls about puberty: A meta-analysis study. *Nursing and Midwifery Studies*, *5*(1), e30360. doi.org/10.17795/nmsjournal30360

Stephenson, R., Simon, C., & Finneran, C. (2014). Community factors shaping early age at first sex among adolescents in Burkina Faso, Ghana, Malawi, and Uganda. *Journal of health, population, and nutrition*, *32*(2), 161.

Strome, A., Waselewski, M., & Chang, T. (2022). Youths' knowledge and perceptions of health risks associated with unprotected oral sex. The Annals of Family Medicine, 20(1), 72-76.

Torvik, F. A., Flatø, M., McAdams, T. A., Colman, I., Silventoinen, K., & Stoltenberg, C. (2021). Early puberty is associated with higher academic achievement in boys and girls and partially explains academic sex differences. *Journal of Adolescent Health*, *69*(3), 503-510.

Thoma, B. C., Huebner, D. M., & Rullo, J. E. (2013). Unseen risks: HIV-related risk behaviors among ethnically diverse sexual minority adolescent females. AIDS education and prevention, 25(6), 535-541.

Scott R. H., Wellings K., & Lindberg L. Adolescent Sexual Activity, Contraceptive Use, and Pregnancy in Britain and the U.S.: A Multidecade Comparison. *Journal of Adolescent Health*. 2020 May 66(5):582-588

Walsh, K., Zwi, K., Woolfenden, S., & Shlonsky, A. (2018). School-based education programs for the prevention of child sexual abuse: A Cochrane systematic review and meta-analysis. *Research on social work practice, 28*(1), 33–55. doi.org/10.1177/1049731515619705

Warner, J. (2017). The unequal toll of toxic stress. Retrieved from www.americanprogress.org/art...-toxic-stress/

Wheeler, S. B. (2010). Effects of self-esteem and academic performance on adolescent decision-making: an examination of early sexual intercourse and illegal substance use. Journal of Adolescent Health, 47(6), 582-590.

Willis, M., & Jozkowski, K. N. (2018). Barriers to the success of affirmative consent initiatives: An application of the social ecological model. American Journal of Sexuality Education, 13(3), 324-336.

Wolfe, J. D., Thomeer, M. B., & Reczek, R. (2023). Age at first birth and women's midlife health: Cohort and race differences across the 20th century. *Social Science & Medicine, 331*, 116097. https://doi.org/10.1016/j.socscimed.2023.116097

This page titled 15.8.3: Puberty, Sexual Behavior, and Sexual Health in Adolescence is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

- 9.2: Puberty, Sexual Behavior, and Sexual Health in Adolescence by OpenStax is licensed CC BY 4.0. Original source: https://openstax.org/details/books/lifespan-development.

# 15.8.4: Cognition in Adolescence

**Learning Objectives**

By the end of this section, you will be able to:

- Describe the formal operational stage of cognitive development in adolescence
- Describe the information processing perspective on cognitive development in adolescence
- Explain influences that promote or inhibit cognitive development in adolescence

Anna is a seventeen-year-old student in twelfth grade in a public school. They recently sought counseling because they were having trouble dealing with the stress of senior year. Coming from a culture that places great importance on academic success, Anna faces intense parental pressure to achieve high grades and attend college. Anna does not want to let them down but is constantly feeling exhausted and anxious. They feel like they overthink everything they do, and after every interaction, Anna wonders how people might have perceived them or thought of their behavior, which gets tiring and stressful. This has led Anna to avoid social interactions with others as much as possible. What can Anna do to overcome unwanted thoughts and deal with academic stress?

Psychologists studying these types of development look to cognitive functioning and growth to understand the changes that occur to the brain during adolescence. Metaphorically, you might consider the brain as "hardware" and cognition as "software," or perhaps a collection of apps with an operating system. During adolescence, there are many changes in the developing capabilities of the teen's new "operating system." These changes help us understand what is going on in Anna's brain functioning that might be triggering anxiety around exams and their self-judgment during peer-to-peer social interactions.

## Formal Operational Stage of Cognitive Development

Recalling Jean Piaget's stages of cognitive development, adolescence is the period when individuals reach the final stage of formal operations. The term "formal" signifies that the adolescent has achieved the capability to reason using formal logical systems and symbols. In a larger sense, Piaget considered cognitive development complete during adolescence: the adolescent has achieved formal adult thinking capabilities.

One way to understand the key developments in adolescent cognition is to connect them to the concept of possibilities. Adolescents are able think about all the possibilities in a situation beforehand and then test them systematically (Crain, 2005). In contrast, while younger children can think in rather complex and logical ways, they are limited to reasoning about concrete, physical situations. Adolescents, in addition to increasing the complexity of their reasoning, gain the ability to think about all aspects of a situation, even a situation that doesn't or can't exist. For example, high school history teachers might ask their students to imagine they could go back in time to change just one event and write about the consequences. A school-aged child would struggle with this assignment and might indicate that time-travel isn't possible or provide an example but discuss only immediate consequences, whereas a teenager would be able to think through the scenario and provide more nuanced ramifications for the historical change. For example, the school-aged child might focus on President Abraham Lincoln still being alive if he wasn't assassinated, whereas a high-school student might develop additional policies that Lincoln could have enacted based on his political leanings, if he were able to remain alive and in power. Two major achievements of adolescent cognition are the ability to think about what is possible and to apply formal logic and reason.

Individuals derive many cognitive skills and developments from the ability to think about what might be possible. For example, people use hypothetical reasoning to predict what might occur given a set of circumstances: If a storm cloud is present and the air feels humid, it may rain soon. People use deductive reasoning to test propositions in a logical and orderly way. For example, let's say a student believes that when people study together, they will do better in a class. Adolescents can test this belief by looking at the outcome of their next exam and comparing their performance before they attended the study group session and after. They are also capable of thinking about why the group session may have helped them, including potential ways they may have studied differently during the group session and how they might extend those study strategies to the next time they try to study on their own. Not only do adolescents gain the ability to think about all the possibilities and angles of a particular problem, but they achieve the mindset to systematically explore and test each one.

Among many other things, Piaget is also credited with developing a unique style of interviewing for testing aspects of his theory in children (Pramling, 2006; Sommer-Flanagan et al., 2015). Specifically in these structured interviews, researchers would pose a problem or scenario, and the child would have to solve it while verbalizing the logic behind their answers. The researcher would ask follow-up questions based on the child's responses to further delve into the child's logical reasoning. Piaget devised several scenarios to test aspects of his theory. One example is the pendulum problem he devised to test deductive reasoning. The problem asks which of four variables makes a pendulum swing faster: (1) the length of the string, (2) the height from which the weight on the string is dropped, (3) the amount of weight, or (4) the force of the initial push. What's important to psychological research is not the participant having the correct answer, but how the participant goes about discovering it. While a younger child in the concrete operational stage (seven to eleven years old) might try out several different solutions seemingly at random and quickly come up with an answer, correct or not, an adolescent will be more likely to methodically plan and test many possible combinations of the four variables, having thought ahead about how to do so and how the four options might interact with one another.

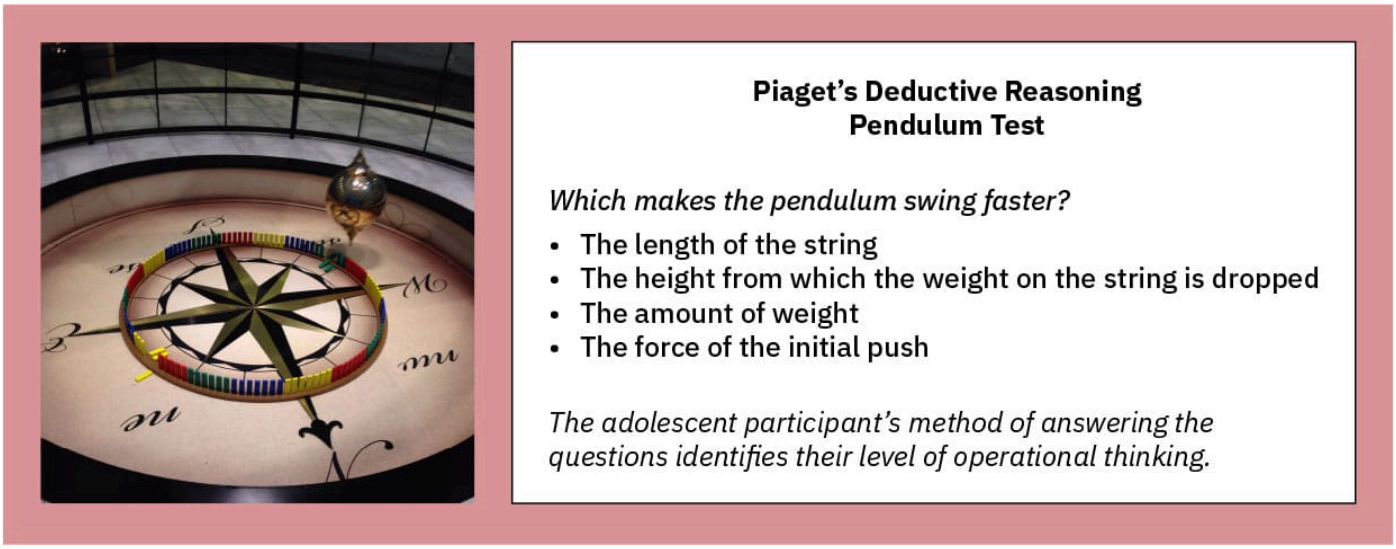



Figure 9.9 The pendulum task is used to identify a formal operational thinker, who is able to think logically even when dealing with abstract concepts or hypothetical situations. (credit left: modification of work "Foucault Pendulum" by Stephen Rahn/Flickr, Public Domain; attribution: Copyright Rice University, OpenStax, under CC BY 4.0 license)

This planning and testing of options is a hallmark of scientific thinking—thinking that involves the systematic testing of possibilities to learn more about a topic. Scientific thinking also relies on the adolescent's ability to reason using propositional logic—the ability to come to a conclusion based on imagining the proposed situation rather than observing an actual scenario. For example, teenagers, along with their recently conquered decentration from the previous concrete operational stage, are capable of simultaneously thinking about and combining different facets/variables about a problem in their mind, as they contemplate and evaluate the outcomes of each possibility (Roberge & Flexer, 1979), making them even better scientists. Taken together, these cognitive capabilities allow adolescents to discover complex relations and truths about the world.

## Multidimensional Facets of Adolescent Thinking

Adolescent thought is characterized by several other tendencies that stem from teens' new ability to think about what is possible. First is the ability to think in complex ways about abstract ideas. Adolescents become aware of the world of ideas that don't necessarily exist in physical form, and concepts, like justice, equality, equity, and truth take on new and profound importance. A child in the concrete operations stage might be able to talk about respect in simple terms, such as the give and take of mutual benefits (i.e., respect is when you are kind and share your things (Malti et al., 2020). An adolescent's description would be much more nuanced and might include a discussion of equality and fairness (another abstract yet real concept).

Adolescents are also able to think about multiple dimensions of a problem or situation and the way various factors combine to influence an observed outcome. For example, when faced with a dress code violation at school, a high school student might be able to see how the policy creates a standard against which all students are held, while also arguing against the lost class time that being sent home to change entails. Seeing the irony of such a situation is a hallmark of adolescent thinking and may lead to frustration and de-idealization of the adults who control their world. An appreciation of sarcasm, which relies on the ability to think in multiple dimensions and from multiple perspectives, also emerges in adolescence (Glenwright et al., 2017). Not only

can adolescents begin to understand when sarcasm is being used, but they can begin to understand its functional use in public discourse. Questioning rules, especially rules that seem arbitrary, is another hallmark of the adolescent experience.

Because they can now think about possibilities, in both abstract ways and in multiple dimensions, adolescents also develop relativistic thinking, which is the belief that most truths and statements of fact are relative to the position of the observer (Chandler et al., 1990). Prior to this stage, children tend to think in absolutes (e.g., right versus wrong; good versus bad). Adolescents who have developed more relativistic thinking can simultaneously evaluate the possibility that both positions can exist, depending on whose perspective you are taking. For example, if two friends are discussing whose answer on a test was correct, a teenager would be able to see how both friends could be right given the context of their examples in the answer. They could then use this information to discuss with their instructor how to gain a better understanding of the material. When all things are possible and all perspectives can be considered, everyone can seem correct . . . and everyone can seem wrong. It's a matter of perspective.

### Intersections and Contexts: Adolescent Idealism and Changing the World

Where does idealism come from? The perspective of Piaget's theory of cognitive development provides several relevant themes that combine to give adolescence this distinct characteristic. The new ability to think about possibilities opens the door for idealism to emerge in adolescence, as well as the ability to think logically about complex abstract concepts, even going so far as to test out hypotheses in one's head. Adolescent theorist David Elkind was pivotal in exploring the consequences of these combined abilities (Elkind, 1998; Tyler, 2020). He noted that as adolescents grow in their analytical capabilities, it's natural for them to become critical of the world around them. For example, teens may notice their parents exceeding the speed limit, a teacher with alcohol on his breath, or a police officer on her cell phone while driving. And turning on the TV or scanning social media shows a world that includes serious issues like hunger, war, homelessness, and political unrest.

Adolescents react to this perception of disorder and hypocrisy in a predictable way, according to Elkind (1967, 1978). Remember that adolescents are growing into adulthood, and the desire to take on adult responsibilities and roles adds to their determination to see the wrongs in the world and to do better. A search for solutions often becomes personal and emotionally charged. The not-quite-adult individual has the capacity to imagine a better world and wants to take immediate action.

Teachers, health-care professionals, and other adult mentors may provide opportunities for teens to explore the constructive power of idealism. Joining advocacy clubs at school, getting involved in community projects, and arguing with adults are all part of this newfound sense of what's possible and what can be made right. Rather than seeing adolescents' argumentativeness and passion as "acting out," adults can recognize that their idealism—and the accompanying de-idealization of parents and other authority figures—is a normative part of the transition to adulthood, and they can work with adolescents to help them channel their interests and energy. For example, a parent might identify that when their teen argues with them, their teen is showing deep concern about issues of environmental sustainability. The parent might identify a local arbor club or relevant non-profit that the teen could get involved with so that they could foster their interests and enact positive change in their community.

In adolescent egocentrism, an adolescent has the tendency to believe that other people—sometimes called an imaginary audience—are as preoccupied with the teen's appearance, body, and behavior as they are (Elkind, 1967). Teens may feel that everyone is watching them and have a strong need to impress others, though usually their peers are also consumed by what others think of them and don't necessarily worry about what they think about others. According to Elkind, another aspect of adolescent egocentrism is the personal fable. That is, teenagers often believe they and their feelings are unique, and that no one else can feel suffering with such intensity (Elkind, 1967). Another feature of adolescent egocentrism is the invincibility fable, the adolescent belief that they cannot be harmed or defeated. Preoccupation with the personal fable and concerns about pleasing the imaginary audience likely peak around age fifteen years, along with self-consciousness in general.

For examples of the features of adolescent egocentrism, consider the scenario of Sage. Sage is a teenager who just had a dramatic breakup with his first romantic partner. Sage is recounting to his father, Justin, his immense heartbreak and self-doubt. Justin tries to comfort his son by saying that the wound will heal in time. Sage snaps back, "You can't possibly understand what I'm feeling!" (personal fable). The next day, Sage walks into school and sees two of his classmates whisper something to each other. Sage confronts them about how they should mind their own business about the breakup only to be embarrassed to find out that his peers were talking about something completely different (imaginary audience). A week or two later, as Sage is trying to find new things to do with his free time, he gets the clever idea to become an influencer by doing more and more daring skate

tricks confident that no harm will befall him (invincibility fable).

Social media can reinforce teens' belief that they are unique (Houlihan, 2014). Online bullying is an apt example, given that adolescents feel they are invulnerable to the negative outcomes of their actions (Houlihan, 2014). Interestingly, this digital environment makes the "imaginary audience" of their life feel more real, increasing the likelihood of engaging in risky behavior, such as sharing one's location on the internet (Cingel et al., 2015). These behaviors might open them up to further negative outcomes that they hadn't predicted.

While Piaget's theory of cognitive development offered a comprehensive accounting of children's cognitive skills at various ages and explained how those skills develop, some aspects of this theory and its research have limitations. First, recall that Piaget's theory of cognitive development is a stage theory. This means that children learn specific cognitive skills at different ages that map directly or indirectly to their brain maturation, such as the ability to focus on more than one aspect of a problem and a maturing frontal cortex. It turns out, however, that development doesn't occur in a stepwise fashion implied by the term "stage theory." The stage model also assumes that all individuals reach the same level of cognitive development at the same time, which we know isn't true. Rather, cognitive abilities and mature thinking can occur in a continuous fashion, given proper guidance and scaffolding from others (e.g., formal schooling, peer interactions, adult caregivers). Moreover, Piaget's focus on the role of nature and the brain's physical maturation led to an underestimation of the significant roles that culture and social interaction and experience play in cognitive development (Franzoi, 2011; Lourenço, 2016). This connects with Lev Vygotsky's research suggesting that children's cognitive development occurs within a sociocultural environment and that cultural tools like language and counting systems have a significant influence on cognitive growth (Bernstein et al., 2008).

Second, Piaget's research relied on an interview style that often heavily used children's verbal descriptions of their thought processes (Ginsburg & Opper, 1988; Müller et al., 2009). This may work well for children who have a well-developed vocabulary and insight into their own thinking, but a child who lacks these skills may not be able to explain their actual understanding, and the Piagetian approach may mistakenly claim the child doesn't understand the concept in question. The research technique was also prone to focus on what children of various ages were incapable of doing or simply got wrong. Later researchers have criticized the tendency to equate task performance with competency in Piaget's initial studies (Lourenço, 2016). Ultimately, each research method be it interviewing the adolescent, surveying the adolescent, or interviewing teachers or caregivers, has various advantages and disadvantages. By combining various research techniques, we can form a more complete picture. The advantage to Piaget's technique stands: hearing the adolescent's perspective and thinking.

A final criticism of Piaget's foundational research into children's cognitive development is the view of formal operations and scientific thinking as a complete and fully attained state, the end-state for human cognitive development, which reflects the bias of historically WEIRD research in the discipline of lifespan development (1.4 Contexts and Settings of Development). Some societies and cultures have different perspectives on the ultimate goals of cognition, including a focus on artistic expression, wisdom represented in folklore, or practical success in everyday life (Lourenço, 2016; Martin et al., 2010). In some cultures, educational institutions don't emphasize critical thinking, which is needed to reach Piaget's formal operational stage. As a result, only about half of the people in these societies achieve this level of thinking skills (Bernstein et al., 2008). Additionally, some biological psychologists suggest that teenagers worldwide cannot handle complex calculations effectively until the age of twenty years because their brain activity is still developing (Cacioppo & Freyberg, 2013).

## Information Processing Perspective on Cognitive Development

The information processing perspective on cognitive development retains several features of Piaget's theory while adding a more contemporary focus on the biological supports for various thinking abilities or cognitive domains. These domains include processing and perceptual speed, metacognition, and other cognitive abilities such as reasoning and decision-making.

Adolescent brain growth and maturation lead to rapid increases in abilities across all the cognitive domains. Most of these increases continue into early adulthood before leveling off. One notable exception is perceptual speed, the ability to quickly recognize objects and other symbols, which peaks in late adolescence and then declines throughout the rest of life (Kail & Ferrer, 2007; Schaie, 1994). For example, a person in this age group would be faster and more accurate than their parent at finding and identifying hidden items in a picture. This enhanced perceptual speed has been shown to be associated with greater job performance (Mount et al., 2008), as well as school performance via increased creativity and intelligence (Rindermann & Neubauer, 2004). Specifically, when a person can quickly process and identify items in their surroundings, they tend to also be more creative and intelligent, which directly impacts their performance in school.

Metacognition, the ability to think about thinking, is another rapidly developing feature of adolescent thought that plateaus in adulthood and is a critical skill for complex problem-solving (Weil et al., 2013). Using metacognition, individuals can take a

moment to pause and form a plan for approaching a problem, selectively choosing the strategy that might work, and monitoring progress toward a solution. They can also decide how much to rely on their own decisions and learning or the advice and learning of others (Paulus et al., 2013). For example, an adolescent's ability to determine whether they will remember something at a later time is greatly improved, as well as the ability to predict someone else's learning and memory of the material, especially if they've tried learning the same material already. The adolescent's growing awareness and regulation of their own cognitive abilities and understanding of others' thinking makes for a nearly mature thinker who begins to rely less on others' input.

How often do adolescents use these capabilities in everyday life? A study noted that teens aim for greater autonomy in decision-making and can harness their emerging abilities to reject misleading advice but accept helpful guidance from others (Moses-Payne et al., 2021). In other words, adolescents are better able to decide whether someone else's advice is worth following and, in turn, become more confident in their own decision-making. Furthermore, contrary to the popular stereotype of impulsive teenagers needlessly acting reckless, adolescents become better (reasoned) risk-takers due to their improved executive function rather than reactive risk-takers (Maslowsky et al., 2019; Romer et al., 2017).

Reasoned risk-taking involves careful planning and strategy, depending on improved cognitive control and a strong inclination for exploring new experiences, whereas teenagers are often stereotyped as impulsive and opportunistic risk-takers engaging in maladaptive behaviors due to a developmental deficit (Maslowsky et al., 2019). While both types of risk-taking occurs, researchers found that teenagers who engaged in more reasoned risk-taking also self-reported higher levels of sensation-seeking behaviors, better working memory, and a more positive focus on future planning (Maslowsky et al., 2019). These results show that teenagers, while more likely to engage in risky behaviors, are actually quite strategic in which risks they take.

Overall, as we consider the adolescent from the information processing perspective, we encounter individuals who are increasingly advanced across many cognitive domains, together with an ever more sophisticated ability to reason effectively using those skills. By and large, by the end of adolescence, a highly capable individual with the ability to think abstractly about multiple facets of a problem from multiple perspectives while contemplating the consequences of each aspect has emerged.

**Link to Learning**

Adriana Galván reveals the neurobiology behind typical teenage behaviors like risk-taking, exploration and thrill-seeking. Watch the video "Insight into the Teenage Brain" from TEDxYouth@Caltech to gain insights into the opportunities and vulnerabilities associated with the teen brain and behavior development, which can help shape policies, juvenile justice, and public health concerns that impact young people.

## Contextual Influences on Cognitive Development

Both Piaget's theory and the information processing perspective are fueled by a feedback loop between the individual's maturing brain and the environmental inputs and supports for the brain's further growth and development. An example is the U.S. school curricula across grade levels. The preschool curriculum takes advantage of the playful mindset of the preoperational child, while high school curricula leverage adolescents' newfound abilities and appreciation for complex problem-solving, introducing abstract concepts. This back-and-forth interaction between the individual and the environment is an example of contexts that influence cognitive development in adolescents. These contexts include family and home environment, culture and language, and formal schooling (Figure 9.10). In cultures that don't emphasize the development of scientific reasoning, Piaget's stage of formal operations may not be reached, and the features associated with adolescent thought might not be readily observed (Cole, 2006; Nur et al., 2020).

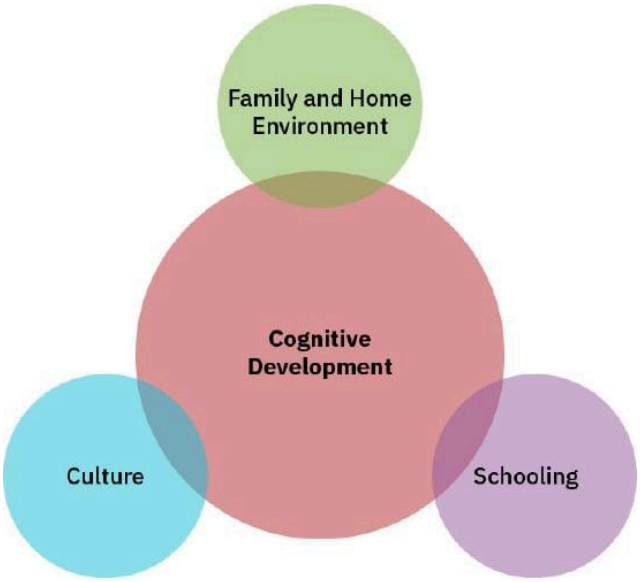



Figure 9.10 Cognitive development in adolescence is influenced by an interplay of family and home environment, culture, and formal schooling contexts. (CC BY 4.0; Rice University & OpenStax)

Considering family dynamics and the home environment, the authoritative parenting style shows the most benefit for school performance and engagement if the development of formal operations is considered a goal of cognitive development (Steinberg et al., 1992). Authoritative parents set high expectations with high levels of warmth and nurturing. They explain the reasoning behind rules and encourage children to extract general principles from experiences and explore within boundaries. These parent–child interactions reinforce the reasoning fostered in formal schooling. Another way the family and home environment support cognitive development is by providing learning resources and opportunities for practice and exploration. Family activities such as games, reading, entertainment, and travel all offer opportunities to learn about the world and practice that understanding (Greenfield, 2014; Wu et al., 2021). There are clear socioeconomic differences in the amount and types of learning-relevant resources available in homes. Whereas clear socioeconomic differences in the amount and types of learning-relevant resources that are available in homes exist, caregivers can still foster cognitive development by providing a supportive environment and accessing community-based resources. However, that can still be resource demanding when families are struggling with limited access to resources.

A growing body of scientific literature shows that cultural factors can impact, at least partially, cognition and cognitive development (Kitayama & Uskul, 2011). For example, researchers have shown that some cultural differences, such as what a culture tends to emphasize in an environment, can influence our memory for that environment (Masuda & Nisbett, 2001). Specifically, the researchers suggest that individuals from East Asian cultures, including Japan, tended to interact with their environment in a more holistic or relational (big picture) way, whereas Westerners, including Americans, tended to focus heavily on objects in the environment and detach them from the surrounding context. When asked to remember items on a memory task, Japanese participants tended to do better than American participants when the background of the image matched the originally presented image, highlighting that the Japanese participants emphasized and encoded the item along with the background context. On the other hand, American participants tended to do better than Japanese participants when the item was presented with no background or a novel background, highlighting that the American participants were able to encode the item detached from the background. These results show how differences in cultural practices and perception could have an impact on cognitive processes.

Through the structure of language, culture can also support and propel learning and cognitive development. For example, in Chinese languages, fractions are represented simply as parts of a whole, so ¼ is said as “one out of four” instead of “one-fourth” (Xin & Liu, 2015). This simplicity and uniformity make learning and manipulating fractions easier and may contribute to observed cross-cultural differences in mathematics performance.

To the extent that a culture, or even an individual home environment, emphasizes the cognitive manipulation of visual symbols, such as icons, emojis, and other visual symbol systems, it is providing everyday practice for tests of fluid intelligence. Think for a moment how visual our current world is—people are constantly tapping, touching, or swiping various icons and symbols on screens, often with different fonts and abbreviations. This highly visual, nonverbal environment supports the development of our spatial and perceptual processing skills (Blazhenkova & Kozhevnikov, 2010; Williams, 1998). Our frequent interaction with icons and symbols in our digital world might be helping us develop the kind of thinking skills measured in fluid intelligence tests,

which suggests a connection between technology and how our brains develop. Ultimately, the adolescent mind is a fascinating culmination of biological and contextual factors that, with experience and motivation, can notice, process, and interact with their environment in a multi-dimensional and less concrete way.

## References


Bernstein, D. A., Clarke-stewart, A., & Roy, E. J. (2008). Psychology. USA: Houghton Mifflin.

Blazhenkova, O., & Kozhevnikov, M. (2010). Visual-object ability: A new dimension of non-verbal intelligence. Cognition, 117(3), 276-301.

Cacioppo, J. T., & Freberg, L. A. (2013). Discovering Psychology: The Science of Mind. USA: Wadsworth.

Chandler, M., Boyes, M., & Ball, L. (1990). Relativism and stations of epistemic doubt. *Journal of Experimental Child Psychology, 50*(3), 370–395. https://doi.org/10.1016/0022-0965(90)90076-K

Cingel, D. P., Krcmar, M., & Olsen, M. K. (2015). Exploring predictors and consequences of personal fable ideation on Facebook. *Computers in Human Behavior, 48*, 28–35. https://doi.org/10.1016/j.chb.2015.01.017

Cole, M. (2006). Culture and Cognitive Development in Phylogenetic, Historical, and Ontogenetic Perspective. In D. Kuhn, R. S. Siegler, W. Damon, & R. M. Lerner (Eds.), *Handbook of child psychology: Cognition, perception, and language* (6th ed., pp. 636–683). John Wiley & Sons, Inc.

Crain, W. (2005). Theories of development concepts and applications (5th ed.). New Jersey: Pearson.

Elkind, D. (1967). Egocentrism in Adolescence. Child Development, 38(4), 1025-1034.

Elkind, D. (1978). Understanding the young adolescent. *Adolescence, 13*(49), 127–134.

Elkind, D. (1998). All grown up and no place to go: teenagers in crisis. Reading, Mass. :Addison-Wesley.

Franzoi, S. L. (2011). Psychology A Discovery Experience. USA: South-Western.

Ginsberg, H.P. and Opper, S. (1988) Piaget's Theory of Intellectual Development. 3rd Edition, Prentice-Hall, Englewood Cliffs, NJ.

Glenwright, M., Tapley, B., Rano, J. K., & Pexman, P. M. (2017). Developing appreciation for sarcasm and sarcastic gossip: It depends on perspective. *Journal of Speech, Language, and Hearing Research, 60*(11), 3295–3309. doi.org/10.1044/2017_JSLHR-L-17-0058

Greenfield, P. (2014). Mind and media: the effects of television, video games and computers. Psychology Press.

Houlihan, D. (2014). Adolescents and the Social Media: The Coming Storm. Journal of Child and Adolescent Behaviour, 2(2).

Kail, R. V., & Ferrer, E. (2007). Processing speed in childhood and adolescence: Longitudinal models for examining developmental change. *Child Development, 78*(6), 1760–1770.

Kitayama S, & Uskul AK (2011). Culture, mind, and the brain: Current evidence and future directions. *Annual Review of Psychology*, 62, 419–449. doi: 10.1146/annurev-psych-120709-145357.

Lourenço, O. M. (2016). Developmental stages, Piagetian stages in particular: A critical review. *New Ideas in Psychology*, *40*, 123-137.

Malti, T., Peplak, J., & Zhang, L. (2020). The Development of Respect in Children and Adolescents. *Monographs of the Society for Research in Child Development, 85*(3). doi.org/10.1111/mono.12417

Martin, G. N., Carlson, N. R., & Buskist, W. (2010). Psychology. Great Britain: Pearson.

Maslowsky, J., Owotomo, O., Huntley, E. D., & Keating, D. (2019). Adolescent Risk Behavior: Differentiating Reasoned And Reactive Risk-taking. Journal of Youth and Adolescence, 48(2), 243–255. https://doi.org/10.1007/s10964-018-0978-3

Masuda, T., & Nisbett, R. E. (2001). Attending holistically versus analytically: Comparing the context sensitivity of Japanese and Americans. *Journal of Personality and Social Psychology, 81*(5), 922–934.

Moses-Payne, M. E., Habicht, J., Bowler, A., Steinbeis, N., & Hauser, T. U. (2021). I know better! Emerging metacognition allows adolescents to ignore false advice. Developmental Science, 24(5), e13101.

Mount, M. K., Oh, I. S., & Burns, M. (2008). Incremental validity of perceptual speed and accuracy over general mental ability. *Personnel Psychology, 61*(1), 113-139. onlinelibrary.wiley.com/doi/...0.2008.00107.x

Müller, U., Carpendale, J. I., & Smith, L. (Eds.). (2009). *The Cambridge companion to Piaget*. Cambridge University Press.

Nur, A. S., Waluya, S. B., Rochmad, R., & Wardono, W. (2020). Contextual Learning with Ethnomathematics in Enhancing the Problem Solving Based on Thinking Levels. Journal of Research and Advances in Mathematics Education, 5(3), 331-344.

Paulus, M., Tsalas, N., Proust, J., & Sodian, B. (2014). Metacognitive monitoring of oneself and others: Developmental changes during childhood and adolescence. *Journal of Experimental Child Psychology, 122*, 153–165. https://doi.org/10.1016/j.jecp.2013.12.011

Pramling, N. (2006). 'The clouds are alive because they fly in the air as if they were birds': A re-analysis of what children say and mean in clinical interviews in the work of Jean Piaget. *European Journal of Psychology of Education*, *21*(4), 453-466.

Rindermann, H., & Neubauer, A. C. (2004). Processing speed, intelligence, creativity, and school performance: Testing of causal hypotheses using structural equation models. *Intelligence, 32*(6), 573–589. https://doi.org/10.1016/j.intell.2004.06.005

Roberge, J. J., & Flexer, B. K. (1979). Further Examination of Formal Operational Reasoning Abilities. *Child Development*, *50*(2), 478–484. doi.org/10.2307/1129426

Romer, D., Reyna, V. F., & Satterthwaite, T. D. (2017). Beyond stereotypes of adolescent risk taking: Placing the adolescent brain in developmental context. In Developmental Cognitive Neuroscience. https://doi.org/10.1016/j.dcn.2017.07.007

Schaie, K. W. (1994). The course of adult intellectual development. *American Psychologist, 49*(4), 304–313.

Sommers-Flanagan, J., Zeleke, W. A., & Hood, M. E. (2015). The clinical interview. *The encyclopedia of clinical psychology. John Wiley & Sons, Inc, Hoboken*, 1–9.

Steinberg L, Lamborn SD, Dornbusch SM, Darling N. Impact of parenting practices on adolescent achievement: authoritative parenting, school involvement, and encouragement to succeed. Child Dev. 1992 Oct;63(5):1266-81.

Tyler, S. (2020). Cognitive Development in Adolescence. Human Behavior and the Social Environment.

Weil, L. G., Fleming, S. M., Dumontheil, I., Kilford, E. J., Weil, R. S., Rees, G., ... & Blakemore, S. J. (2013). The development of metacognitive ability in adolescence. *Consciousness and cognition, 22*(1), 264–271. https://doi.org/10.1016/j.concog.2013.01.004

Williams, W. M. (1998). Are we raising smarter children today? School- and home-related influences on IQ. In U. Neisser (Ed.), *The rising curve: Long-term gains in IQ and related measures* (pp. 125–154). American Psychological Association.

Wong, B. I., Yin, S., Yang, L., Li, J., & Spaniol, J. (2018). Cultural differences in memory for objects and backgrounds in pictures. Journal of Cross-Cultural Psychology, 49(3), 404-417.

Wu, W., Kirillova, K., & Lehto, X. (2021). Learning in family travel: what, how, and from whom?. *Journal of Travel & Tourism Marketing*, *38*(1), 44-57.

Xin, Z. & Liu, X. (2015). Chinese children's understanding of the fraction concept. In book: The first sourcebook on Asian research in mathematics education: China, Korea, Singapore, Japan, Malaysia and India (pp.515-540) Publisher: Information Age Publishing. Editors: B. Sriraman, J. Cai, K-H. Lee, L. Fan, Y. Shimuzu, C. S. Lim, K. Subramanium

This page titled 15.8.4: Cognition in Adolescence is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

- 9.3: Cognition in Adolescence by OpenStax is licensed CC BY 4.0. Original source: https://openstax.org/details/books/lifespan-development.

# 15.8.5: Decision-Making and Risky Behaviors in Adolescence

## Learning Objectives

By the end of this section, you will be able to:

- Describe the brain regions that govern adolescent risk perception and reward-seeking behaviors
- Describe adolescents' decision-making in comparison to adults' decision-marking
- Describe the prevalence and types of common risky behaviors in adolescence

Kesavan is a sixteen-year-old high school sophomore, and he's feeling a new sense of optimism about his social life. It's Friday night, and he's excited to make the most of his extended curfew, which is now until 11 p.m. When his parents ask about his plans, Kesavan says he's planning to see the latest action film with some friends and maybe hang out at the fast food place around the corner. In reality, his friends will pick him up, and they will attend a keg party thrown by high school seniors. Kesavan doesn't think he'll drink at the party, but if he does, he'll need some breath mints before heading home. He's also hoping that the party is not busted by the cops and that no one drinks and drives.

Kesavan is making a set of decisions that could have lasting effects on his health, safety, legal record, family relationships, and social standing. He weighs the pros and cons of different options, considering both the social and emotional aspects of the situation, like the excitement and nervousness of being at a keg party. Adolescent decision-making is complex, largely driven by emotions and pleasure-seeking behaviors, and often lacks a clear assessment of consequences.

## Decision-Making, Risk-Taking, and Rewards

As you've learned, significant growth in brain structures influences the cognitive developments of adolescence, and these changes impact individuals' risk perception, emotion regulation, and decision-making capabilities. In particular, the frontal lobe and limbic systems are not fully mature in adolescence. The frontal lobe supports rational decision-making, planning, emotion regulation, and impulse control. The limbic system—a collection of structures active in memory formation, emotion processing, and sensory integration—contains the brain's reward center that is important in teen growth.

Teen decision-making is often characterized by a balance between risk-taking and reward-seeking behaviors. Adolescents tend to be more sensitive to potential rewards and less sensitive to potential risks compared to adults. And, at its most basic level, decision-making consists of choosing a course of action from several possibilities (Fischhoff & Broomell, 2020; Hardman, 2009). Rational decision-making requires assessing the levels of risk and reward and weighing the probability of one against the likelihood of the other. Teens often take more risks than adults, because they weigh risks and rewards differently than adults do (Gillespie, 2019).

Adolescents are more sensitive to reward cues in their environment than are children or adults (Andersen, 2016). For example, in a study examining the response to monetary rewards, researchers found that adolescents showed significantly greater activation in the nucleus accumbens, a key brain region involved in reward processing, compared to both children and adults (Becker et al., 2023). The nucleus accumbens is connected to both the hippocampus and the amygdala and is considered the brain's reward center. As brain development occurs, adolescents are likely to have less activation in this reward center of the brain; this, in turn, will reduce risky decision-making as they mature in adulthood.

Development of the limbic system also makes peer relationships more intriguing to teens and is associated with increased novelty seeking, leading teens to continually seek out new and intriguing experiences that may bring reward (or risk) (Steinberg, 2008). The limbic system develops earlier than the prefrontal cortex, making early and middle adolescence a particularly vulnerable time for teens because this is the period of the greatest mismatch in the developmental timeline, resulting in a window of vulnerability for increased risk-taking (Andrews et al., 2021; Steinberg, 2008). For instance, a sixteen-year-old's propensity to skateboard without a helmet or to accept risky dares from friends most likely reflects limbic system activation leading to pleasure-seeking behaviors and response to peer pressure rather than a desire to incur injury from risk. Essentially, an adolescent's brain has a fully developed reward center providing plenty of dopamine, also known as a "feel good" hormone, but does not have the fully developed prefrontal cortex to keep those feelings under control.

## Link to Learning

Risk-taking is not always a negative. While there are unhealthy risks that teens may pursue, risks are also a part of healthy growth and development. Adults should recognize that risks foster growth and learning and support teens through those experiences.

Adolescents are especially sensitive to rewards. The neurotransmitter dopamine helps transmit signals in the reward circuits of the brain. During adolescence, dopamine activity increases significantly. This increase actually makes rewarding activities less satisfying because the brain already has a relatively larger amount of dopamine. As a result, to experience the same amount of "feel good" reward from an activity that an adult might, adolescents seek out more novel experiences (Steinberg, 2008) and often higher-risk experiences. This can lead adolescents to be more likely to take bigger risks when driving, making decisions related to sexual behaviors, or making decisions regarding substance use (Khurana et al., 2015; Spear, 2013). In a variety of activities, teens are more likely to seek out more rewarding activities, even when those highly rewarding activities also come with risks. For example, it might be quite a thrill to steal a shopping cart from a grocery store, climb inside it, and have your friends push you down a road, but this decision also entails the possibility of sustaining physical injury and getting into trouble with law enforcement (Figure 9.11). For the developing teenager seeking stimulation and reward, however, riding in the shopping cart may be irresistible in the moment.



Figure 9.11 Teenagers are more drawn to exciting and rewarding activities. This can sometimes lead them to take risks, like riding in shopping carts, just for the thrill of it. (credit: "shopping cart race" by Sarah Mirk/Flickr, CC BY 2.0)

Another important influence on risk-taking behavior is teenagers' heightened interest in the social world. The pubertal changes of adolescence have many effects, including increasing the relevance of the hormone oxytocin, a chemical messenger that contributes to the formation of attachment and social relationships. Oxytocin is linked to fostering peer interactions and social support among teenagers. Higher levels of oxytocin have been associated with greater trust, cooperation, and prosocial behavior toward peers (He et al., 2018). In adolescence, oxytocin levels, along with rapid development of the brain's social and emotional processing areas, means that social features of the environment take on greater importance and impact in adolescent decision-making (Anderson, 2023; Gillespie, 2019). In fact, approval from peers becomes as meaningful as any type of nonsocial reward, such as money or a favorite food. This social influence combined with the desire to seek greater sources of reward helps explain why teens make the decisions they do (Steinberg, 2008).

Teens take risks not because they're incapable of complex hypothetical and deductive reasoning; they are perfectly capable of imagining the consequences of various choices they might make. In fact, researchers have found no real differences between adults and adolescents in their perception of the risk level of their choices (Ivers et al., 2009; Knoll et al., 2017). What's different is that in considering the trade-offs, adolescents pay more attention to the possible rewards than to the risks, even more so when the rewards have a social element involving peer approval.

This is a critical distinction to make because it suggests that educational programs that aim to increase an adolescent's

awareness of how risky things may be will not help. Adolescents in a classroom setting can think in sophisticated ways about complex situations, carefully weighing the pros and cons (e.g., Steinberg, 2015). It's when these same adolescents step into a nuanced everyday situation, combined with peer influence, that their risk threshold and decision-making may be different. Adolescents know the risks quite well, it's just not how they are making decisions in the moment.

**Link to Learning**

Young scholar Kashfia Rahman became intrigued during her own teenage years about why some adolescents could be extremely "smart" but engage in high-risk behaviors that don't seem smart. Listen to Kashfia Rahman discuss her research process and findings on teenagers' risk-taking in this TED Talk.

## Risky Behaviors

After considering the brain development that underlies adolescents' decision-making, let's consider some specific common risky behaviors, such as unsafe driving and substance use.

The YRBSS monitors risky transportation-related behavior. In 2019, 43 percent of youth in the United States reported they did not always wear a seat belt while riding in a car. Nearly 17 percent reported having ridden with a driver who had been drinking alcohol, and 5.4 percent reported having driven when they had been drinking. Texting while driving remains a frequent risky choice, with 39 percent of teens reporting they have texted (or sent emails) while driving.

Teen delinquency, also known as juvenile offending, is the act of participating in unlawful behavior as a minor or individual younger than the statutory age of majority (i.e., under eighteen years of age in most countries). Overall, delinquency has declined over the past couple decades with only around 34 percent of adolescents reporting engaging in any criminal behavior (Baumer et al., 2017). These behaviors can range from relatively minor offenses such as shoplifting or vandalism to more serious crimes such as drug-related offenses, assault, and theft. Lower parental monitoring, teen-parent conflict, absenteeism, school dropout, poor academic performance, and a disrespectful attitude toward teachers and other school authorities are risk factors for delinquent adolescents (Bendezú et al., 2018; Dong et al., 2015). Furthermore, youth who experience social disadvantage including poverty, dangerous neighborhoods, and child maltreatment, are at an increased risk of juvenile delinquency (De Coster et al., 2022; Vidal et al., 2017). However, interventions with youth that focus on socioemotional well-being have been shown to reduce future offenses in these youth as well (Vidal et al., 2017).

**Link to Learning**

Should adolescents be tried as adults when they commit a crime? One way developmental psychology can help inform improved care of adolescents is by considering adolescent brain development and the goals of rehabilitation when youth commit crimes. Review this brief video to learn more about the issue.

Substance use among youth is a major public health concern and is associated with several potentially harmful consequences such as an increased risk of addiction. Adolescents who experience certain risk factors, including availability of substances, social disadvantage, poor parent-relationship quality, and higher risk-taking behaviors, are more likely to use substances (Degenhardt et al., 2016). Additionally, studies in the United States and Thailand have found that being male, having poor academic performance, not residing with parents, and having family members and peers engaged in drug use all increase the risk of substance use (Assanangkornchai et al., 2018; Degenhardt et al., 2016).

In 2023, the CDC reported that adolescents are most likely to use alcohol among all drugs, with 22 percent having consumed alcohol in the past month, compared to 17 percent who had used marijuana in the past month. A 2023 CDC survey indicated that approximately 15 percent of middle schoolers and nearly 28 percent of high schoolers had experimented with tobacco at some point.

Adolescent use of illicit drugs, including cocaine, heroin, and methamphetamine, has declined over the past couple of years. In 2023, 10 percent of female youth reported such use, as did 10 percent of males. The YRBSS monitors the use of prescription opioids separately and found similar rates of use as for illicit drugs (14 percent of female youth and 9 percent of male youths). From 2021 to 2023, the CDC reported a decline in use of illict drugs and misuse of prescription opioids for Black, White, and Hispanic youth. Meanwhile, there were increases in misuse of prescription opioids and illicit drugs in LGBTQ+ youth. Some

research indicates that bullying and victimization experiences predicted a higher risk of drug use for LGBTQ+ youth (e.g., Wheldon et al., 2023).

Broadly, the YRBSS data have shown either no change in drug use or a decline in drug use across all groups and drug use types in high school students since 2019. Some research indicates that the declines in these risky behaviors may be due to adolescents showing less interest in risk-taking behaviors, having less unstructured social time with friends, and changing social norms in the age of risk-taking, which can lead to risk-taking behaviors beginning later in adolescence (Ball et al., 2023). Still other research indicates that the declines may be related to social changes during and following COVID-19, including less time spent with peers and increases in parental supervision (Compton et al., 2023). While these trends are largely encouraging, they do show that some youth are still at high risk of drug use, particularly when they face other contextual risks.

A few studies have shown an association between insufficient sleep and unhealthy risk behaviors including alcohol use, tobacco smoking, marijuana use, and abuse of other illicit/prescription drugs (McKnight-Eily et al., 2011; Winsler et al., 2015). Overall, teens who abuse drugs are also reported to have higher rates of physical and mental illness and reduced overall health and well-being (Schulte et al., 2013).

Link to Learning

Listen to teenager Megan Hanley discuss her personal struggles with alcoholism and her experience with youth.

## References

Andersen SL. Commentary on the special issue on the adolescent brain: Adolescence, trajectories, and the importance of prevention. *Neuroscience and Biobehavioral Reviews*. PMID 27423540 DOI: 10.1016/J.Neubiorev.2016.07.012

Anderson, J. E. (2023). The teenage brain: Under construction. Issues L. & Med., 38, 107.

Andrews, J. L., Ahmed, S. P., & Blakemore, S. J. (2021). Navigating the social environment in adolescence: The role of social brain development. Biological Psychiatry, 89(2), 109-118.

Assanangkornchai, S., Li, J., McNeil, E., & Saingam, D. (2018). Clusters of alcohol and drug use and other health-risk behaviors among Thai secondary school students: A latent class analysis. BMC public health, 18, 1-10.

Ball, J., Grucza, R., Livingston, M., Ter Bogt, T., Currie, C., & de Looze, M. (2023). The great decline in adolescent risk behaviours: Unitary trend, separate trends, or cascade? *Social science & medicine, 317*. https://doi.org/10.1016/j.socscimed.2022.115616

Baumer, E. P., Cundiff, K., & Luo, L. (2021). The contemporary transformation of American youth: An analysis of change in the prevalence of delinquency, 1991–2015. *Criminology, 59*(1), 109–136. doi.org/10.1111/1745-9125.12264

Becker, M., Yu, Y., & Cabeza, R. (2023). The influence of insight on risky decision making and nucleus accumbens activation. Scientific Reports, 13(1), 17159.

Bendezú, J. J., Pinderhughes, E. E., Hurley, S. M., McMahon, R. J., & Racz, S. J. (2018). Longitudinal relations among parental monitoring strategies, knowledge, and adolescent delinquency in a racially diverse at-risk sample. *Journal of Clinical Child & Adolescent Psychology, 47*(sup1), S21-S34. doi.org/10.1080/15374416.2016.1141358

CDC. (2020, February 10). Teen substance use & risks. Retrieved February 19, 2024 from www.cdc.gov/healthyyouth/fac...heet-basic.htm

CDC (2024). *Youth Risk Behavior Survey Data Summary & Trends Report: 2013–2023*. U.S. Department of Health and Human Services; 2024. https://www.cdc.gov/yrbs/dstr/index.html

Compton, W. M., Flannagan, K. S. J., Silveira, M. L., Creamer, M. R., Kimmel, H. L., Kanel, M., Blanco, C., & Volkow, N. D. (2023). Tobacco, alcohol, cannabis, and other drug use in the US before and during the early phase of the COVID-19 pandemic. *JAMA Network Open, 6*(1). doi.org/10.1001/jamanetworkopen.2022.54566

De Coster, S., Heimer, K., & Sanchagrin, K. (2022). Impoverished single mother households and violent delinquency: bonding,

negative, and bridging social capital. Youth & society, 54(7), 1200-1224.

Degenhardt L, Stockings E, Patton G, Hall WD, Lynskey M. The increasing global health priority of substance use in young people. Lancet Psychiatry. 2016;3(3):251–64. https://doi.org/10.1016/S2215-0366(15)00508-8

Dong, B., Gibson, C. L., & Krohn, D. M. (2015). Gang membership in a developmental and life- course perspective. In S. H. Decker & D. C. Pyrooz (Eds.), The handbook of gangs (pp. 78–97). London: Wiley.

Fischhoff, B., & Broomell, S. B. (2020). Judgment and decision making. Annual review of psychology, 71, 331-355.

Gillespie, D. (2019). *Teen brain*. Macmillan Publishers Aus.

Guyer A. E., Silk J. S., Nelson E. E. (2016). The neurobiology of the emotional adolescent: From the inside out. *Neurosci. Biobehav. Rev.* 70 74–85. 10.1016/j.neubiorev.2016.07.037

Hardman, D. (2009). Judgment and decision making: Psychological perspectives. Blackwell Publishing; British Psychological Society.

Ivers R, Senserrick T, Boufous S, Stevenson M, Chen HY, Woodward M, Norton R. Novice drivers' risky driving behavior, risk perception, and crash risk: findings from the DRIVE study. Am J Public Health. 2009 Sep;99(9):1638-44.

Khurana, A., Romer, D., Betancourt, L. M., Brodsky, N. L., Giannetta, J. M., & Hurt, H. (2015). Experimentation versus progression in adolescent drug use: A test of an emerging neurobehavioral imbalance model. Development and psychopathology, 27(3), 901-913.

Knoll, L. J., Leung, J. T., Foulkes, L., & Blakemore, S.-J. (2017). Age-related differences in social influence on risk perception depend on the direction of influence. Journal of Adolescence, 60, 53– 63. dx.doi.org/10.1016/j.adolescence.2017.07.002

McKnight-Eily LR, Eaton DK, Lowry R, Croft JB, Presley-Cantrell L, Perry GS. Relationships between hours of sleep and health-risk behaviors in US adolescent students. Prev Med. 2011;53(4–5):271–273.

National Academies of Sciences, Engineering, and Medicine. 2011. The Health of Lesbian, Gay, Bisexual, and Transgender People: Building a Foundation for Better Understanding. Washington, DC: The National Academies Press. https://doi.org/10.17226/13128.

Pilatti, A., Godoy, J. C., Brussino, S. A., & Pautassi, R. M. (2013). Patterns of substance use among Argentinean adolescents and analysis of the effect of age at first alcohol use on substance use behaviors. Addictive behaviors, 38(12), 2847-2850.

Sam-Angsri, N., Assanangkornchai, S., Pattanasattayawong, U., & Muekthong, A. (2011). Health-risk behaviors among high-school students in southern Thailand. Journal of the Medical Association of Thailand, 93(9), 1075.

Schulte MT, Hser YI. Substance use and associated health conditions throughout the lifespan. Public Health Rev. 2013;35(2).

Spear, L. P. (2013). Adolescent neurodevelopment. *Journal of adolescent health*, *52*(2), S7-S13.

Steinberg, L. (2008). A social neuroscience perspective on adolescent risk-taking. Devel opmental Review, 28, 78-106. NEUROBIOLOGÍA DE LA ADOLESCENCIA.

Steinberg L. How to Improve the Health of American Adolescents. Perspect Psychol Sci. 2015 Nov;10(6):711-5.

Vassallo, S., & Swami, N. (2018). Tweens and teens: What do they worry about? *Growing Up in Australia*, 133.

Vidal, S., Steeger, C. M., Caron, C., Lasher, L., & Connell, C. M. (2017). Placement and delinquency outcomes among system-involved youth referred to multisystemic therapy: A propensity score matching analysis. *Administration and policy in mental health and mental health services research, 44*, 853–866. https://doi.org/10.1007/s10488-017-0797-y

Wheldon, C. W., Watson, R. J., Cunningham, C., & Fish, J. N. (2023). State marijuana laws and marijuana use among sexual and gender minority youth in the United States. LGBT health, 10(2), 121-129.

Winsler, A., Deutsch, A., Vorona, R. D., Payne, P. A., & Szklo-Coxe, M. (2015). Sleepless in Fairfax: the difference one more hour of sleep can make for teen hopelessness, suicidal ideation, and substance use. *Journal of youth and adolescence*, *44*, 362-378.

This page titled 15.8.5: Decision-Making and Risky Behaviors in Adolescence is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

- 9.4: Decision-Making and Risky Behaviors in Adolescence by OpenStax is licensed CC BY 4.0. Original source: https://openstax.org/details/books/lifespan-development.

# 15.8.6: Key Terms

**abstinence-only education**
: teaches that abstaining from sex is expected until marriage; this educational track typically excludes information about the utility of contraception and condoms to prevent pregnancy and sexually transmitted infections

**abstinence-plus education**
: promotes abstinence but includes information about contraception and condoms

**adolescence**
: transition period of physical, cognitive, social, and emotional growth and development of an individual from childhood to adulthood

**adolescent egocentrism**
: kind of self-centeredness whereby adolescents tend to view themselves as the central figure in a drama unfolding daily

**amygdala**
: brain structure responsible for emotional processes

**circadian rhythm**
: individual's biologically based pattern of physiological events that occur on a daily cycle

**cognitive domains**
: in the information-processing perspective, the biological supports for various thinking abilities

**comprehensive sex education**
: offers medically accurate, age-appropriate information about development, sexual behavior, abstinence, consent, healthy relationships, life and communication skills, sexual orientation, and gender identity

**deductive reasoning**
: process of testing out statements, or propositions, in a logical and orderly way based on a general premise

**formal operations**
: stage of cognitive development in which the adolescent has achieved formal adult thinking capabilities, including the ability to reason using formal logical systems and symbols

**hippocampus**
: brain structure responsible for memory formation

**hypothalamus**
: brain structure responsible for hormonal production and control center

**hypothetical reasoning**
: ability to make predictions about what might occur given a set of circumstances

**imaginary audience**
: distinct sense that everyone is watching, thinking and interested in oneself; a consequence of adolescent egocentrism

**invincibility fable**
: feature of the personal fable where adolescents believe that they cannot be harmed or defeated

**limbic system**
: set of brain structures that develop over the course of adolescence in terms of their primary functionality as well as their connections and coordination with other areas of the brain

**menarche**
: first menstruation in girls

**perceptual speed**
ability to automatically and efficiently process novel visual information and make quick decisions

**personal fable**
belief that adolescents have about their uniqueness in emotions and immortality

**primary sex characteristics**
physical developments that are directly related to the ability to reproduce

**propositional logic**
ability to make a logical conclusion based on the imagined outcome of a scenario rather than the observation of the actual scenario

**puberty**
period of time and the process whereby children transition to physical and reproductive maturity

**relativistic thinking**
ability to think in multiple dimensions and to realize that most statements of fact are relative to the position of the observer

**scientific thinking**
thinking that involves the systematic testing of possibilities

**secondary sex characteristics**
physical developments that accompany primary sex characteristics but are not directly related to the ability to reproduce

**secular trend**
the tendency for successive generations to reach puberty earlier, such as an earlier age of menarche among females today than their counterparts from past cohorts.

**sex positivity**
approach to adolescent sexuality that encourages exploration and experimentation within safe and openly discussed parameters

**sexually transmitted disease (STD)**
sexually transmitted infection that has led to some symptom of disease

**sexually transmitted infection (STI)**
infection transmitted through sexual contact, caused by bacteria, viruses, or parasites

**spermarche**
development of the testes in boys resulting in semen, sperm, and the first ejaculation

**thalamus**
brain structure responsible for sensory integration and relay

**thelarche**
development of the breasts in girls

This page titled 15.8.6: Key Terms is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

# 15.8.7: Summary

## 9.1 Physical Growth and Development in Adolescence

- Adolescence is a period of growth and development that involves increases in height, muscle mass, and fat tissue.
- The two brain regions that play a crucial role in teen growth and maturation are the frontal lobe and limbic system. The frontal lobe and prefrontal cortex are involved with executive functioning, rationality, decision making, planning, and organization. The limbic system is responsible for hormonal changes, emotions, and the sleep-wake cycle.
- Adequate nutrition and a balanced diet are crucial during adolescence to support growth, development, and overall health. Adolescents need eight to ten hours of sleep per night for optimal health and well-being. Regular check-ups, vaccinations, and screenings are important for preventing and detecting health issues.

## 9.2 Puberty, Sexual Behavior, and Sexual Health in Adolescence

- Puberty refers to the period of physical development during which a teen's body becomes capable of sexual reproduction. Puberty is marked by various physical changes including growth spurts, maturation of reproductive organs (primary sexual characteristics), and development of secondary sexual characteristics.
- Genetic factors play a role in determining the timing of puberty. Environmental factors such as nutrition, physical activity, and access to health care can impact the timing of puberty. Finally, psychological stressors, such as family disruptions, can impact hormone regulation and consequently affect the timing of puberty.
- Adolescent sexual behaviors encompass a range of experiences and expressions. Adolescents may engage in various behaviors, such as forming romantic relationships, exploring sexual activity, and seeking information about sexual health.
- Teen pregnancy factors are influenced by SES, early onset of puberty, access to comprehensive sex education, and cultural attitudes toward sexuality.
- Prevention of sexual health risks includes promoting contraceptive use, providing access to reproductive health-care services, and implementing educational programs addressing healthy relationships, consent culture, and responsible sexual behavior.

## 9.3 Cognition in Adolescence

- Adolescent cognition as explained by Piaget's cognitive development theory suggests that adolescents undergo significant cognitive changes, including the ability to think abstractly and engage in hypothetical reasoning.
- The information processing model emphasizes how adolescents acquire, store, and retrieve information, highlighting improvements in attention, memory, and problem-solving skills.
- Adolescent egocentrism describes teens' tendency to focus on their own thoughts and feelings while struggling to consider perspectives different from their own, a phenomenon often observed during this developmental stage.
- Adolescent cognitive development is influenced not only by biological factors such as brain maturation and hormonal changes but also by environmental factors including social interactions and parental expectations. These influences shape teenagers' thinking abilities, decision-making skills, and overall cognitive development.

## 9.4 Decision-Making and Risky Behaviors in Adolescence

- Teen risk perception and decision-making are influenced by factors such as brain development, social influences, and individual characteristics. Adolescents often underestimate risks and prioritize short-term gains due to the immaturity of their prefrontal cortex, which is responsible for impulse control and decision-making.
- Adolescents are especially vulnerable to peer pressure and may engage in risky behaviors to gain acceptance or approval from their peers. Sensation-seeking tendencies, coupled with underdeveloped impulse control and risk assessment skills, can lead to reckless driving, delinquent activities, and experimentation with substances during this stage of development. Additionally, environmental factors such as access to drugs, alcohol, and opportunities for delinquent behavior can further exacerbate risky behaviors among teens.

This page titled 15.8.7: Summary is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

- 9.6: Summary by OpenStax is licensed CC BY 4.0. Original source: https://openstax.org/details/books/lifespan-development.

# 15.8.8: Review Questions

1.
Based on guidelines from the Centers for Disease Control and Prevention, how many hours of sleep a night do adolescents need for optimal functioning?

a. five to six hours
b. six to seven hours
c. eight to ten hours
d. eleven to thirteen hours

2 .
The cycle that governs the sleep wake cycle on a rotating, twenty-four-hour pattern is called the _____ rhythm.

a. circadian
b. hypothalamic
c. diurnal-nocturnal
d. anterograde

3.
What dimensional/proportional changes are typically seen in a female as she goes through adolescence?

a. Her waist increases relative to her shoulders and bust.
b. Her hips increase relative to her shoulders and waist.
c. Her shoulders increase relative to all lower regions of her body.
d. Her hips and shoulders will increase in a one-to-one ratio, both more than her waist.

4 .
By the end of adolescence, what is true of the human brain?

a. It will be at its adult weight and size.
b. It will not have grown much since the midteens.
c. It will be at 60 to 70 percent of its final dimensions.
d. It will be thinner and lighter, but more lateralized, than it was prior to puberty.

5.
Which option is an example of a primary sex characteristic?

a. facial hair
b. enlargement of the uterus
c. development of breast buds
d. growth of pubic hair

6 .
Which of the following statements is true regarding U.S. adolescents and sexual intercourse?

a. More than half of all high school students report having had sexual intercourse.
b. Most teens—over 80 percent—remain virgins until college.
c. Fifteen percent of adolescent females have had sexual intercourse.
d. Just under one-third of teens report having had sexual intercourse.

7.
What group has reported the highest rate of experiencing sexual violence?

a. LGBQ+ teens
b. Hispanic teens
c. Native American teens
d. White teens

8 .
The adolescent birth rate has _____ over the past few decades.

a. increased sharply
b. increased steadily
c. stayed the same
d. declined steadily

9.
In regard to the timing of the onset of puberty, who is more at risk for a depressed mood, negative body image, eating disorders, substance use, promiscuity, and school problems?

a. a male who experiences late-onset puberty
b. a female who experiences late-onset puberty
c. a boy who experiences early-onset puberty
d. a girl who experiences early-onset puberty

10 .
What is a property of formal operational thought?

a. believing that inanimate objects are alive and can have humanlike thoughts and feelings
b. the ability to use abstract, hypothetical, and deductive reasoning skills
c. the recognition that only physical appearance represents reality
d. the ability to consider multiple perspectives at the same time

11.
Jamarcus realized that the method he used to study for his history test last time didn't work. He decides to try a new approach. Which cognitive skill is Jamarcus demonstrating?

a. assimilation
b. perceptual speed
c. metacognition
d. propositional logic

12 .
Which of these concepts can be described as "interactionist"?

a. the study of animal relationships in different species
b. a mathematical equation that can only be solved one way
c. the environment and the individual reinforcing each other
d. the psychological study of the family environment

13.
Elise has a sense that her problems are unique, that nobody has ever experienced them, and that her pain is a special kind of suffering that nobody has *ever* felt. This is an example of the concept of _____.

a. the imaginary audience
b. adolescent egocentrism
c. metacognition
d. the personal fable

14 .
Which substance that two-thirds of teens report having tried before twelfth grade is the most commonly used in this age group?

a. alcohol
b. cannabis
c. heroin
d. tobacco

15.

Which hormone increases during puberty, which in turn can contribute to the formation of attachment and social relationships?

a. glutamate
b. oxytocin
c. gamma-aminobutyric acid (GABA)
d. norepinephrine

This page titled 15.8.8: Review Questions is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

- 9.7: Review Questions by OpenStax is licensed CC BY 4.0. Original source: https://openstax.org/details/books/lifespan-development.

# 15.8.9: Check Your Understanding Questions

16 .
Identify and describe two factors that have led to a decline in teen pregnancy rates.
17 .
Identify and describe two benefits of a comprehensive sex education curriculum.
18 .
Identify three cognitive domains that develop rapidly during adolescence.
19 .
Describe the changes in thinking that occur during Piaget's formal operational stage, and cite two real-life examples.
20 .
Briefly describe the role of the brain’s reward processes in adolescent risk-taking behavior.
21 .
Briefly describe the role of reward sensitivity in adolescent risk-taking behavior.

This page titled 15.8.9: Check Your Understanding Questions is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

# 15.8.10: Personal Application Questions

22 .
Reflect on your own physical development during adolescence. Did you experience any significant growth spurts or changes? How did these changes impact your self-esteem and interactions with peers?
23 .
Think about the times when you made decisions during your adolescence that you now see differently as an adult. How do you think the development of your brain at that time influenced your decision-making process?
24 .
Consider the health care you received during adolescence. Did you feel that your health-care needs were adequately met, and were you comfortable discussing personal health issues with your provider? If not, what do you think could have made the experience better?
25 .
How did your sleep patterns change during adolescence? Do you think you were getting enough sleep? Reflect on how your sleep habits impacted your daily life, including your academic performance and mood.
26 .
Reflect on your experience of learning about puberty. Did you feel prepared for the changes you went through, or did you find them surprising? What, if anything, would have helped you feel more comfortable or informed during that time?
27 .
Think about the messages you received about sex and relationships during your adolescence. How did these messages shape your views on sexual behavior? Do you believe they had a positive or negative impact on your sexual health decisions?
28 .
Consider the role of peer pressure in sexual decision-making. Have you ever felt pressured by friends or peers regarding sexual behavior? How did you handle that situation, and what did you learn from it?
29 .
Reflect on the portrayal of adolescent sexual behavior in media and popular culture. How do these portrayals compare to your own experiences or the experiences of those around you? What effect do you think these portrayals have on adolescents' sexual health and behavior?
30 .
Reflect on a time during your adolescence when you found yourself thinking about abstract concepts like justice, equality, or truth. How did your understanding of these concepts evolve as you grew older, and what experiences or influences contributed to that change?
31 .
Consider a situation in which you had to make a difficult decision during your teenage years. How did you approach the problem, and how did your ability to think through different possibilities influence the outcome?
32 .
Recall a time when you felt strongly about questioning or challenging a rule or belief held by your parents or teachers. What was the situation, and how did your cognitive development at the time influence your reaction and reasoning?
33 .
Think about an instance where you felt that everyone was watching or judging you (an "imaginary audience"). How did this belief affect your behavior or decisions at the time, and how do you view that experience now?
34 .
Think back to a time during your adolescence when you were faced with a decision involving potential risk. What factors influenced your decision? Did you consider the possible consequences, or were you more focused on the immediate rewards? How did the outcome of this decision shape your perspective on risk-taking?
35 .
Reflect on a situation where you felt peer pressure to engage in a risky behavior. How did the presence of your peers affect your risk assessment and decision-making? Looking back, would you have made the same decision if you were alone? Why or why not?
36 .
Consider how your decision-making process has changed from adolescence to now. What are some specific ways in which you believe your ability to assess risks and rewards has matured? Provide an example of a recent decision that illustrates this change.

This page titled 15.8.10: Personal Application Questions is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

# 15.8.11: Essay Questions

37 .
Evaluate the role of nutrition and sleep in supporting healthy physical and cognitive development during adolescence. How do poor nutrition and insufficient sleep impact adolescents' growth and academic performance?
38 .
Should adolescents be able to make important medical decisions without their parents' involvement? Why or why not? Cite material from the chapter to support your reasoning.
39 .
Discuss the various factors that influence the timing of puberty. How do biological, environmental, and sociocultural factors interact to affect when puberty begins? What are some potential psychological and social consequences of early or late puberty?
40 .
Evaluate the impact of comprehensive sex education on adolescent sexual behavior and health outcomes. How does comprehensive sex education compare to abstinence-only education in terms of effectiveness? Support your answer with evidence from research studies.
41 .
Reflect on how your cognitive abilities evolved during adolescence, specifically in terms of your ability to think abstractly and reason logically. Provide examples from your teenage years where you engaged in hypothetical reasoning or complex problem-solving. How did your environment, such as your family, school, or culture, influence your cognitive development during this time?
42 .
As a school counselor, you have received concerns from a parent about their 15-year-old son, Ricky, who is engaging in risk-taking behavior, such as performing dangerous stunts on his skateboard, especially when other teens are watching and recording his actions. The parent wants to know if this behavior is "normal" for his age or if they should be concerned. Write a response that explains the typical brain development during adolescence and how it influences risk-taking behavior. Provide guidance on how the parent can approach this situation.

This page titled 15.8.11: Essay Questions is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

# 15.9: PHYSICAL AND COGNITIVE DEVELOPMENT IN EARLY ADULTHOOD (AGES 18 TO 29)


15.9.1: What Does Psychology Say?

15.9.2: Becoming an Adult

15.9.3: Physical Health and Growth in Early Adulthood

15.9.4: Sexuality in Early Adulthood

15.9.5: Cognitive Development in Early Adulthood

15.9.6: Contexts - Higher Education and Work Achievement in Early Adulthood

15.9.7: Key Terms

15.9.8: Summary

15.9.9: Review Questions

15.9.10: Check Your Understanding Questions

15.9.11: Personal Application Questions

15.9.12: Essay Questions



This page titled 15.9: Physical and Cognitive Development in Early Adulthood (Ages 18 to 29) is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

- 11: Physical and Cognitive Development in Early Adulthood (Ages 18 to 29) by OpenStax is licensed CC BY 4.0. Original source: https://openstax.org/details/books/lifespan-development.

# 15.9.1: What Does Psychology Say?




Figure 11.1 Becoming an adult involves finding meaningful ways to put your skills to use. (credit: modification of work "2015 REI volunteers" by Mount Rainier National Park/Flickr, CC BY 2.0)

Priya's college graduation day was filled with a mix of excitement and anxiety, marking the end of one journey and the beginning of another. Degree in hand, Priya was eager to start her career in marketing. However, reality hit hard as she faced a competitive job market. She sent out countless applications and went to numerous interviews, yet was unable to secure an offer. Frustrated but determined, she accepted a part-time position at a local café to make ends meet while continuing to search for a job in her field.

Amid the hustle of job hunting and working odd hours, Priya grappled with newfound responsibilities. Managing her finances and health became top priorities. To save money and avoid relying on unhealthy fast food, she learned to cook. She began dating a coworker from the café—a casual relationship at first that seemed to be turning into something more serious.

Through her job purchasing supplies for the café, Priya realized she had a passion for recycling and other environmental sustainability issues. She began volunteering with a local nonprofit environmental organization and used her marketing knowledge to publicize its fundraisers and events. Her efforts were so successful that she caught the eye of a larger environmental group, which offered her a full-time paying position in their media relations department. She enjoyed the stable income and got a great sense of satisfaction from applying her degree to a cause she found personally meaningful.

Priya likely found herself thinking about several things related to this stage of life:

- What does it mean to be in "emerging adulthood"?
- What physical changes mark the transition and affect our functioning in early adulthood?
- What aspects of sexuality do we need to consider in early adulthood?
- How do our cognitive skills continue to develop in early adulthood, and what can we do with them?
- What are common educational and career experiences we encounter in early adulthood?

This page titled 15.9.1: What Does Psychology Say? is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

- 11.0: What Does Psychology Say? by OpenStax is licensed CC BY 4.0. Original source: https://openstax.org/details/books/lifespan-development.

# 15.9.2: Becoming an Adult

**Learning Objectives**

By the end of this section, you will be able to:

- Explain the major developmental tasks and expected outcomes of young adulthood
- Describe environmental factors that impact reaching physical and cognitive milestones in young adulthood

Jabril, age 23, graduated college last spring with a bachelor's degree in biology and works in the pharmaceutical industry. It's not exactly his dream job, but he knows the skills he develops will open different paths for the future. He moved back in with his parents to save money while working. This wasn't his first choice either, but he knows that paying down his college debt will help him later. Besides, it allows him to reconnect with his younger sister, who is about to start high school. Jabril jogs in his neighborhood and has connected with a new temple after several years of questioning his religious beliefs. He isn't currently in a relationship, but he peruses dating apps occasionally. The possibilities for his personal and professional life are quite open.

The first phase of early adulthood is emerging adulthood, when individuals are in the process of becoming an adult and establishing their fully adult life, characterized by the achievement of new legal statuses such as the ability to vote, drive, drink alcohol, and marry. It's also a time of intense exploration of career options, beliefs, and relationships. Many countries around the world recognize these years as a buffer period before full adulthood, when young adults may study in college or a vocational training program, explore career options, work, or travel. Young adults also learn about the financial, personal, and social tasks of being an adult, such as making personal health decisions, living within a budget, and becoming more accountable for their choices and actions.

In this section, we'll examine theories of emerging adulthood, aspects of the physical and cognitive transitions to adulthood, common developmental tasks, and variations in the way people experience emerging adulthood across cultures.

**Link to Learning**

In this TED talk, clinician Meg Jay discusses young adulthood and what one can do to help plan for the future.

## Theories of Emerging Adulthood

Becoming an adult often means making independent decisions and becoming more responsible for ourselves and others. Psychologists have developed theories that provide a framework for understanding the changes and individual undergoes during this stage of life.

### Five Challenges

According to Jeffrey Arnett (2010), people face five challenges during emerging adulthood. Some of these challenges may first arise in adolescence, but Arnett believes they are finally resolved in emerging adulthood (Arnett et al., 2014) (Figure 11.2).

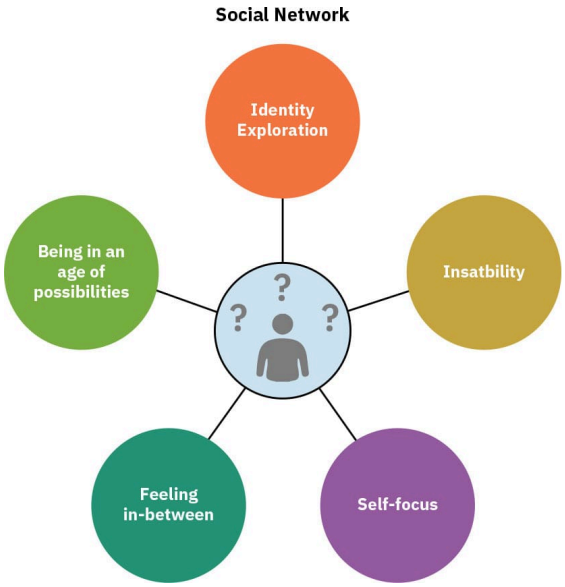



Figure 11.2 Arnett's theory of emerging adulthood proposes five challenges to resolve during this time in our lives. (CC BY 4.0; Rice University & OpenStax)

Let's examine each of these.

- *Identity exploration*. In emerging adulthood, people think more seriously about identity exploration (begun in adolescence) (Arnett et al., 2014). They attempt to learn who they are at work and within relationships, and they solidify their core beliefs and values.
- *Instability*. Emerging adulthood is full of change, partly due to identity exploration, but also to factors such as being "last hired, first fired" at a job.
- *Self-focus*. With fewer obligations to others, emerging adults may be better able to explore not just who they are, but how to become self-sufficient.
- *Feeling in-between*. Though legally adults, emerging adults might not yet be comfortable making some decisions on their own and thus consult with family and friends when faced with important choices.
- *Being in an age of possibilities*. Emerging adults can create their own stories, perhaps leaving behind uncomfortable or unhealthy aspects of their early lives. Thus, they often report feeling optimistic about what lies ahead (Arnett et al., 2014).

**Link to Learning**

The time between adolescence and adulthood is relatively new ground for lifespan psychologists, and has become popularized by the work of Jeffrey Arnett. Watch Arnett's TED talk in which he elaborates on work in this area and offers advice to emerging adults.

## Four Identity Statuses

As adolescents enter adulthood, they are confronted with new opportunities to explore and consolidate their identity. James Marcia believed people experienced different stages in their quest for identity, based on their level of exploration and commitment (Erikson et al., 2020; Marcia, 1966; Kolbert et al., 2021). These stages are identity diffusion, identity foreclosure, identity moratorium, and identity achievement. A person can move through them in various orders or even skip some. It's also possible for different aspects of someone's identity to be in different stages at once.

What does Marcia mean by identity diffusion, foreclosure, moratorium, and achievement?

- *Identity Diffusion*. The individual has not yet explored options, realized they have choices, or committed to any. They may be aware of upcoming elections, but have not chosen their preferred candidate or perhaps even decided whether to vote.
- *Identity Foreclosure*. The individual has committed to some goals, values, or roles but without any exploration. They conform to the choices of their peers or their parents, such as a person entering an arranged marriage without actively considering whether the partner is a good match.

- *Identity Moratorium*. The individual is actively exploring options and may be ready to commit to some values, but has not yet fully committed to their choices. A college student who changes their major several times may be experiencing identity moratorium.
- *Identity Achievement*. The individual has actively explored possibilities and has now made a commitment to them, meaning they have chosen an identity. A person who has read about different faiths and chosen one to follow has attained identity achievement.

Identity achievement contributes to aspects of psychosocial well-being, including high self-esteem, conscientiousness, maturity, and problem-focused coping (Oleś, 2016). However, some of the other stages may be appropriate under certain circumstances. For example, identity diffusion may be a natural starting point for people who have little experience (Marcia, 1966; Waterman, 1982). Cultural and contextual factors may also affect the search for identity, meaning that identity achievement may not be feasible or ideal for everyone.

Link to Learning

The University of Edinburgh Reflectors' Toolkit contains several resources for identifying your goals and core values and connecting them to life experiences and career prospects.

# Contextual and Cultural Variations in the Experience of Emerging Adulthood

Comparing the experience of emerging adulthood across countries is not straightforward: some factors, such as culture and SES, often occur together. Increased globalization makes simple cultural distinctions (such as individualistic versus collectivistic) difficult and perhaps outdated, as some traditionally collectivistic nations adopt more individualistic attitudes (Drobot, 2021; Sugimura, 2020). Thus, some transitions associated with early adulthood may not apply to all cultures, and the experiences of people in this age range may vary significantly.

## Socioeconomic Status

People seem to experience emerging adulthood regardless of SES, but differently (Arnett, 2016; Galambos & Martinez, 2007; Landberg et al., 2019; Wood et al., 2017). For example, periodic economic instability in the country or region, might mean that young adults are likely to work on short-term contracts or in positions that could be terminated at any time (Arnett et al., 2014; Landberg et al., 2019), consistent with Arnett's concept of instability. People from lower SES are more likely to have a negative outlook on life, and therefore be less likely to feel optimistic and see their life as full of possibilities. They may also lack opportunities for identity exploration due to life events such as being their family's sole wage earner (Landberg et al., 2019). Viewed in the terms of Marcia's theory, economic conditions may limit opportunities for both exploration and commitment (Beckert et al., 2020) or cause a person to prioritize gaining financial stability over traditional markers of identity achievement that typically occur in early adulthood stages of development (Bowen et al., 2021). Some emerging adults who desire higher education may not have the ability to afford it and are therefore limited to choosing jobs based on financial needs rather than prioritizing personally fulfilling careers (Haider & von Stumm, 2022; Landberg et al., 2019; Wood et al., 2017). Still others may not find higher education to be necessary to finding a career that meets their needs and goals. Typical early adulthood experiences, such as moving out to live independently, gaining employment, forming new relationships with friends and romantic partners, and pursuing other goals such as academic or technical skill developments may be delayed or even skipped where financial restrictions or family needs are prioritized for these young adults.

## Culture

In societies with an individualistic cultural orientation, identity is often based on achieving independence; cultures that are more collectivistic emphasize creating connections within family and communities as important aspects of identity (Muttaqin, 2020). However, this may be affected by globalization. Although Japan is traditionally collectivistic, the current cohort of young adults is more influenced by individualistic values and likely to prioritize independence and finding personally satisfying careers (Arnett et al., 2014; Sugimura, 2020; Sugimura et al., 2023), consistent with the theme of identity exploration and being self-focused. It's also worth noting that globalization's influence isn't identical across contexts. For example, some immigrants assimilate into the culture of their new home country, while others identify more strongly with the culture of their country of origin (Maehler et al.,

2019) (Figure 11.3). Variations in acculturation may thus affect the experience of emerging adulthood for immigrants.



Figure 11.3 Globalization provides opportunities for people from different cultures to interact with and influence each other, such as this meeting of young adults at the 2016 Global Entrepreneurship Summit. (credit: modification of work "Global Entrepreneurship Summit 2016" by GES 2016/Flickr, Public Domain)

The opportunities a culture offers its members and subgroups may also matter. A review of literature relating to the experiences of Black individuals during emerging adulthood (Hope et al., 2015) found that experiencing discrimination interrupted their exploration of self and career. Different racial and ethnic groups within a geographic location may not have the same access to early adulthood if discrimination is present. When people have multiple cultural affiliations, identity formation may be influenced by both cultures, though not necessarily equally. For example, a study of Chinese Canadian teenagers, all of whom were children of immigrant parents and 80 percent of whom were Chinese-born themselves, indicated that teenage girls tended to report more tension between their Canadian and Chinese identities than teenage boys. The researchers attributed these differences to the ways the Chinese and Canadian cultures regarded gender. Canadian culture tends to emphasize gender equality and independence for all, but in Chinese culture, male children are more prized and given more freedom than female children. In other words, Chinese Canadian teenage boys benefited from being part of two cultures that encouraged freedom for them, while their girl peers had to try to reconcile the conflicting messages of these cultures (Quan et al., 2022).

## Intersections and Contexts: DACA and Emerging Adulthood

The experience of emerging adulthood can depend on factors such as SES and culture. Another possible influence is immigration status. Being an immigrant, particularly with undocumented status, can limit opportunities to explore options and choose a meaningful path in life due to language barriers, financial difficulties, fear of deportation, and inability to work legally. However, public policy initiatives may be able to address some of these challenges.

The Deferred Action for Childhood Arrivals (DACA) relief program was enacted in 2012 to protect undocumented immigrants who were brought to the United States before the age of 16 (and before 2007). President Barack Obama described it as being for "young people who study in our schools, play in our neighborhoods, are friends with our kids, and pledge allegiance to our flag" (Connor, 2023, para. 1; *Key Facts*, 2023). DACA granted a two-year work authorization to prevent young people from being deported (*Key Facts*, 2023). More than 835,000 people were protected during the decade DACA was in effect, and although the program is no longer accepting people, about 580,000 people are still in it (Connor, 2023; *Key Facts*, 2023; Wong et al., 2023) (Figure 11.4).




Figure 11.4 The DACA program provided many people with opportunities. (credit: "DACA-16" by Susan Ruggles/Flickr, CC BY 2.0)

The DACA program is relevant here because of its connection to the developmental tasks of emerging adulthood. Many DACA recipients have participated in emerging adulthood tasks such as attending college, starting careers, and having families, and 7 of 10 indicated that DACA allowed them to get schooling and achieve degrees they would not have been able to attain otherwise (Wong et al., 2023). Additionally, DACA recipients over 25 have a 91 percent employment rate, with many employed in professions considered "essential", such as health care and education. Their employment status and income allow them to attain material markers of adulthood such as cars, homes, and health insurance (Svajlenka & Truong, 2021) as well as financially support themselves and their families.

Specific cultural practices may also affect the experience of early adulthood. For example, early marriage, particularly before age 15, is associated with stunted identity development for several reasons: it abruptly imposes adult roles and responsibilities on the individual, thus representing a loss of the "emerging" aspect of adulthood, limits decision-making, and imposes societal norms of gender roles onto people regardless of their individual views or goals (Abera et al., 2020; Callaghan et al., 2015). However, this gets complicated because many countries that encourage child marriage also have high rates of poverty and school dropouts (Burgess et al., 2022), so it's hard to know whether any differences are caused by economic factors, sociocultural views, or a combination.

## References

https://www.census.gov/library/stori...rce-rates.html

Abera, M., Nega, A., Tefera, Y., & Gelagay, A. A. (2020). Early marriage and women's empowerment: The case of child-brides in Amhara National Regional State, Ethiopia. *BMC International Health and Human Rights, 20*, 1-16. https://doi.org/10.1186/s12914-020-00249-5

Arnett, J. J. (2010). Emerging adulthood(s): The cultural psychology of a new life stage. In L. A. Jensen (Ed.), *Bridging cultural and developmental approaches to psychology: New syntheses in theory, research, and policy* (pp. 255–275). Oxford University Press. doi.org/10.1093/acprof:oso/9...83430.001.0001

Arnett, J. J. (2016). Does emerging adulthood theory apply across social classes? National data on a persistent question. *Emerging Adulthood, 4*(4), 227-235. doi.org/10.1177/2167696815613000

Arnett, J. J., Žukauskienė, R., & Sugimura, K. (2014). The new life stage of emerging adulthood at ages 18–29 years: Implications for mental health. *The Lancet Psychiatry, 1*(7), 569-576. https://doi.org/10.1016/S2215-0366(14)00080-7

Beckert, T. E., Lee, C. P., & Albiero, P. (2020). Reaching adult status among emerging adults in United States, Italy, and Taiwan. *Journal of Cross-Cultural Psychology, 51*(9), 659–682. doi.org/10.1177/0022022120953533

Bowen, E., Ball, A., Jones, A. S., & Miller, B. (2021). Toward many emerging adulthoods: A theory-based examination of the features of emerging adulthood for cross-systems youth. *Emerging Adulthood, 9*(3), 189-201. doi.org/10.1177/2167696821989123

Burgess, R. A., Jeffery, M., Odero, S. A., Rose-Clarke, K., & Devakumar, D. (2022). Overlooked and unaddressed: A narrative review of mental health consequences of child marriages. *PLOS Global Public Health, 2*(1), e0000131. https://doi.org/10.1371/journal.pgph.0000131

Callaghan, J. E., Gambo, Y., & Fellin, L. C. (2015). Hearing the silences: Adult Nigerian women's accounts of 'early marriages'. *Feminism & Psychology, 25*(4), 506-527. doi.org/10.1177/0959353515590691

Connor, P. (2023). *DACA 11 years later: From students to careers and families*. https://www.fwd.us/news/daca-anniversary/

Drobot, I. A. (2021). Why are cultures becoming more individualistic? In I. Boldea (Ed.), *The shades of globalisation: Identity and dialogue in an intercultural world* (pp. 52-60). https://ibn.idsi.md/sites/default/fi...21.pdf#page=52

Eriksson, P. L., Wängqvist, M., Carlsson, J., & Frisén, A. (2020). Identity development in early adulthood. *Developmental Psychology, 56*(10), 1968–1983. doi.org/10.1037/dev0001093

Galambos, N. L., & Martínez, M. L. (2007). Poised for emerging adulthood in Latin America: A pleasure for the privileged. *Child Development Perspectives*, *1*(2), 109–114. doi.org/10.1111/j.1750-8606.2007.00024.x

Haider, Z. F., & von Stumm, S. (2022). Predicting educational and social–emotional outcomes in emerging adulthood from intelligence, personality, and socioeconomic status. *Journal of Personality and Social Psychology, 123*(6), 1386–1406. doi.org/10.1037/pspp0000421

Hope, E. C., Hoggard, L. S., & Thomas, A. (2015). Emerging into adulthood in the face of racial discrimination: Physiological, psychological, and sociopolitical consequences for African American youth. *Translational Issues in Psychological Science*, *1*(4), 342–351. doi.org/10.1037/tps0000041

*Key facts on Deferred Action for Childhood Arrivals (DACA)*. (2023). KFF. https://www.kff.org/racial-equity-an...arrivals-daca/

Kolbert, J. B., Hilts, D., Crothers, L. M., & Nice, M. L. (2021). School counselors' use of Marcia's identity status theory for career advisement and consultation and collaboration. *Journal of School Counseling, 19*(21). http:/www.jsc.montana.edu/articles/v19n21.pdf

Landberg, M., Lee, B., & Noack, P. (2019). What alters the experience of emerging adulthood? How the experience of emerging adulthood differs according to socioeconomic status and critical life events. *Emerging Adulthood*, *7*(3), 208–222. doi.org/10.1177/2167696819831793

Maehler, D. B., Weinmann, M., & Hanke, K. (2019). Acculturation and naturalization: Insights from representative and longitudinal migration studies in Germany. *Frontiers in Psychology, 10*, 430382. https://doi.org/10.3389/fpsyg.2019.01160

Marcia, J. (1966). Development and validation of ego-identity status. *Journal of Personality and Social Psychology*, *3*(5), 551–558. psycnet.apa.org/fulltext/1966-07584-001.pdf

Muttaqin, D. (2020). The role of cultural orientation in adolescent identity formation: Self-construal as a mediator. *Makara Human Behavior Studies in Asia, 24*(1), 7-16. https://doi.org/10.7454/hubs.asia.1050719

Negru-Subtirica, O., Tiganasu, A., Dezutter, J., & Luyckx, K. (2017). A cultural take on the links between religiosity, identity, and meaning in life in religious emerging adults. *British Journal of Developmental Psychology, 35*(1), 106-126. doi.org/10.1111/bjdp.12169

Oleś, M. (2016). Dimensions of identity and subjective quality of life in adolescents. *Social Indicators Research, 126*, 1401-1419. https://doi.org/10.1007/s11205-015-0942-5

Quan, C., Costigan, C. L., & Kobayashi, K. M. (2022). Ethnic and national identity development processes: The role of cultural behaviors and gender. *Cultural Diversity and Ethnic Minority Psychology, 28*(1), 1–12. doi.org/10.1037/cdp0000475

Rajagopalreddy, D., & Varghese, K. (2022). Process of identity development and psychological functioning: A critical narrative review for the Indian context. *Indian Journal of Social Psychiatry 38*(3), 213-220. doi.org/10.4103/ijsp.ijsp_202_20

Sugimura, K. (2020). Adolescent identity development in Japan. *Child Development Perspectives, 14*(2), 71-77. doi.org/10.1111/cdep.12359

Sugimura, K., Hihara, S., Hatano, K., Nakama, R., Saiga, S., & Tsuzuki, M. (2023). Profiles of emotional separation and parental trust from adolescence to emerging adulthood: Age differences and associations with identity and life satisfaction. *Journal of Youth and Adolescence 52*, 475–489. https://doi.org/10.1007/s10964-022-01716-z

Svajlenka, N. P., & Truong, T. Q. (2021). *The demographic and economic impacts of DACA recipients: Fall 2021 edition*. Center for American Progress. www.americanprogress.org/art...-2021-edition/ Waterman, A. S. (1982). Identity development from adolescence to adulthood: An extension of theory and a review of research. *Developmental Psychology, 18*(3), 341–358. doi.org/10.1037/0012-1649.18.3.341

Wong, T. K., Kmec, I. R., Pliego, D., Ruiz, K. F., Gandhi, D., Truong, T. Q., & Svajlenka, N. P. (2023). *DACA boosts recipients' well-being and economic contributions: 2022 survey results*. Center for American Progress. www.americanprogress.org/art...urvey-results/

Wood, D., Crapnell, T., Lau, L., Bennett, A., Lotstein, D., Ferris, M., & Kuo, A. (2017). Emerging adulthood as a critical stage in the life course. In N. Halfon, C. B. Forrest, Lerner, R. M., & E. M. Faustman (Eds.), *Handbook of life course health development* (pp. 123–143). Springer. https://library.oapen.org/bitstream/...7.pdf#page=138

This page titled 15.9.2: Becoming an Adult is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

- 11.1: Becoming an Adult by OpenStax is licensed CC BY 4.0. Original source: https://openstax.org/details/books/lifespan-development.

# 15.9.3: Physical Health and Growth in Early Adulthood

**Learning Objectives**

By the end of this section, you will be able to:

- Identify major features in physical health and change across early adulthood
- Describe the markers of physical maturity that appear and are completed during early adulthood
- Identify lifestyle choices that promote healthy outcomes for early adulthood and beyond

Elisa was so excited to move into her dorm room for her first year of college. However, by the end of her first semester, she felt like life was better back at her mom's house. Though she was getting good grades, she had stopped exercising, wasn't sleeping enough, and was eating take out or fast-food for most of her meals. She just didn't have the energy she used to have before college and noticed that she often had circles under her eyes. Over the winter break, Elisa decided to make changes to her lifestyle to help her feel more energized. She realized enjoying her newfound freedom at college had led to some unhealthy lifestyle choices and that this wasn't how she wanted to live her life.

Becoming an adult means becoming more responsible for managing our eating, sleeping, and exercise habits. Learning more about what to expect during this period and how our habits affect our health can benefit our overall well-being. In this section, we'll cover changes in the body during emerging adulthood.

## Physical Changes in the Body

Development and physiological changes continue over the entire lifespan. Although the physical transition from childhood to adolescence is easy to see with significant changes in height, weight, and strength, just as some examples, the transition from adolescence to early adulthood may sometimes be more subtle. Part of the reason for this is that the transition to early adulthood involves certain processes stopping. For example, height no longer increases, and our primary and secondary sexual characteristics are donewill complete their process of developing by early adulthood (Hochberg & Konner, 2020).

In general, many of our physical capabilities are at their peak during emerging early adulthood, including muscle strength (Francis et al., 2017), lung function (Mahmoud et al., 2023) hearing (Irace et al., 2021), and immune system functioning (Brodin & Davis, 2017). Let's consider specific changes to a few of our major body systems.

- *Bones*. Bones stop growing between the ages of 17 and 25 when the epiphyses, the ends of long bones like the ones in our arms and legs, fuse together. The collarbone is the last bone to mature, around the age of 25 (Hughes et al, 2020; Olivares et al., 2020). There's also an increase in bone mineral density (Hochberg & Konner, 2020; Lantz et al., 2008).
- *Joints*. The quality and amount of synovial fluid, the lubricant keeping joints healthy, starts to show some minimal decline as early as age 28, which can lead to increased stiffness (Temple-Wong et al., 2016). For individuals who have had an injury, such as athletes or from an accident, post-traumatic arthritis osteoarthritis may also occur (Punzi et al., 2016).
- *Skin*. The level of collagen, a substance that helps keep skin firm and elastic, peaks at 25 and slowly declines afterwards (Reilly & Lozano, 2021).
- *Body composition*. The percentages of both fat and muscle tend to increase during early adulthood, (Hochberg & Konner, 2020), although muscle mass increases more for people assigned male at birth and fat mass increases more for people assigned female at birth (Lantz et al., 2008). Body fat percentage shows a steady gradual increase starting in emerging adulthood for people assigned female at birth, but for people assigned male at birth, this figure dips around age 20 and then rises at a rate similar to that for people assigned female at birth, although overall body fat percentage tends to remain lower (Westerterp, 2018).
- *Endocrine system*. Testosterone peaks sometime between the late teens and mid 20s and then remains stable until middle age (Hochberg & Konner, 2020; Hull et al., 2011). Fasting glucose levels drop in adolescence and the early parts of emerging adulthood, starting to rise after age 25 (Hammel at al., 2022); similarly, insulin resistance increases after age 20 (Zhong et al., 2019).

Though people within early adulthood are typically at their healthiest, genetic predispositions for health conditions such as heart disease and high blood pressure, when present, can start to influence health during this time. Drinking and drug use, often

associated with young people exploring life for the first time on their own, can also contribute to health problems (Table 11.1).

*Table 11.1 Summary of Changes in Bodily Systems during Young Adulthood*

| Bodily System | Changes | Result |
|---|---|---|
| Bones | Ends of bones fuse<br>Increased bone density | Strong bones |
| Joints | Synovial fluid declines as early as age 28 | Stiff joints |
| Skin | Collagen declines after age 25 | Skin wrinkles |
| Body composition | Fat and nonfat tissue increase early<br>Nonfat tissue declines in mid-20s (for men) | Increases in body fat and muscle<br>Decline in muscle amount and strength |
| Endocrine function | Testosterone peaks (for AMAB)<br>Fasting glucose levels drop<br>Insulin resistance increases | Height of reproductive ability<br>Glucose tolerance declines |

# Foundations for Health

The choices we make during young adulthood, especially lifestyle choices and our responses to sociocultural influences, can have both immediate and long-term influences on health. New health challenges may arise, such as increases in overweight/obesity, substance use, mental health challenges, and being a victim or perpetrator of gun violence. But there are also many opportunities for positive influences on health and establishing productive habits. While we can't control every aspect of our health, we can take steps to maintain or even enhance our physical and mental well-being.

## Diet and Exercise

Healthy habits established early influence later well-being, especially cardiovascular health (Liu et al., 2012). For example, a healthy diet and a physically active lifestyle can help to protect cardiovascular health, even if a person has a genetic predisposition toward heart disease (U.S. Preventative Services Task Force, 2020). Physical activity builds and maintains muscle, bone, and joint health and improves strength (Figure 11.5). Being moderately active can also help maintain the health and functioning of the heart and lungs, counteract the negative effects of stress, and reduce blood pressure (Chen et al., 2020). In fact, many disorders can be kept in check with proper diet, exercise, and sleep.



Figure 11.5 Exercise has many potential benefits for our physical and mental well-being. (credit: modification of work "Participants of the Boot Camp Challenge training program perform slaloms during a session Aboard the Marine Corps recruit Depot San Diego CA Aug. 23, 2011" by Lance Cpl. Katalynn M. Thomas/Wikimedia Commons, Public Domain)

Education may also have a protective influence on health during early adulthood and beyond. Research using data from the National Longitudinal Study of Adolescent to Adult Health (AKA Add Health) suggests people with higher levels of education tend to have healthier behavioral "profiles" or habits (Skalamera & Hummer, 2016). Admittedly, these are correlational data, so we can't definitively say that getting more education causes people to have healthier habits. It could be that having more education increases income, which increases access to resources such as gyms, healthy food, and medical care. This doesn't mean that individuals in early adulthood need to restrict their diets to green smoothies and spend all of their time at the gym. Rather, they should understand that eating healthy food and being active are important, though often challenging with busy schedules.

One way to make healthy behaviors more manageable is to think of them as smaller tasks that can be done over time. For example, the American Heart Association (AHA) recommends that adults get 150 minutes (2.5 hours) of moderate intensity aerobic activity each week (American Heart Association, 2024), but that 150 minutes isn't meant to be done all at once. Also, physical activity can include things like brisk walking, gardening, and dancing, meaning that people can stay active in a variety of ways. The AHA recommendations also encourage 75 minutes of high-intensity aerobic activity (swimming laps, running, singles tennis) each week and muscle-strengthening activities such as weightlifting two days a week, but emphasize that any activity is better than none (American Heart Association, 2024).

## Life Hacks: Stress Management

Another important factor in long-term health is stress management. Excessive stress over time eventually affects multiple aspects of our overall level of health (Seiler et al., 2020). Stress causes your brain to turn on the flight or fight response, which in turn causes the adrenal glands to release the hormones adrenaline and cortisol. Adrenaline increases the activity of our cardiovascular system, so our heart rate and blood pressure rise; if this happens repeatedly or lasts a long time, this puts strain on our heart and can lead to hypertension and stroke. Cortisol causes our liver to release glucose (sugar), which over time can lead to Type 2 diabetes (Cleveland Clinic, 2021) and weakens our immune system (O'Connor et al., 2021). Long-term stress is also associated with increased risk of developing specific health problems such as cancer (Dai et al., 2020), respiratory infections, skin diseases like psoriasis (Graubard et al., 2021), and cardiovascular disease (O'Connor et al., 2021).

So how do we reduce stress? There's no one solution that works for everyone, but here are some things to try.

- *Relax*. This is harder than it sounds, because most of us can't just relax on command. However, we can consciously tense and release our muscles or try to control our breathing. For example, a technique called 4-7-8 breathing (where you inhale to a count of four, hold your breath for a count of seven, and exhale to a count of eight) is common in several yoga practices and has been associated with improved heart rate and blood pressure (Vierra et al., 2022). There are also relaxation apps that use breathing and mindfulness exercises to reduce stress.
- *Move*. Raising your heart rate to decrease your stress might seem counterintuitive, but exercise can reduce muscle tension and regulate our breathing as well as benefiting our cardiovascular health. Depending on exactly what we do, exercising might also help us feel a sense of accomplishment (e.g., we set a new personal record), enjoy the company of others (e.g., walking with a friend), or simply be a distraction from stressful life events (e.g., clearing your mind in a yoga class). Movement doesn't even have to mean "exercise"; dancing and pushing a lawn mower may have the same types of physical and psychological benefits.
- *Prioritize*. Stress often involves feeling overwhelmed by responsibilities, but not everything has to be done immediately. One method of prioritizing tasks is called the Eisenhower Matrix, which asks you to classify tasks along two dimensions: How urgent they are, and how important they are. Tasks that are both urgent and important, like refilling a prescription you're about to run out of, should be done immediately. Tasks that are important but not urgent, like exercising, can be put off until later (but still need to be done). Tasks that are urgent but not important, like grocery shopping, can be delegated to someone else. Finally, tasks that are neither urgent nor important, like rearranging your furniture, can be deleted or ignored.

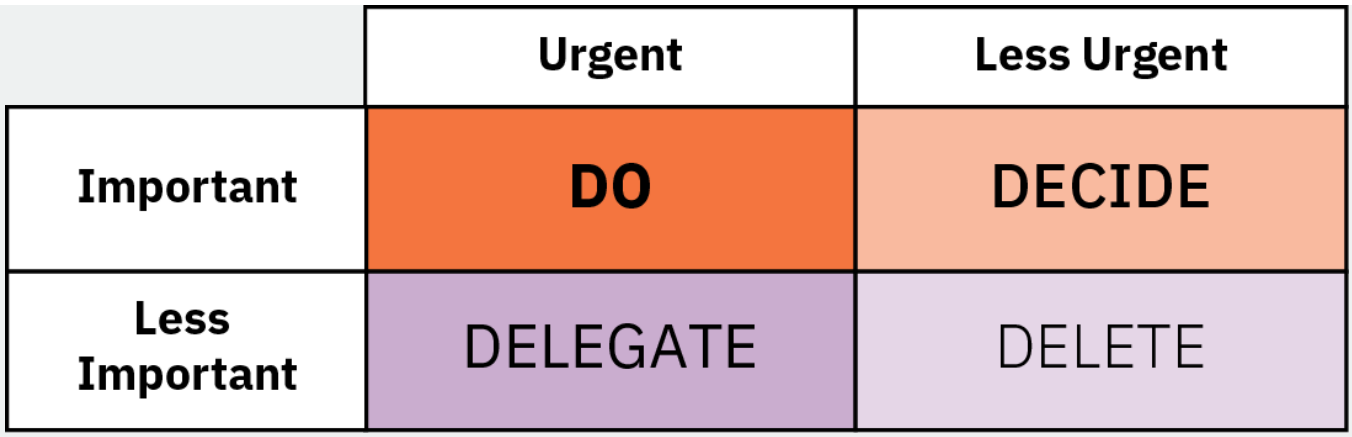



Figure 11.6 The Eisenhower Matrix classifies tasks along two dimensions: urgency and importance. (CC BY 4.0; Rice University & OpenStax)

You can also use a calendar or to-do list to figure out the most important things on your plate and leave other things for later.

- *Communicate*. Talk about the things that are bothering you, either with a therapist or with someone in your life. Ask for help if you need it. No one likes asking for help, but people like helping. Remember how good you feel when you can help someone else out, and give someone else the chance to have that same feeling (plus this might give you less to do).

## Healthy Sleep

Many young adults have trouble getting a good night's sleep, and stress and anxiety are among the primary reasons (Suni & Truong, 2023). Sleep matters because it lets the body repair itself at the cellular level. Physical complaints associated with poor sleep include migraines, neck pain, and a poorer sense of self-rated health (Sohn et al., 2021; Wacks & Weinstein, 2021). Poor sleep can also increase our risk of getting sick, reduce our mental and physical health, and cause premature aging at the cellular level (Carroll & Prather, 2021).

The National Institutes of Health (NIH) recommend that adults get seven to eight hours of sleep per night. The effects of lost sleep are cumulative and produce a "sleep debt"; for example, a person who loses two hours of sleep each night for seven days has a sleep debt of 14 hours (2022). Routinely getting less than seven hours a night can make it difficult to think clearly because chronic sleep deprivation appears to damage brain tissue in areas like the prefrontal cortex and hippocampus (Schiel et al., 2023). Cognitive complaints linked to poor sleep include impaired working memory, attention, and numerical processing (Wacks & Weinstein, 2021). Poor sleep is also a risk factor for developing depression (Fang et al., 2019) and other mental health problems such as anxiety disorders and alcohol use (Daniyal et al., 2022; Wacks & Weinstein, 2021), although it's not clear whether this is due to disrupted circadian rhythms, changes in levels of neurotransmitters like serotonin, or other factors such as coping mechanisms (Riemann et al., 2020). Regardless of the mechanism behind it, without consistently good sleep, both our physical health and mental health suffer.

Using cell phones and other electronic devices appears to be linked to health in several areas, including sleep. Research has consistently indicated an association between heavy cell phone use and declines in sleep quality and quantity, including taking longer to get to sleep, waking up more frequently (and often using the phone during these awakenings), and decreased REM sleep (Daniyal et al., 2022; Sohn et al., 2021; Wacks & Weinstein, 2021). People who report heavy cell phone use and poorer sleep also report numerous physical, cognitive, and mental health complaints identical to the ones mentioned in the previous paragraph.

Exactly why electronic device use is linked to poorer sleep is unclear. Some research suggests that the blue light emitted by electronic devices suppresses melatonin release, therefore disrupting circadian rhythms (e.g., Silvani et al., 2022); however, other research disputes this (e.g., Blume et al., 2024). It's also possible that using these devices produces emotional arousal that interferes with sleep, causes people to lose track of time and stay up later than they intended, and/or disrupts the association between bed and sleeping (Alshobaili & AlYousefi, 2019; Suni & Rosen, 2024). Regardless of the underlying mechanism, using electronic devices in bed and/or close to bedtime is reliably associated with negative effects on well-being and functioning (Daniyal et al., 2022; Silvani et al., 2022; Sohn et al., 2021; Wacks & Weinstein, 2021). Interestingly, the overall duration of phone use may be less important than how close to bedtime someone uses their phone (Sohn et al., 2021).

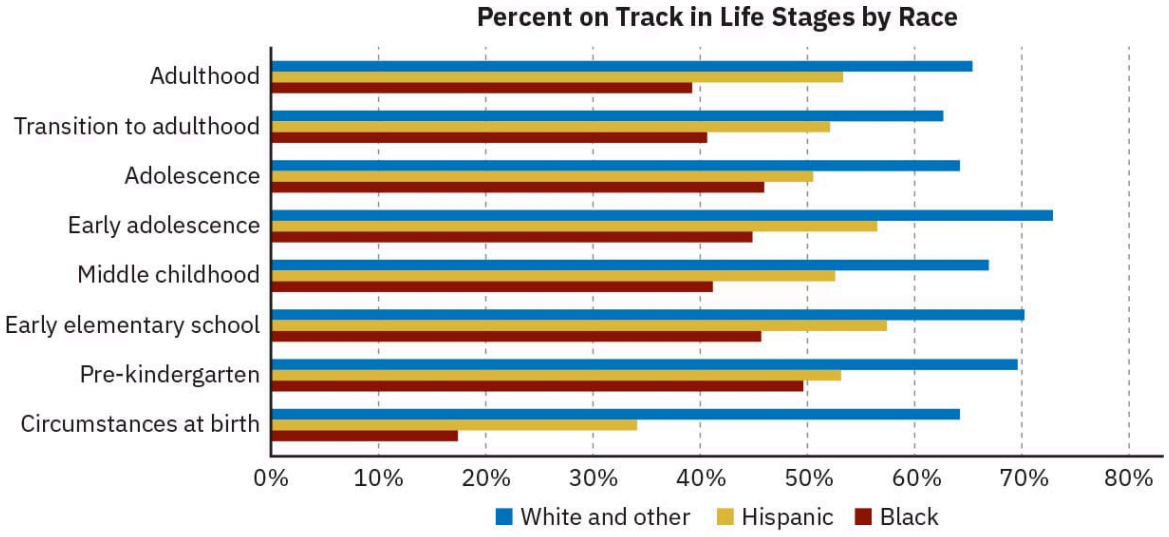
# Contextual and Cultural Influences on Health

Research has found that having low socioeconomic status early in life can influence well-being and health over the person's lifetime (Trent et al., 2019; Wickrama et al., 2022; Yang et al., 2017). Being in the lowest 25 percent SES was found to be particularly disadvantageous to long-term health (Yang et al., 2017). In addition to lacking resources to become and stay healthy, people with lower SES encounter are at a higher risk of adverse life events, such as job loss. Having a more limited set of socioeconomic resources is also associated with higher stress and higher instability (Landberg et al., 2019). For those who struggle with chronic poverty this stress can be reflected in health (Beech et al., 2021). Intergenerational transmission of social and economic disadvantages can increase these health and well-being risks for early adults and reduce access to protective factors such as educational opportunities (Vauhkonen et al., 2017; Wagmiller & Adelman, 2009). Government policies and programs, such as tax care credits for low income families, welfare programs, and educational assistance resources can provide opportunities for overcoming these early disadvantages (Van Ryzin et al., 2018; Vauhkonen et al., 2017).

## Racial Discrimination

Racial discrimination is associated with decreased feelings of well-being and health, including increased anxiety and depression (Beech et al., 2021). Research (Lei et al., 2021) following over 1,800 people between the ages of 18 and 28 for a decade revealed that the more frequently young people experience discrimination, the higher their risk of developing mental health issues or a problem with substance misuse (or substance abuse), the use of drugs or alcohol in excess or for purposes for which they weren't intended, leading to problems in physical, social, and/or psychological functioning, often termed substance misuse or problematic substance use in order to avoid stigma of "abuse"; often related to substance use disorder (SUD). The research from Lei et al. (2021) also points to a possible cumulative effect. Black individuals often deal with extra stressors during early adulthood, including discrimination in employment and housing, and in interactions with others at work or school (Beech et al., 2021). The stress caused by discrimination appears to negatively affect people' social, mental, and physical health (Hope et al., 2015).

The health effects of being a person of color may start early. A 2021 study by the Urban Institute measured the numbers of different groups considered "on track" for healthy developmental outcomes, with "on track" referring to having a variety of potentially beneficial characteristics and life circumstances such as being born into a two-parent family, having good interpersonal and self-control skills, and having an income at least 100 percent above the federal poverty level. While approximately 67 percent of White individuals are born on track for a healthy developmental outcome according to the criteria presented, only 17 percent of Black children and 34 percent of Hispanic children are. By the time people reach thirty years of age, 66 percent of White adults are still on track, while less than 40 percent of Black individuals and 54 percent of Hispanic individuals are (Acs et al., 2021) (Figure 11.7). For Black and Hispanic people in the United States, their chances of attaining successful development generally improve between birth and adulthood, but are consistently lower than the chances of their White peers.




Source: Social Genome Model.

Figure 11.7 The percentage of the population considered "on track" for healthy development—due to having potentially beneficial characteristics and life circumstances such as income and good socioemotional skills—shows variations by race. (credit: modification of work "Percent on Track in Life Stage by Race" by Social Genome Project/Urban Institute, CC BY 2.0)

## Gender and Sexuality

For various reasons, women generally live longer than men but are at higher risk of violence, poverty, and physical and mental health problems (e.g., Kettel et al., 2017). A French study of men's and women's use of preventive care screenings indicated that women under age 50 received the fewest screenings, particularly for cardiovascular health and suggested that differences in perception of cardiovascular health risk may be partly responsible (Gaye et al., 2022). Other studies have noted that women are more likely than men to live in poverty and be single parents, which are potentially stressful situations (Bassett & Moore, 2013; Christie-Mizell, 2022; Kettel, 2017; Williams & Baker, 2021). In many cases, the intersection of gender with race and SES appears to increase the likelihood of negative outcomes such as depression and health problems (Christie-Mizell, 2022; Williams & Baker, 2021). These studies also noted that the sociocultural norms and gender role expectations for women produce a lot of stress in that women are expected to be self-sacrificing, nurturing, and subservient (Bassett & Moore, 2013; Christie-Mizell, 2022; Kettel, 2017).




Figure 11.8 LGBTQ+ adults may experience discrimination, violence, and even criminal persecution, which can negatively affect their well-being. (credit: modification of work "Dia de los Muertos Festival Canoga Park CA" by Mark Krynsky/Flickr, CC BY 2.0)

The mental and physical health of LGBTQ+ young adults has become the focus of more research in the past decade. In many countries, being LBGTQ+ meets a range of responses, from passive to active social disapproval, to violence, and even criminal persecution. This can produce an environment of chronic stress that negatively affects health. Compared to heterosexual peers, LGBTQ+ emerging adults are more likely to experience homelessness and food insecurity, often starting in adolescence after their home life becomes intolerable (Bowen et al., 2021; Oi, 2023; Tucker et al., 2024). These circumstances were associated with higher rates of depression, anxiety, physical ailments, and drug use (Tucker et al., 2024). Evidence indicates that LGBTQ+ men were likely to experience negative economic consequences starting as they entered their 30s (Oi, 2023), suggesting that their risk of developing health problems due to chronic stress or lack of access to health care would likely increase as they reached middle age (Figure 11.8).

# Specific Individual Health Concerns in Early Adulthood

Obesity, drug and alcohol use, and injuries and accidental death are specific health concerns for young adults. You may have heard that weight gain is common during the first year of college. College freshmen often do gain weight, but not that much—typically about 4 kg (8.8 lb) for male students and about 1.8 kb (4 lb) for female students (Beaudry et al., 2019; Winpenny et al., 2020). This may occur because of new and less healthy eating habits than at home, changes in sleep patterns, and reduced activity levels. Thus, stress may affect our health not just through direct changes in the body but also by changing our health-related behaviors.

Obesity (partly indicated by having a body mass index, or BMI, over 30) occurring during adolescence often carries into early and later stages of adulthood (Ng & Cunningham, 2020; Simmonds et al., 2016). BMI, a measure of height and mass, has been used for years to assess future health problems, but it has come under increasing criticism because it merely focuses on height and weight and doesn't examine body composition. A person with a lot of muscle mass may have the same BMI as a person with a lot of fat tissue, but we probably wouldn't consider them to be equally healthy. Nor does obesity guarantee health problems.

People with a high BMI have a higher risk of developing heart disease than people with a lower BMI; however, once they develop heart disease, people with a high BMI sometimes live longer and in better health than people with a lower BMI who develop heart disease. This is called the obesity paradox (Horwich et al., 2001) and has been consistently, though not universally, demonstrated (e.g., Carbone et al., 2020; Donataccio et al., 2021; Fröhlich et al., 2022). Additionally, it's possible to have a BMI that's too low, as in anorexia nervosa or malnutrition. Being thin doesn't equal being healthy. Some research has indicated that other measures than BMI alone might better indicate obesity related health risks, such as waist circumference, waist-to-hip ratio. and waist-to-height ratio (Harvard T.H. Chan, 2022; Tu, 2022). The American Medical Association has also adopted the policy to use metrics beyond BMI due to the ways BMI can be an inaccurate and misleading measure of body fat, particularly across racial and ethnic groups (AMA, 2023; Tu, 2022).

Social, environmental, and genetic factors all play a role in increasing the risk of becoming obese. Low socioeconomic status has been connected to obesity, but the connection is not yet well understood. It is believed that stress and limited access to high-quality food may play a role (Spinosa et al., 2019). Additionally, a recent systematic review found emerging adulthood as a risk period for both poor mental health and low diet quality. Findings noted a moderate association between diet quality and measures of psychological health such as depression and anxiety (Collins et al., 2022). The young adults studied in this review weren't exclusively college students, suggesting that it's the experience of young adulthood, and not just the college environment, that's most influential here.

Drug and alcohol use also affect health. Though many adolescents experiment with drugs and alcohol, emerging adulthood is the time when substance use is most likely to occur and to set the foundation for possible substance misuse in the future (UNODC, 2018). Emerging adults (18 to 25) are the largest abusers of marijuana, alcohol, anti-anxiety medications, and ADHD medication (de Jonge et al., 2022; National Center for Drug Abuse Statistics, 2023; Schepis et al., 2020). Drugs and alcohol are frequent elements of socialization at bars, parties, clubs, and concerts during emerging adulthood (de Jonge et al., 2022; Martinotti et al., 2020; Strandberg et al., 2020). In fact, certain drugs such as ketamine and MDMA/Ecstasy are known as "club drugs" because of their association with the nightclub scene (Strandberg et al., 2020). Other potential reasons for the increase in substance use during emerging adulthood include curiosity, financial challenges, and ineffective coping mechanisms for dealing with stress caused by increased responsibilities and changing relationships with family and peers (Ibarra-Mejia et al., 2023; Schepis et al., 2020; Zaami et al., 2020). College students (and young adults in general) are more likely to report using alcohol or drugs to cope with stress than getting counseling (Ibarra-Mejia et al., 2023) (Figure 11.9).

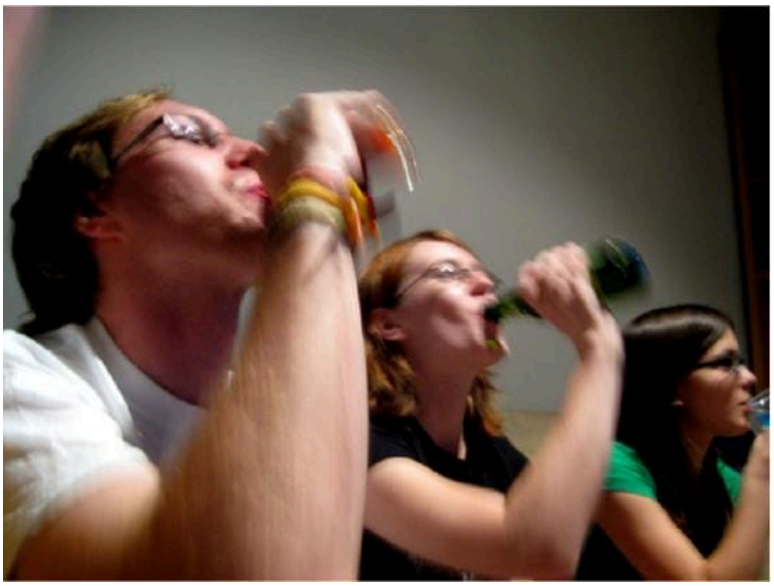


Figure 11.9 Being able to legally drink alcohol brings new experiences and challenges. (credit: "Everyone take a drink" by Dani Lurie/Wikimedia Commons, CC BY 2.0)

This trend of drug and alcohol use increasing in emerging adulthood isn't confined to any specific country or area of the world, but is a global observation (UNODC, 2018). Additionally, it appears to affect emerging adults regardless of educational status. Emerging adults in the workforce appear to also have higher rates of drug and alcohol use than their older coworkers, suggesting that having disposable income is one factor contributing to this behavior (de Jonge et al., 2022; Strandberg et al., 2020). Table 11.2 shows the percentage of adults ages 18–22 in the United States using alcohol and other drugs, broken down by gender and college enrollment status. In general, rates of substance use are roughly equivalent across groups, with the exception of heavy drinking being more prevalent in male college students compared to the other groups.

*Table 11.2 Percentage of Adults Ages 18–22 Reporting Using Specific Substances within the Last Month (source: SAMHSA, 2019)*

| | College Male | College Female | Noncollege Male | Noncollege Female |
|---|---|---|---|---|
| Marijuana | 22.6 | 19.9 | 24.8 | 22.4 |
| Heavy drinking | 9.7 | 6.8 | 6.9 | 5.7 |
| Prescription drugs | 3.4 | 3.1 | 3.1 | 3.7 |
| Hallucinogens | 1.8 | 1.0 | 2.6 | 1.6 |
| Cocaine/crack | 1.2 | 1.4 | 1.2 | 1.8 |
| Methamphetamine | 0.2 | 0.0 | 0.4 | 0.2 |

Substance use is correlated with increased risks of mental health difficulties, risky sexual behavior, violent assault, and injuries and death from accidents and motor vehicle crashes (Baskin-Sommers & Sommers, 2006; de Jonge et al., 2022; Martinotti et al., 2020; National Center for Drug Abuse Statistics, 2023). Repeated use of marijuana and other cannabis-containing substances is associated with increased risk of developing schizophrenia spectrum disorders, particularly in male users (Hjorthøj et al., 2023; Martinotti et al., 2020). Approximately 20 percent of HIV cases can be linked to sharing needles for injected drugs (National Center for Drug Abuse Statistics, 2023). Some substance abuse problems start out as recreational use but snowball into addictions; 8.1 percent of adults ages 18–22 reported a diagnosis of alcohol use disorder and 13.1 percent reported a diagnosis of substance use disorder (SAMHSA, 2019). It's unclear why some people develop these disorders and others don't, but there doesn't seem to be a single pathway or risk factor that guarantees this. There instead appear to be many risk factors, including biological (e.g., variations in dopamine function that affect pleasure-seeking behavior), environmental (e.g., adverse childhood events), psychological (e.g., tendency toward risk-taking) and social (e.g., desire to conform (Potenza, 2013). Regardless of the cause, alcohol or substance use disorders can affect a person's ability to succeed academically, professionally, and socially, and thus interfere with achieving the typical milestones of emerging adulthood (Table 11.3).

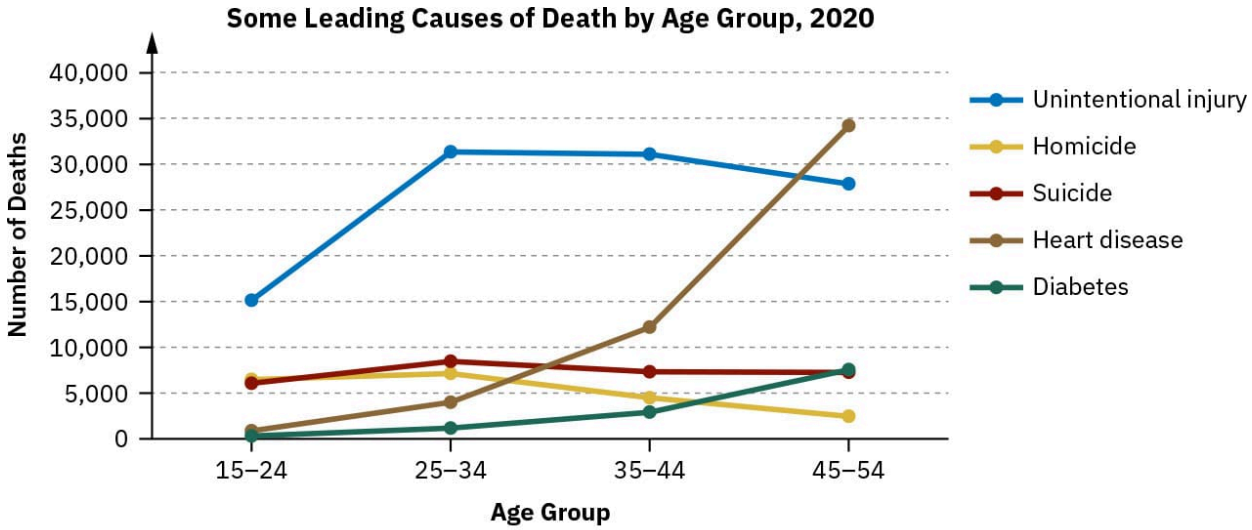
*Table 11.3 Classes of Drugs and Their Effects*

| | Stimulants | Sedative-Hypnotics ("Depressants") | Opiates | Hallucinogens |
|---|---|---|---|---|
| Examples | Cocaine, amphetamines (including some ADHD medications such as Adderall), methamphetamines, MDMA ("Ecstasy" or "Molly") | Alcohol, barbiturates (e.g., secobarbital, pentobarbital), Benzodiazepines (e.g., Xanax) | Opium, Heroin, Fentanyl, Morphine, Oxycodone, Vicodin, methadone, and other prescription pain relievers | Marijuana, LSD, Peyote, mescaline, DMT, dissociative anesthetics including ketamine and PCP |
| Effects on the body | Increased heart rate, blood pressure, body temperature | Decreased heart rate, blood pressure | Decreased pain, pupil constriction, decreased gut motility, decreased respiratory function | Increased heart rate and blood pressure that may dissipate over time |
| Psychologically addicting? | Yes | Yes | Yes | Yes |

## Injuries and Accidental Death

Despite the good physical health typical of young adulthood, people in this developmental stage are at increased risk of accidental death from causes such as car accidents, overdose, and drowning. Other risks include suicide and homicide, especially via gun violence.

The leading causes of death for young adults, according to the CDC (2020), are listed in Figure 11.10.




Sources:

Figure 11.10 Causes of death aren't equally distributed across the lifespan; some causes are more likely for some age groups than others. (data source: Centers for Disease Control; attribution: Copyright Rice University, OpenStax, under CC BY 4.0 license)

Unintentional injury is the most common cause of death during emerging adulthood, and most of those injuries (44.6 percent) are caused by car accidents. Many emerging adults find themselves driving more often—to work, school, stores, and so on—and increased mileage can mean more opportunities for accidents to occur. Being exposed to gun violence at a young age is strongly related to being caught in an event that included gun violence later (Beardslee et al., 2021a, 2021b; Semenza et al., 2024). It's possible that growing up in an environment where guns and violence are common normalizes these things (Beardslee et al., 2021a).

## Mental Health in Emerging and Early Adulthood

Mental health is an important part of overall well-being (Figure 11.11). Emerging adulthood can be full of positive experiences alongside major life changes, but almost everyone has some negative experiences as well. Sometimes, potentially unrelated to life experiences, people develop mental health problems such as depression, anxiety, and substance use disorders. Emerging adulthood is often a pivotal time for mental health. A 2022 meta-analysis indicated that worldwide, 48.4 percent of cases of mental illness had an onset before age 18, and 62.5 percent had an onset before age 25, indicating that the prevalence of mental illness increased by 14.1 percent between the ages of 18 and 25. Eating disorders and obsessive-compulsive disorder, were most likely to be diagnosed between the ages of 17–22, and schizophrenia, alcohol use disorder, panic disorder, and personality disorders were most likely to be first diagnosed between the ages of 25–27 (Solmi et al., 2022). Therefore, the early adulthood stage of development may result in first diagnoses of symptoms from mental, physical, and social struggles that may have occurred earlier in life, and are first identified and properly diagnosed as a young adult.



Figure 11.11 Mental health issues can affect many aspects of our well-being. (credit: modification of work “Man sitting on ground” by NappyStock/nappy, Public Domain)

In addition to young adulthood already being a prime time for developing mental health problems, the COVID-19 pandemic added increased stress to people’s lives due to lockdowns, loss of loved ones, worries about health, and disruption of typical activities. During the first two years of the pandemic, depression, anxiety, and loneliness increased for the world’s population in general but for younger people in particular (Birmingham et al., 2023; Horigan et al., 2021; Juvonen et al., 2022; Molock & Parchem, 2022; Wang et al., 2020; World Health Organization, 2021). Interestingly, longitudinal research suggests that loneliness declined after the first two years because adolescents and young adults adapted to using technology for most of their social interactions (Juvonen et al., 2022), an extension of previously noted trends toward increasing use of social networks for peer interaction and communication (Lima et al., 2017).

There is no one leading risk factor for suicide. Many factors appear to play a role in suicides, occurring in four broad categories: individual risk factors, relationship risk factors, community risk factors, and societal risk factors (CDC, 2023)(Figure 11.12). Specific examples of risk factors include racism and bullying, financial difficulties, lack of opportunities (for work or housing), lack of access to health care and mental health care, feelings of being left out, and relationship problems (CDC, 2021; 2023). Some individuals are at higher risk of attempting or dying by suicide, including veterans, American Indian and Alaskan natives, people living in rural areas, men, and sexual/gender minorities (CDC, 2023a).

**Risk Factors for Suicide by Category**

| Individual | Relationship | Community | Societal |
|---|---|---|---|
| • Prior suicide attempts<br>• History of mental illness<br>• Chronic illness<br>• Legal issues<br>• Financial loss<br>• Substance abuse<br>• Victim of violence | • Bullying<br>• Volatile relationships<br>• Family history of suicide<br>• Loss of relationship(s)<br>• Social isolation | • Decreased access to healthcare<br>• Suicide cluster occuring in the community<br>• Community violence<br>• Discrimination | • Stigmas with seeking mental health help<br>• Access to instruments utilized to commit suicide<br>• Unsafe media portrayals of suicide |

Figure 11.12 There are several categories of risk factors for suicide, and people may have more than one risk factor from more than category. (CC BY 4.0; Rice University & OpenStax)

Worldwide, 21 percent of gun deaths are from suicide, but this percentage varies among countries. In the United States, suicide accounts for almost two-thirds of gun-related deaths (World Population Review, 2024). While easy access to guns may contribute to this, another possibility is that repeated exposure to violence produces a sense of hopelessness. There are two research findings consistent with this notion. First, in 2022, Black young adults had more gun-related suicides than White young adults for the first time since data started being collected (Semenza et al., 2024). Second, gun carrying has been found to be negatively correlated with future orientation, the ability to think about and plan for what lies ahead, including predicting consequences of one's actions. People who are low on future orientation may not have high expectations for themselves and/or consider or care about the consequences of their actions, and thus engage in more dangerous behavior or be more likely to die by suicide (Beardslee et al., 2021a).

**Link to Learning**

If you or someone you know is at risk of suicide, reach out to the National 988 Suicide and Crisis Lifeline for help. Text or call 988 or chat through their website to receive immediate, confidential support.

## References


Acs, G., Werner, K., Blagg, K., & Martin, S. (2021). *Identifying pathways for upward mobility* Urban Institute. https://www.urban.org/sites/default/...d-mobility.pdf

Alshobaili, F. A., & AlYousefi, N. A. (2019). The effect of smartphone usage at bedtime on sleep quality among Saudi non- medical staff at King Saud University Medical City. *Journal of Family Medicine and Primary Care, 8*(6), 1953–1957. doi.org/10.4103/jfmpc.jfmpc_269_19

American Heart Association. (2024). *American Heart Association recommendations for physical activity in adults and kids*. https://www.heart.org/en/healthy-liv...vity-in-adults

Baskin-Sommers, A., & Sommers, I. (2006). The co-occurrence of substance use and high-risk behaviors. *Journal of Adolescent Health*, *38*(5), 609–611. https://doi.org/10.1016/j.jadohealth.2005.07.010

Bassett, E., & Moore, S. (2013). Gender differences in the social pathways linking neighborhood disadvantage to depressive symptoms in adults. *PloS One, 8*(10), e76554. https://doi.org/10.1371/journal.pone.0076554

Beardslee, J., Docherty, M., Mulvey, E., & Pardini, D. (2021a). The direct and indirect associations between childhood socioeconomic disadvantage and adolescent gun violence. *Journal of Clinical Child and Adolescent Psychology, 50*(3), 326–336. doi.org/10.1080/15374416.2019.1644646

Beardslee, J., Kan, E., Simmons, C., Pardini, D., Peniche, M., Frick, P. J., Steinberg, L., & Cauffman, E. (2021b). A within-individual examination of the predictors of gun carrying during adolescence and young adulthood among young men. *Journal of Youth and Adolescence*, *50*(10), 1952–1969. https://doi.org/10.1007/s10964-021-01464-6

Beech, B. M., Ford, C., Thorpe Jr, R. J., Bruce, M. A., & Norris, K. C. (2021). Poverty, racism, and the public health crisis in America. *Frontiers in Public Health, 9*, 699049. https://doi.org/10.3389/fpubh.2021.699049

Birmingham, W. C., Wadsworth, L., Lassetter, J. H., Graff, T. C., Lauren, E., & Hung, M. (2023). COVID-19 lockdown: Impact on college students' lives. *Journal of American College Health, 71*(3), 879-893. doi.org/10.1080/07448481.2021.1909041

Blume, C., Cajochen, C., Schöllhorn, I., Slawik, H. C., & Spitschan, M. (2024). Effects of calibrated blue-yellow changes in light on the human circadian clock. *Nature Human Behaviour, 8*(3), 590–605. https://doi.org/10.1038/s41562-023-01791-7

Bowen, E., Ball, A., Jones, A. S., & Miller, B. (2021). Toward many emerging adulthoods: A theory-based examination of the features of emerging adulthood for cross-systems youth. *Emerging Adulthood, 9*(3), 189-201. doi.org/10.1177/2167696821989123

Brodin, P., & Davis, M. M. (2017). Human immune system variation. *Nature Reviews Immunology, 17*(1), 21–29. https://doi.org/10.1038/nri.2016.125

Carbone, S., Lavie, C. J., Elagizi, A., Arena, R., & Ventura, H. O. (2020). The impact of obesity in heart failure. *Heart Failure Clinics,*

*16*(1), 71-80. https://doi.org/10.1016/j.hfc.2019.08.008

Carroll, J. E., & Prather, A. A. (2021). Sleep and biological aging: A short review. *Current Opinion in Endocrine and Metabolic Research, 18*, 159-164. https://doi.org/10.1016/j.coemr.2021.03.021

Centers for Disease Control and Prevention. (2022a). *Distracted driving*. www.cdc.gov/transportationsa...x.html#problem

Centers for Disease Control and Prevention. (2022b). *Impaired driving: Get the facts*. www.cdc.gov/transportationsa...factsheet.html

Centers for Disease Control and Prevention. (2022c). *Risk and protective factors*. www.cdc.gov/suicide/factors/index.html

Centers for Disease Control and Prevention. (2023a). *Disparities in suicide*. www.cdc.gov/suicide/facts/di...n-suicide.html

Centers for Disease Control and Prevention. (2023b). *Preventing youth violence*. www.cdc.gov/violencepreventi.../fastfact.html

Centers for Disease Control and Prevention. (2020). *Injury Data Visualization Tools | WISQARS | CDC*. Wisqars.cdc.gov. https://wisqars.cdc.gov/data/lcd/home

Centers for Disease Control and Prevention. (2023b). *Suicide data and statistics*. www.cdc.gov/suicide/suicide-...tatistics.html

Chen, M. L., Hu, J., McCoy, T. P., Letvak, S., & Ivanov, L. (2020). Associations of lifestyle intervention effect with blood pressure and physical activity among community-dwelling older Americans with hypertension in Southern California. *International Journal of Environmental Research and Public Health, 17*(16), 5673. https://doi.org/10.3390/ijerph17165673

Christie-Mizell, C. A. (2022). Neighborhood disadvantage and poor health: The consequences of race, gender, and age among young adults. *International Journal of Environmental Research and Public Health, 19*, 8107. https:// doi.org/10.3390/ijerph19138107

Cleveland Clinic. (2021). *Cortisol*. my.clevelandclinic.org/healt...22187-cortisol

Collins, S., Dash, S., Allender, S., Jacka, F., & Hoare, E. (2022). Diet and mental health during emerging adulthood: a systematic review. *Emerging Adulthood, 10*(3), 645-659. doi.org/10.1177/2167696820943028

Dai, S., Mo, Y., Wang, Y., Xiang, B., Liao, Q., Zhou, M., Li, X., Li, Y., Xiong, W., Li, G., Guo, C., & Zeng, Z. (2020). Chronic stress promotes cancer development. *Frontiers in Oncology, 10*, 1492. https://doi.org/10.3389/fonc.2020.01492

de Jonge, M. C., Bukman, A. J., van Leeuwen, L., Onrust, S. A., & Kleinjan, M. (2022). Latent classes of substance use in young adults - A systematic review. *Substance Use & Misuse, 57*(5), 769–785. doi.org/10.1080/10826084.2022.2040029

Donataccio, M. P., Angiola, V., & Ottavio, B. (2021). Obesity paradox and heart failure. *Eating and Weight Disorders, 26*(6), 1697-1707. https://doi.org/10.1007/s40519-020-00982-9

Fang, H., Tu, S., Sheng, J., & Shao, A. (2019). Depression in sleep disturbance: A review on a bidirectional relationship, mechanisms and treatment. *Journal of Cellular and Molecular Medicine*, *23*(4), 2324–2332. doi.org/10.1111/jcmm.14170Francis, P., Lyons, M., Piasecki, M., Mc Phee, J., Hind, K., & Jakeman, P. (2017). Measurement of muscle health in aging. *Biogerontology, 18*(6), 901–911. https://doi.org/10.1007/s10522-017-9697-5

Fröhlich, H., Frey, N., Frankenstein, L., & Täger, T. (2022). The obesity paradox in heart failure: Is it still valid in light of new therapies?. *Cardiology, 147*(5-6), 529–538. doi.org/10.1159/000527332

Gaye, B., Hergault, H., Lassale, C., Ladouceur, M., Valentin, E., Vignac, M., Danchin, N., Diaw, M., Kvaskoff, M., Chamieh, S., Thomas, F., Michos, E., & Jouven, X. (2022). Gender gap in annual preventive care services in France. *eClinical Medicine, 49*, 101469. https://doi.org/10.1016/j.eclinm.2022.101469

Graubard, R., Perez-Sanchez, A., & Katta, R. (2021). Stress and skin: An overview of mind body therapies as a treatment strategy in dermatology. *Dermatology Practical & Conceptual, 11*(4), e2021091. https://doi.org/10.5826/dpc.1104a91

Hammel, M. C., Stein, R., Kratzsch, J., Vogel, M., Eckert, A. J., Triatin, R. D., Colombo, M., Meigen, C., Baber, R., Stanik, J., Spielau, U., Stoltze, A., Wirkner, K., Tönjes, A., Snieder, H., Holl, R. W., Stumvoll, M., Blüher, M., Kiess, W., & Körner, A. (2023). Fasting indices of

glucose-insulin-metabolism across life span and prediction of glycemic deterioration in children with obesity from new diagnostic cut-offs. *The Lancet Regional Health Europe, 30*, 100652. https://doi.org/10.1016/j.lanepe.2023.100652

Hjorthøj, C., Compton, W., Starzer, M., Nordholm, D., Einstein, E., Erlangsen, A., Nordentoft, M., Volkow, N. D., & Han, B. (2023). Association between cannabis use disorder and schizophrenia stronger in young males than in females. *Psychological Medicine, 53*(15), 7322–7328. https://doi.org/10.1017/S0033291723000880

Hochberg, Z., & Konner, M. (2020). Emerging adulthood, a pre-adult life- history stage. *Frontiers in Endocrinology, 10*(918). https://doi.org/10.3389/fendo.2019.00918

Hope, E. C., Hoggard, L. S., & Thomas, A. (2015). Emerging into adulthood in the face of racial discrimination: Physiological, psychological, and sociopolitical consequences for African American youth. *Translational Issues in Psychological Science*, *1*(4), 342–351. doi.org/10.1037/tps0000041

Horwich, T. B., Fonarow, G. C., Hamilton, M. A., MacLellan, W. R., Woo, M. A., & Tillisch, J. H. (2001). The relationship between obesity and mortality in patients with heart failure. *Journal of the American College of Cardiology, 38*(3), 789–95. https://doi.org/10.1016/s0735-1097(01)01448-6.

Hughes, J. L., Newton, P. O., Bastrom, T., Fabricant, P. D., & Pennock, A. T. (2020). The clavicle continues to grow during adolescence and early adulthood. *HSS Journal*, *16*(S2), 372–377. doi.org/10.1007/s11420-020-09754-8

Hull, H. R., Thornton, J., Wang, J., Pierson, R. N., Jr, Kaleem, Z., Pi-Sunyer, X., Heymsfield, S., Albu, J., Fernandez, J. R., Vanitallie, T. B., & Gallagher, D. (2011). Fat-free mass index: changes and race/ethnic differences in adulthood. *International Journal of Obesity, 35*(1), 121–127. https://doi.org/10.1038/ijo.2010.111

Ibarra-Mejia, G., Lusk, M., & Umucu, E. (2023). Mental health among college students during the COVID-19 pandemic at a Hispanic-serving institution. *Health Promotion Practice, 24*(3), 455-464. doi.org/10.1177/15248399221092750

Irace, A. L., Chern, A., & Golub, J. S. (2021). Hearing loss patterns throughout life: Insights from Japan. *The Lancet Regional Health–Western Pacific, 10*. 100152. https://doi.org/10.1016/j.lanwpc.2021.100152

Juvonen, J., Lessard, L. M., Kline, N. G., & Graham, S. (2022). Young adult adaptability to the social challenges of the COVID-19 pandemic: The protective role of friendships. *Journal of Youth and Adolescence, 51*(3), 585-597. https://link.springer.com/content/pd...22-01573-w.pdf

Kettel, B. (2017). Women, health, and the environment. In S. Sherwin & B. Parish (Eds.), *Women, medicine, ethics and the law* (1st ed., pp. 23-35). Routledge. doi.org/10.4324/9781003073789

Landberg, M., Lee, B., & Noack, P. (2019). What alters the experience of emerging adulthood? How the experience of emerging adulthood differs according to socioeconomic status and critical life events. *Emerging Adulthood*, *7*(3), 208–222. doi.org/10.1177/2167696819831793

Lantz, H., Bratteby, L. E., Fors, H., Sandhagen, B., Sjöström, L., & Samuelson, G. (2008). Body composition in a cohort of Swedish adolescents aged 15, 17 and 20.5 years. *Acta Paediatrica*, *97*(12), 1691–1697. doi.org/10.1111/j.1651-2227.2008.01035.x

Lei, Y., Shah, V., Biely, C., Jackson, N., Dudovitz, R., Barnert, E., Hotez, E., Guerrero, A., Bui, A. L., Sastry, N., & Schickedanz, A. (2021). Discrimination and subsequent mental health, substance use, and well-being in young adults. *Pediatrics*, *148*(6). doi.org/10.1542/peds.2021-051378

Lima, M. L., Marques, S., Muiños, G., & Camilo, C. (2017). All you need is Facebook friends? Associations between online and face-to-face friendships and health. *Frontiers in Psychology, 08*. https://doi.org/10.3389/fpsyg.2017.00068

Liu, K., Daviglus, M. L., Loria, C. M., Colangelo, L. A., Spring, B., Moller, A. C., & Lloyd-Jones, D. M. (2012). Healthy lifestyle through young adulthood and the presence of low cardiovascular disease risk profile in middle age. *Circulation*, *125*(8), 996–1004. doi.org/10.1161/circulationaha.111.060681

Mahmoud, O., Granell, R., Peralta, G. P., Garcia-Aymerich, J., Jarvis, D., Henderson, J., & Sterne, J. (2023). Early-life and health behaviour influences on lung function in early adulthood. *The European Respiratory Journal, 61*(3), 2001316. doi.org/10.1183/13993003.01316-2020

Martinotti, G., Negri, A., Schiavone, S., Montemitro, C., Vannini, C., Baroni, G., Pettorruso, M., De Giorgio, F., Giorgetti, R., Verrastro, V., Trabace, L., Garcia, A., Castro, I., Iglesias Lopez, J., Merino Del Villar, C., Schifano, F., & di Giannantonio, M. (2020). Club drugs: Psychotropic effects and psychopathological characteristics of a sample of inpatients. *Frontiers in Psychiatry, 11*, 879. https://doi.org/10.3389/fpsyt.2020.00879

Molock, S. D., & Parchem, B. (2022). The impact of COVID-19 on college students from communities of color. *Journal of American College Health, 70*(8), 2399–2405. doi.org/10.1080/07448481.2020.1865380

National Center for Drug Abuse Statistics. (2023). *Drug abuse statistics*. https://drugabusestatistics.org/

National Institutes of Health. (2022). *How much sleep is enough*. https://www.nhlbi.nih.gov/health/sle...how-much-sleep

National Overview of STDs, 2021. (2023, April 11). Www.cdc.gov. www.cdc.gov/std/statistics/2021/overview.htm

Neal, S., Channon, A. A., Chandra-Mouli, V., & Madise, N. (2020). Trends in adolescent first births in sub-Saharan Africa: a tale of increasing inequity? *International Journal for Equity in Health*, *19*(1). https://doi.org/10.1186/s12939-020-01251-y

O'Connor, D. B., Thayer, J. F., & Vedhara, K. (2021). Stress and health: A review of psychobiological processes. *Annual Review of Psychology, 72*, 663–688. doi.org/10.1146/annurev-psych-062520-122331

Oi, K. (2023). Widening, narrowing, and persistence of socioeconomic gaps between sexual minorities and heterosexuals across adulthood. *Journal of Homosexuality, 70*(13), 3213–3246. doi.org/10.1080/00918369.2022.2090885

Olivares, L. A. F., De León, L. G., & Fragoso, M. I. (2020). Skeletal age prediction model from percentage of adult height in children and adolescents. *Scientific Reports*, *10*, 15768. https://doi.org/10.1038/s41598-020-72835-5

Ozbay, F., Johnson, D. C., Dimoulas, E., Morgan, C. A., Charney, D., & Southwick, S. (2007). Social support and resilience to stress: From neurobiology to clinical practice. *Psychiatry (Edgmont)*, *4*(5), 35–40. www.ncbi.nlm.nih.gov/pmc/articles/PMC2921311/

Potenza, M. N. (2013). Biological contributions to addictions in adolescents and adults: prevention, treatment, and policy implications. *The Journal of Adolescent Health, 52*(2 Suppl 2), S22–S32. https://doi.org/10.1016/j.jadohealth.2012.05.007

Punzi, L., Galozzi, P., Luisetto, R., Favero, M., Ramonda, R., Oliviero, F., & Scanu, A. (2016). Post-traumatic arthritis: overview on pathogenic mechanisms and role of inflammation. *RMD open*, *2*(2), e000279. doi.org/10.1136/rmdopen-2016-000279

Reilly, D. M., & Lozano, J. (2021). Skin collagen through the lifestages: Importance for skin health and beauty. *Plastic and Aesthetic Research*, *8*(2). https://doi.org/10.20517/2347-9264.2020.153

Riemann, D., Krone, L. B., Wulff, K., & Nissen, C. (2020). Sleep, insomnia, and depression. *Neuropsychopharmacology, 45*(1), 74–89. https://doi.org/10.1038/s41386-019-0411-y

SAMHSA, Center for Behavioral Health Statistics and Quality (2019). *National survey on drug use and health, 2018 and 2019*. https://www.samhsa.gov/data/sites/de...ect6pe2019.htm

Schepis, T. S., Klare, D. L., Ford, J.A., & McCabe, S. E. (2020). Prescription drug misuse: Taking a lifespan perspective. *Substance Abuse: Research and Treatment, 14*. doi.org/10.1177/1178221820909352

Schiel, J. E., Tamm, S., Holub, F., Petri, R., Dashti, H. S., Domschke, K., Feige, B., Goodman, M. O., Jones, S. E., Lane, J. M., Ratti, P.-L., Ray, D. W., Redline, S., Riemann, D., Rutter, M. K., Saxena, R., Sexton, C. E., Tahmasian, M., Wang, H., . . . Spiegelhalder, K. (2023). Associations between sleep health and grey matter Vol. in the UK Biobank cohort (n = 33 356). *Brain Communications, 5*(4), Article fcad200. doi.org/10.1093/braincomms/fcad200

Seiler, A., Fagundes, C. P., Christian, L. M. (2020). The impact of everyday stressors on the immune system and health. In A. Choukèr (Ed.), *Stress challenges and immunity in space* (pp. 71-92). Springer. https://doi.org/10.1007/978-3-030-16996-1_6

Semenza, D. C., Daruwala, S., Brooks Stephens, J. R., & Anestis, M. D. (2024). Gun violence exposure and suicide among black adults. *JAMA Network Open, 7*(2), e2354953. doi.org/10.1001/jamanetworkopen.2023.54953

Silvani, M. I., Werder, R., & Perret, C. (2022). The influence of blue light on sleep, performance and wellbeing in young adults: A systematic review. *Frontiers in Physiology, 13*, 943108. https://doi.org/10.3389/fphys.2022.943108

Simmonds, M., Llewellyn, A., Owen, C. G., & Woolacott, N. (2016). Predicting adult obesity from childhood obesity: A systematic review and meta-analysis. *Obesity Reviews*, *17*(2), 95–107. doi.org/10.1111/obr.12334

Skalamera, J., & Hummer, R. A. (2016). Educational attainment and the clustering of health-related behavior among U.S. young adults. *Preventive Medicine*, *84*, 83–89. https://doi.org/10.1016/j.ypmed.2015.12.011

Sohn, S. Y., Krasnoff, L., Rees, P., Kalk, N. J., & Carter, B. (2021). The association between smartphone addiction and sleep: a UK cross-sectional study of young adults. *Frontiers in Psychiatry, 12*, 629407. https://doi.org/10.3389/fpsyt.2021.629407

Solmi, M., Radua, J., Olivola, M., Croce, E., Soardo, L., Salazar de Pablo, G., Shin, J. I., Kirkbride, J. B., Jones, P., Kim, J. H., Kim, J. Y., Carvalho, A. F., Seeman, M. V., Correll, C. U., & Fusar-Poli, P.. (2022). Age at onset of mental disorders worldwide: large-scale meta-analysis of 192 epidemiological studies. *Molecular Psychiatry 27*, 281–295. https://doi.org/10.1038/s41380-021-01161-7

Spinosa, J., Christiansen, P., Dickson, J. M., Lorenzetti, V., & Hardman, C. A. (2019). From socioeconomic disadvantage to obesity: The mediating role of psychological distress and emotional eating. *Obesity*, *27*(4), 559–564. doi.org/10.1002/oby.22402

Strandberg, A. K., Elgán, T. H., Feltmann, K., Jayaram Lindström, N., & Gripenberg, J. (2020). Illicit drugs in the nightlife setting: Changes in employee perceptions and drug use over a fifteen-year period. *Substance Use & Misuse, 55*(13), 2116–2128. doi.org/10.1080/10826084.2020.1793365

Suni, E., & Rosen, D. (2024). *Mastering sleep hygiene: Your path to quality sleep*. Sleep Foundation. https://www.sleepfoundation.org/sleep-hygiene

Suni, E., & Truong, K. (2023). *100+ sleep statistics* Sleep Foundation. https://www.sleepfoundation.org/how-...cts-statistics

Temple-Wong, M. M., Ren, S., Quach, P., Hansen, B. C., Chen, A. C., Hasegawa, A., D'Lima, D. D., Koziol, J., Masuda, K., Lotz, M. K., & Sah, R. L. (2016). Hyaluronan concentration and size distribution in human knee synovial fluid: variations with age and cartilage degeneration. *Arthritis Research & Therapy*, *18*, 18. https://doi.org/10.1186/s13075-016-0922-4

Tracy, B. M., Smith, R. N., Miller, K., Clayton, E., Bailey, K., Gerrin, C., Eversley-Kelso, T., Carney, D., & MacNew, H. (2019). Community distress predicts youth gun violence. *Journal of Pediatric Surgery, 54*(11), 2375–2381. https://doi.org/10.1016/j.jpedsurg.2019.03.021

Trent, M., Dooley, D. G., Dougé, J., Cavanaugh Jr., R. M., Lacroix, A. E., Fanburg, J., Rahmandar, M. H., Hornberger, L. L., Schneider, M. B., Yen, S., Chilton, L. A., Green, A. E., Dilley, K. J., Gutierrez, J. R., Duffee, J. H., Keane, V. A., Krugman, S. D., McKelvey, C. D., Linton, J. M.,.... Wallace, S. B. (2019). The impact of racism on child and adolescent health. *Pediatrics*, *144*(2), e20191765. doi.org/10.1542/peds.2019-1765

Tucker, J. S., Perez, L. G., Klein, D. J., & D'Amico, E. J. (2024). Homelessness and food insecurity during emerging adulthood: Associations with changes in behavioral and physical health over a two-year period. *The Journal of Adolescent Health, 74*(5), 1006–1011. https://doi.org/10.1016/j.jadohealth.2023.12.007

Van Ryzin, M. J., Fishbein, D., & Biglan, A. (2018). The promise of prevention science for addressing intergenerational poverty. Psychology, Public Policy, and Law, 24(1), 128.

Vauhkonen, T., Kallio, J., Kauppinen, T. M., & Erola, J. (2017). Intergenerational accumulation of social disadvantages across generations in young adulthood. Research in social stratification and mobility, 48, 42–52.

UNODC. (2018). *World drug report 2018, Booklet 4.Drugs and age: Drugs and associated issues among young people and older people*. https://www.unodc.org/wdr2018/prelau...et_4_YOUTH.pdf

U.S. Preventive Services Task Force. (2020). Behavioral counseling interventions to promote a healthy diet and physical activity for cardiovascular disease prevention in adults with cardiovascular risk factors: U.S. Preventive Services Task Force recommendation statement. *JAMA, 324*(20), 2069–2075. doi.org/10.1001/jama.2020.21749

Vierra, J., Boonla, O., & Prasertsri, P. (2022). Effects of sleep deprivation and 4-7-8 breathing control on heart rate variability, blood pressure, blood glucose, and endothelial function in healthy young adults. *Physiological Reports, 10*(13), e15389. doi.org/10.14814/phy2.15389

Wacks, Y., & Weinstein, A. M. (2021). Excessive smartphone use is associated with health problems in adolescents and young

adults. *Frontiers in Psychiatry, 12*, 669042. https://doi.org/10.3389/fpsyt.2021.669042

Wagmiller, R. L., & Adelman, R. M. (2009). Childhood and intergenerational poverty: The long-term consequences of growing up poor. National Center for Children in Poverty. http://www.nccp.org/publication/chil...ional-poverty/

Wang, X., Hegde, S., Son, C., Keller, B., Smith, A., & Sasangohar, F. (2020). Investigating mental health of US college students during the COVID-19 pandemic: Cross-sectional survey study. *Journal of Medical Internet Research, 22*(9), e22817. https://doi.org/10.2196/22817

Westerterp, K. R. (2018). Changes in physical activity over the lifespan: impact on body composition and sarcopenic obesity. *Obesity Reviews, 19* (Suppl. 1), 8-13. doi.org/10.1111/obr.12781

Wickrama, K. (A. S.), Lee, T. K., & O'Neal, C. W. (2022). Explaining physical health disparities and inequalities over the first half of the life course: An integrative review of Add Health studies. *Journal of Adolescent Health*, *71*(6), S47–S54. https://doi.org/10.1016/j.jadohealth.2022.06.019

Williams, D. T., & Baker, R. S. (2021). Family structure, risks, and racial stratification in poverty. *Social Problems, 68*(4), 964–985. doi.org/10.1093/socpro/spab018

World Health Organization. (2021). *Action required to address the impacts of the COVID-19 pandemic on mental health and service delivery systems in the WHO European Region: recommendations from the European Technical Advisory Group on the Mental Health Impacts of COVID-19*. iris.who.int/bitstream/handl...-59267-eng.pdf

World Population Review. (2024). *Gun deaths by country 2024*. https://worldpopulationreview.com/co...ths-by-country

Yang, Y. C., Gerken, K., Schorpp, K., Boen, C., & Harris, K. M. (2017). Early-life socioeconomic status and adult physiological functioning: A life course examination of biosocial mechanisms. *Biodemography and Social Biology*, *63*(2), 87–103. doi.org/10.1080/19485565.2017.1279536

Zhong, V. W., Bancks, M. P., Schreiner, P. J., Lewis, C. E., Steffen, L. M., Meigs, J. B., Schrader, L. A., Schorr, M., Miller, K. K., Sidney, S., & Carnethon, M. R. (2019). Insulin resistance since early adulthood and appendicular lean mass in middle-aged adults without diabetes: 20 years of the CARDIA study. *Journal of Diabetes and Its Complications, 33*(1), 84–90. https://doi.org/10.1016/j.jdiacomp.2018.09.011

This page titled 15.9.3: Physical Health and Growth in Early Adulthood is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

- 11.2: Physical Health and Growth in Early Adulthood by OpenStax is licensed CC BY 4.0. Original source: https://openstax.org/details/books/lifespan-development.

# 15.9.4: Sexuality in Early Adulthood

**Learning Objectives**

By the end of this section, you will be able to:

- Define young adult sexuality
- Define sexual identity and orientation
- Explain the connections between sexual activity and health
- Explain the risk factors for and consequences of sexual assault and harassment

During adolescence, David realized he was attracted to other males. Within his small community, David worried about rejection and even physical harm if other people knew he was gay and hid his sexual orientation throughout high school. Away at college in a large urban center, David joined the school's LGBTQ+ student group and was fully out to his university community; however, when he went home on breaks, he "went back in the closet." At the beginning of his senior year, he had his first sexual encounter and developed a romantic relationship with his partner. As their connection grew, it became more difficult, and more uncomfortable, to hide this important part of his life. After some minor mistruths about how holidays and breaks were being spent, David decided it was time to come out to his family. To his surprise, they were generally accepting of his sexual orientation. With their support, David was able to gradually start living as his authentic self in his hometown. Several years later, he is closer to his family than ever.

Emerging adulthood is typically a time of sexual exploration along with exploration of other aspects of ourselves. This can include the formation of social and emotional bonds with others, which we'll discuss in more detail in Chapter 12 Social and Emotional Development in Early Adulthood (Ages 18 to 29). However, sexuality also has physical and cognitive aspects, such as achieving sexual maturity and choices about sexual behavior. Here, we'll focus on these dimensions of sexuality as a part of adult development.

## Sexual Maturity and Sexual Behavior

The Sexuality Education Resource Centre (SERC) in Manitoba, Canada, which states that a person's sexuality is self-defined and can change over time depending on age and circumstances. The SERC portrays sexuality as being in a "wheel" composed of different components that interact with each other (SERC MB, n.d.), as seen in Figure 11.13. Here, we'll likewise define sexuality as a person's feelings, beliefs, and behaviors regarding attraction to others, sexual activity, and gender identity.

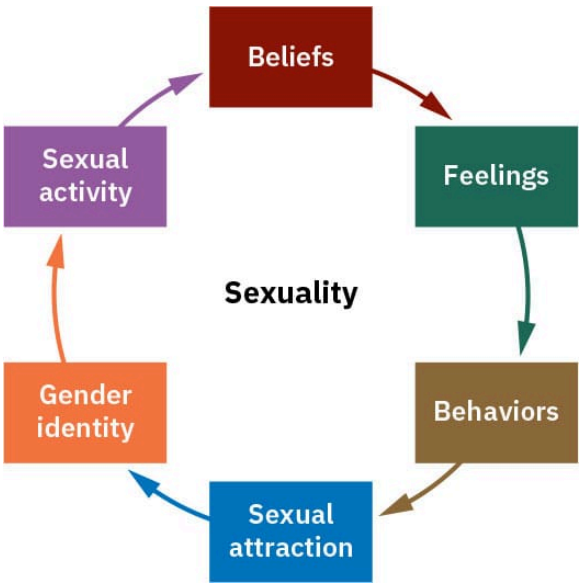



Figure 11.13 Sexuality involves several different components, each of which may change over time. (CC BY 4.0; Rice University & OpenStax)

Sexuality is a complicated concept with many influences, including biology, culture, religion, the views of our family and friends, and the portrayals of sexuality in mass media (Macleod & McCabe, 2020; Potard et al., 2008) (Figure 11.14). Because culture evolves, so do attitudes and behaviors regarding sexuality. For several decades, the General Social Survey (GSS) from the University of Chicago has tracked U.S. societal opinions on attitudes toward various facets of sexuality. Over that time studies have found greater acceptance toward living together before marriage and having sex before marriage (GSS Data Explorer, 2022; Harding & Jencks, 2003). However, in the United States and some European countries, these behaviors are now widely accepted, though they are still frowned upon or even prohibited in other countries (Rokach & Patel, 2021). Societal acceptance of non-heterosexual relationships, and the experiences people have when coming out, likewise vary by cohort (Martos et al., 2015; van Bergen et al., 2021). In some parts of the world, young females undergo procedures meant to decrease sexual pleasure, and marriage sometimes occurs before reaching puberty to reduce the incidence of premarital sex (Rokach & Patel, 2021; UN Women, 2019). However, in other cultures, premarital sex is considered a natural aspect of the transition from adolescent to adult and is encouraged (Christensen, 1960; Rokach & Patel, 2021).



Figure 11.14 Attitudes toward sexuality and sexual behavior can be affected by one's culture. (credit: "Close-up of a couple smiling and holding hands" by Chona Kasinger/Disabled and Here, CC BY 4.0)

Why do people engage in sexual activity? Beyond the obvious reasons that it's enjoyable, there are psychosocial reasons as well. Sexual activity is a way to express feelings to and establish connections with others, an important developmental task of emerging adulthood. Sexual interactions can also be a method of exploring one's identity, particularly for LGB youth who are questioning their sexual orientation or who feel the need to downplay their sexual orientation due to social disapproval (Phillips II et al., 2019). Social factors may also influence this (Figure 11.15). A study examining heterosexual women's same-sex encounters—specifically, kissing publicly—at college parties indicated that there was no single motive for this behavior; instead, it was motivated by one of several factors, such as being drunk, wanting to experiment, and enjoying the attention this behavior produced, especially attention from men (Yost & McCarthy, 2012). Sexual activity is also considered to be a standard element of romantic relationships, and some people engage in it out of feelings of obligation or duty—feelings that can be exploited, particularly in cultures where women are expected to be submissive and marital rape isn't regarded as a crime (UN Women, 2019).



Figure 11.15 The experience of sexuality is unique to everyone. (credit: modification of work “YuLein” by “Yuc j”/Wikimedia Commons, CC BY 3.0)

The experience and expression of sexuality are unique to everyone. The peak of sexual activity generally occurs between the ages of 18 and 24, though the number of adults in this age group who were sexually active decreased somewhat between the years 2000 and 2018, especially men (Ueda et al., 2020). Becoming sexually active is a common part of growing up, although it’s not a mandatory element (i.e., people who are asexual or who abstain from sexual activity for religious or other reasons aren’t somehow “defective”). Sexual activity is also, for many people, a healthy and enjoyable aspect of their lives. However, sometimes sexual activity has unwanted health consequences, such as sexually transmitted infections or unintended pregnancy.

## Sexual Orientation and Gender Identity

Recent data indicate that in the United States, about 7 percent of the population identifies as LGBTQ+, including 20 percent of adults in “Generation Z”, the group born between 1997–2012 (Jones, 2024). Looking beyond the U.S., a survey of 30 countries indicated that about 9 percent of the world’s population identifies as LGBTQ+, although there’s a lot of variability between countries; for example, 15 percent of Brazil’s population identifies as LBGTQ+, but only 4 percent of Peru’s population does (Jackson, 2023). In both sets of data, the most common LGBTQ+ identity was as bisexual; about 4 percent of the U.S. and world population identify as bisexual, and 57 percent of the LGBTQ+ adults in the U.S. claim this identity (Jackson, 2023; Jones, 2024).

Figuring out one’s sexual orientation and gender identity doesn’t look the same for everyone. In cultures where LGBTQ+ people are stigmatized or even criminalized, there may be significant risks to coming out, and some people may choose not to do so until later in life if at all (Rosati et al., 2020). Even in countries with LGBTQ+ friendly policies, that doesn’t mean that individual people or communities will be accepting. Also, “coming out” isn’t a singular event, but often involves several tasks, often described as identifying an attraction to others, identifying as having a particular sexual orientation, having one’s first relationship corresponding to that sexual orientation, and disclosing sexual orientation to others (Hall et al., 2021; Martos et al., 2015). These tasks typically don’t occur simultaneously, although they do appear to happen in a fairly consistent order, and the specific timing of these tasks may vary. In general, men achieve these tasks earlier than women, and people identifying as gay or lesbian achieve most of these tasks earlier than people identifying as bisexual. There are also cohort differences in that people ages 45–59 reported the relationship and disclosure tasks occurring later than people ages 30–44, who in turn reported these tasks occurring later than people ages 18–29. These differences likely reflect changing societal attitudes regarding the acceptability of non-heterosexual relationships (Martos et al., 2015; van Bergen et al., 2021).

The study by Martos and colleagues indicates that identifying as lesbian, gay, or bisexual commonly happens in mid-adolescence, but disclosure to others may not occur until emerging adulthood (2015). Emerging adulthood, as we’ve already seen, is a time of continued identity exploration and commitment after we’ve gained more independence. This pulling away from our family is often accompanied by increased connections with similar peers. Studies of college students in the United States suggest that between 7 percent and 14 percent of heterosexual women and roughly 4 percent of men report having at least one same-sex encounter. These rates are lower in other countries, such as Thailand, most likely due to cultural differences in the acceptability of same-sex involvement (Morgan, 2013). Heterosexual women consistently report more same-sex attraction and encounters than heterosexual

men do, potentially because of internalized standards of “appropriate” male behavior and a general greater incidence of sexual fluidity in women (Morgan, 2013; Yost & McCarthy, 2012) (Figure 11.16).



Figure 11.16 Sexual attraction and sexual experiences are determined by a complex combination of factors. (credit: modification of work “Nick and Andy celebrate their commitment in Minnesota” by Freedom to Marry/Flickr, CC BY 2.0)

## Sexually Transmitted Infections

Because sexual activity generally peaks during this time, it’s not surprising that the years from ages 18–24 are also the peak years of risk for contracting a sexually transmitted infection (STI), a disease caused by certain types of viruses, bacteria, or microorganisms and spread through contact with bodily fluids such as semen and blood. According to the Centers for Disease Control and Prevention (CDC), in 2022 almost half the new cases of STIs occurred in people between 15 and 24 years of age (CDC, 2024). The use of the phrase “sexually transmitted” is a little misleading, because some STIs can be acquired outside of sexual activity; for example, HIV can be passed to nursing babies through breastmilk. However, regardless of the mode of transmission, the health effects of STIs are the same.

There are several different STIs, each with its own cause. Syphilis, chlamydia, and gonorrhea are caused by bacteria. Trichomoniasis is caused by a parasite. Common symptoms of these four STIs are painful urination, discharge (including blood) from the genitals or anus, and pelvic or abdominal pain, although some people may not have any symptoms. These STIs can be treated with antibiotics; however, a person can get re-infected if they come into contact with the bacteria/parasite again. It’s also important to take the antibiotics as directed, including taking all the medicine even if symptoms improve. Only taking some of an antibiotic prescription is believed to cause bacteria to become drug-resistant (Muteeb et al., 2023), making future infections harder to treat.

Other STIs are caused by viruses. Genital warts are caused by the human papillomavirus (HPV) and typically occur as small cauliflower-like bumps on the genitals, although some people may not have any symptoms. These warts can be treated with special medicine (not the same over-the-counter medicine used to treat warts on other parts of the body like the fingers). Herpes is caused by the virus *herpes simplex*, which comes in two forms. Herpes simplex virus type 1 (HSV-1) typically causes “oral herpes” and most often appears as cold sores around the mouth. HSV-1 isn’t technically an STI, although it can be contracted from a person with HSV-1 through kissing or oral sex. Most people with HSV-1 get it some way other than sexual contact, such as sharing a cup with an infected person, and it’s very common in childhood. Herpes simplex virus type 2 (HSV-2), on the other hand, is usually spread just through sexual activity, although it can also be passed to babies during a vaginal birth. It typically appears as blisters or sores on the genitals, although again some people may not have any symptoms. The blisters may go away after treatment with medication, but may come back during times of illness or stress. When we talk about someone “having herpes”, we’re most often talking about HSV-2, though not always.

The human immunodeficiency virus (HIV) produces different symptoms than HPV and HSV-2. The initial infection typically involves not warts or sores on the genitals, but flu-like symptoms such as fever, chills, fatigue, and a sore throat. Often these symptoms go away within a couple of weeks, and then the person may not have any symptoms for as many as 10–15 years (HIV.gov,

2022). Unfortunately, this means that people may unknowingly spread HIV to others during that time. Also, without treatment, the virus slowly destroys the body's immune system, and the person eventually develops severe medical problems such as pneumonia, tuberculosis, dementia, and some types of cancers. Some of these are opportunistic infections, medical conditions that occur more frequently in people with weakened immune systems who can't fight them off. An HIV-positive person who develops these types of medical problems is now said to have acquired immunodeficiency syndrome (AIDS), a late stage of HIV infection in which the body's immune system is significantly weakened and susceptible to a wide variety of diseases.

A viral STI can't be treated with antibiotics, and a person with HPV or HSV-2 will carry the virus for the rest of their life. They may need to take medication regularly to prevent or treat flare-ups. Similarly, a person with HIV will need medication lifelong to prevent the virus from continuing to multiply inside their body. With early and high-quality medical care, they can enjoy good health and quality of life for many years.

The incidence of STIs is unequal across the population. Non-Hispanic Black individuals make up only 12.6 percent of the U.S. population but account for 31 percent of chlamydia, gonorrhea, and syphilis cases. This high proportion is likely due not to a greater incidence of sexual behavior, but to lack of access to reproductive and sexual health care (CDC, 2024), typical for marginalized groups. For example, HIV is more common among men who have sex with men (CDC, 2021); in the early days of the HIV pandemic, the disease wasn't taken seriously and people with HIV were treated poorly because both being gay and having a disease were stigmatized.

Diagnosing and treating STIs is crucial to avoid permanent health consequences. HPV is known to cause six types of cancer, including of the cervix, penis, and vagina (National Cancer Institute, 2023.) HPV can't be eliminated from the body, but a person who knows they have it can get regular medical checkups to detect cancer early enough for treatment. Chlamydia, gonorrhea, and syphilis can all cause infertility, chronic pelvic pain, and complications in pregnancy such as premature birth. If untreated for decades, syphilis can damage the brain and produce blood clots, stroke, and dementia. Treatment for HIV works best if started early, and while people who are HIV-positive may not know for several years, testing is available and recommended.

The stigma associated with STIs—and sometimes with sexual activity in general—can prevent people from seeking treatment. Deciding to engage in sexual activity requires taking increased responsibility for monitoring your health, however, including getting regular STI testing and being honest with health care providers about behaviors and symptoms.

In recent years, treatments for HIV have dramatically improved meaning that most people with HIV can manage the virus through antiretroviral therapy (ART). ART involves taking medicines that allow people to get and stay at a level of virus suppression that helps them to stay healthy and means they will not transmit HIV to other during sexual intercourse (CDC, 2024).

## Pregnancy in Early Adulthood

You learned earlier about the process and milestones of pregnancy and childbirth (Chapter 2 Genetic, Prenatal, and Perinatal Health). Pregnancy is exciting and welcome news for many (Figure 11.11), but not for all. "Unintended pregnancy" refers to any situation in which a person becomes pregnant without intending to.

In the United States, approximately 3.6 million people give birth each year, with 48.6 percent of these people being between the ages of 18–29 (Osterman et al., 2024). Determining how many of these pregnancies are unintended is challenging because many of them are likely to occur among people who aren't married, and being a single parent is still associated with some stigma in many cultures. Therefore, people may not report this information thoroughly.



Figure 11.17 Pregnancy and parenthood are major life changes. (credit: “Pregnant woman” by Brit/nappy, Public Domain)

As you learned in Chapter 2 Genetic, Prenatal, and Perinatal Health, pregnancy causes many physical changes, which can be hard on the body during the pregnancy and postpartum period. Worldwide, maternal mortality is still a concern, with around 287,000 birth mothers dying in childbirth each year—most often in middle and lower income countries (World Health Organization, 2024). However, most pregnancy-related deaths can be prevented through effective prenatal and perinatal care (CDC, 2024) and the birth mother's body generally physically recovers from the pregnancy and delivery during the first couple months after delivery (Lopez-Gonzalez & Kopparapu, 2022). For those who decide to keep and raise a baby, becoming a parent is a significant transition that's expensive, emotionally challenging but often rewarding, and. time-consuming.

This is likely one of the reasons, we see a societal trend to delay parenthood until later in early adulthood or even in middle adulthood for those who choose to become parents. In addition, we have seen trends of more people choosing not to become parents often citing financial concerns (APA, 2024). Mothers in particular still take on a higher caregiving load in most families with small children and additionally face a high deal of societal pressure, often known as "mommy guilt" to bear the main responsibility of the child's wellbeing (Constantinou et al., 2020). This pressure can be present across family types including in particular single mothers and heterosexual couples, even when the couple has a high level of shared responsibility. While fathers take on much more caregiving responsibilities than was common in decades past in the U.S., mothers are still much more likely to reduce or leave the workforce than fathers (Heggeness, 2020).

Choosing to become a caregiver and starting a family can be a fulfilling part of an individuals identity. Planned parenting often brings psychological fulfillment and wellbeing, enjoyment of family socioemotional experiences, and can contribute to a person's sense of meaning in life (Chen et al., 2016). This can mean that for many becoming a parent can be another important part of identity formation and commitment, best facilitated by having social support, control over the choice to become a parent, and knowledge about parenting effectively (Chen et al., 2016; Piotrowski, 2020).

Parenthood can also affect the transition to adulthood. Becoming a parent is a very adult, and often rewarding, responsibility that can help define our identity. But in early adulthood it can also interfere with the achievement of identity tasks such as furthering an educational or training program and starting a career (Landberg et al., 2019) (Landberg et al., 2019). People may find an identity in becoming a parent, but it may also delay or prevent them from exploring other facets of their identity; of course, we can say the same about other choices we commit to.

Both STI and pregnancy prevention share some similar strategies, and some foundational elements. First, without completely avoiding sexual activity (known as abstinence), guaranteed prevention of STIs and pregnancy is nearly impossible. Thus, there is no truly “safe sex” and precautions instead can provide “safer sex.” When choosing a pregnancy or STI prevention method, it’s important to be aware of your health status and use good decision-making to determine what’s likely to work best for you and any partners.

Abstinence is often said to be the most reliable method for avoiding STIs and pregnancy (CDC, 2023). However, not everyone understands “abstinence” the same way. Some people consider abstinence to mean avoiding any kind of sexually-related contact, including oral sex and mutual masturbation. Others use this term only to mean avoiding penetrative intercourse (Byers et al.,

2009; Hans & Kimberly, 2011). These varying definitions of this term can give different impressions about a person's sexual activity and could put them at risk for contracting an STI. For example, a person who engages in oral sex but not intercourse could contract herpes while still considering themselves abstinent. When discussing abstinence, either in a personal conversation, a health-related setting, or a research context, it's important to make sure you know how others define abstinence.

Other behavior-based STI prevention methods include being in a monogamous relationship, reducing one's number of sex partners, and avoiding drug and alcohol use. Because drugs and alcohol can impair judgment, people who use substances are at higher risk of STIs because they may engage more often in risky sexual behaviors like unprotected sex or sex with multiple partners (Baskin-Sommers & Sommers, 2006; Kusunoki & Barber, 2020). There are also medications (both shots and pills) to reduce the chances of getting HIV. These medications are called pre-exposure prophylaxis (PrEP) and are meant to be taken on a regular basis—a similar strategy as birth control pills, but for preventing HIV and not pregnancy.

Apart from abstinence, condoms are the only method effective at preventing both pregnancy and STIs. Condoms are called a barrier method because they prevent exchange of bodily fluids. Another barrier method used for STI prevention is a dental dam, a thin piece of latex or polyurethane that's placed over the vulva or anus prior to oral sex. Other barrier methods that are used as pregnancy prevention but not STI prevention include diaphragms, cervical caps, and contraceptive sponges. Each of these is inserted into the vagina prior to sex and work to keep semen from reaching the uterus. They're also typically used with spermicide, a gel that kills sperm cells, increasing the effectiveness of pregnancy prevention. All of these barrier methods have to be placed before sex and removed afterward; they're not left in place between sexual encounters. Removal should be done following the product's directions or as advised by a health-care provider to optimize their effectiveness.

Some pregnancy prevention methods are hormone based. Birth control pills, contraceptive shots, and contraceptive implants each contain the synthetic hormone progestin, which prevents ovulation. Contraceptive shots and implants are long-lasting (3 months and 5 years respectively). Birth control pills must be taken daily, and medications like antibiotics can have contraindications that may make them ineffective.

Other methods of pregnancy prevention are more complex. An intrauterine device (IUD) is a small T-shaped device that's inserted into the uterus via the vagina. It works by either preventing ovulation or reducing the movements of sperm. Unlike a diaphragm, an IUD can stay in place long-term (several years); however, it must be inserted and removed by a health-care provider. There are also surgical birth control methods.

**Link to Learning**

Many college campuses as well as local community health clinics may have health centers where you can get tested for STIs. However, if you're not able to access this service or choose not to, there are tools you can use to find a testing center.

- If you're in the United States, you can find STI testing locations through the CDC website.
- If you're in Europe, you can use the European Test Finder website to search by country, city, and type of services needed.
- If you're in Africa, South America, or Asia, you can use the Building Healthy Online Communities site.

## Sexual Harassment and Sexual Violence

So far we've been talking about sexual activity as always consensual, relatively common, and hopefully enjoyable aspects of life in early adulthood. Unfortunately, some experiences fall outside of that: sexual harassment and sexual violence.

Any unwanted sexual activity that is forced on another person in any way without their consent is considered an act of sexual violence (National Sexual Violence Resource Center, 2010). Force can involve verbal, physical, or emotional behaviors, such as manipulation. Sexual violence may include assault, abuse, harassment, exploitation, public exposure, or stalking behaviors. Regardless of the type of sexual violence, all acts of sexual violence involve harm to another person. Sexual harassment is a broad term referring to a range of actions representing unwanted physical or verbal attention with a sexual basis. It most commonly involves behaviors that make a person uncomfortable and interfere with that person's ability to engage in typical activities such as going to school, working, or participating in extracurricular settings, like a sports club or religious group. These behaviors don't even have to be directed at a specific person to be considered sexual harassment. Repeatedly making negative comments about a specific gender or talking about sexual acts or fantasies could constitute sexual harassment even if it just occurred within earshot of a person who wasn't directly included in the conversation. Sexual harassment often involves a power differential in that the harasser may be in a position of authority, such as a boss, teacher, or spiritual leader. However, this isn't a requirement to

define sexual harassment; it can occur among peers, such as among teammates or classmates. Some acts of sexual harassment, such as rape or unwanted touching, are also considered sexual assault. Sexual assault is defined as nonconsensual sexual contact. Consent must be explicitly given; "not saying no" is not the same as saying "yes". A person who's unconscious or too scared to refuse has not given consent. Neither has a person who's unable to make informed decisions due to intoxication or cognitive impairment.

Link to Learning

If you or someone you know are experiencing sexual assault or harassment, reach out to the Rape, Abuse & Incest National Network (RAINN) for help. Call the National Sexual Assault Hotline at 1-800-656-HOPE or chat through the RAINN website for immediate, confidential support.

## Incidence of Sexual Harassment and Assault

How common are sexual harassment and sexual assault in early adulthood? According to a 2019 survey of 893 adults in the United States, nearly a third of these participants (32.7 percent) reported experiencing sexual harassment between the ages of 18–29, with 24.6 percent reporting experiencing sexual assault. (In this study, sexual harassment and sexual assault weren't mutually exclusive categories; a person could report experiencing both.) For context, the rates of sexual harassment in this age group were 105 percent higher than for respondents over age 30, and the rates of sexual assault were 65 percent higher. Women were more likely than men to report sexual harassment (37.4 percent vs 22.4 percent) and sexual assault (36.0 percent vs 16.0 percent; Mumford et al., 2020). These rates in general are also comparable to many other countries; statistics indicate that approximately a third of women worldwide experience sexual violence (UN Women, 2019).

Unfortunately, college campuses—common environments for young adults—aren't immune to these problems. A large-scale study of sexual assault and harassment reports on college campuses between 1966–2017 found that between 11–73 percent (median 49 percent) of women reported sexual harassment at college. Sexual harassment was more likely to happen to women who were younger, economically insecure, and of an ethnic or sexual minority group. All of these factors indicate a vulnerable population, and perhaps not surprisingly, this study noted that over half these incidents had gone unreported to university personnel. Interestingly, data indicated rates of sexual assault and violence declined during the period being examined, While sexual violence is a higher risk for women and girls, research estimates that 27 percent of men have been victimized at some point in their lives (Thomas & Kopel, 2023). Additionally, transgender individuals are at a much higher risk of being victims of sexual violence (Stotzer, 2009). Due to the prevalence of these crimes, prevention and intervention work needs to include a community and societal wide response.

## Preventing Sexual Violence and Sexual Harassment

One issue sometimes noted is that many "prevention efforts" are aimed at potential victims, not at potential perpetrators. For example, telling people to keep an eye on their drinks at parties is helpful, but it would be even more helpful if other people didn't slip drugs into others' drinks in the first place. Suggesting that women not walk alone at night is another example that focuses the burden of preventing sexual violence on women and unintentionally may contribute to victim blaming and other rape myths. Higher endorsement of rape myths, including those that put the burden on potential victims, is associated with an increased likelihood of perpetrating sexual assault as well as with a higher rate of sexual assault in that community - including on college campuses (O'Connor, 2021). At the root of many cases of sexual- and gender-based discrimination appear to be individual and cultural beliefs about gender roles and behavior; e.g., men are expected to be dominant while women are expected to be submissive, even regarding consenting to sex (UN Women, 2019). These beliefs are common in many African and Asian cultures (de Villiers et al., 2021; Olson-Strom & Rao, 2020) and is also reflected in the Latino values of *machismo* (Kim et al., 2017). In the United Kingdom, "lad culture"—which includes sexist and homophobic behavior as well as heavy alcohol consumption and a tendency toward violence—is associated with the beliefs that men are entitled to sexual intercourse, women secretly enjoy being raped, and verbal, physical, and sexual harassment are acceptable male behaviors (Phipps et al., 2018). Teaching and practicing safety behaviors is important, but a more proactive approach would involve addressing the reasons why people mistreat others in the first place.

Some groups are attempting to do just that. For example, Men as Peacemakers, a nonprofit organization located in Minnesota, provides programming aimed at teaching men to avoid and resist all forms of violence against women, including some programming aimed specifically at college students. Similarly, in South Africa, the One Man Can Intervention addresses specific cultural views of gender norms and encourages men to become advocates for gender equality in all forms, including ending

sexual violence. While data regarding the effectiveness of these types of programs are somewhat mixed, the results generally lend support to the idea that both attitudes and behaviors can be changed and thus lead to lower rates of discrimination and maltreatment (de Villiers et al., 2021; Flood, 2022; Wright et al., 2020).

The anti-sexual assault movement began in the U.S. with major changes in legal definitions shifting up through the 1990s. For example, marital rape was not recognized as a crime in every U.S. state until 1993 and the Violence Against Women Act was pivotal in shaping current policies and advocacy resources beginning in 1994 (WCSAP, 2024; Tulane University, 2024). This was followed by the establishment of many organizations and a wealth of advocacy work, often performed by women and survivors, to both prevention sexual violence and support recovery for survivors of sexual violence (Tulane University, 2024).

Other changes occur at a public policy level. In the United States, for example, Title IX is a federal policy aimed at addressing sexual and gender-based discrimination in educational settings. It contains regulations for reporting and responding to incidents of sexual assault, abuse, and harassment, including provision of counseling services to survivors, even if these incidents didn't involve the school environment. However, changes were made during the Trump administration due to concerns about lack of due process for people accused of sexual violence. Following these changes, sexual violence on college campuses increased by 3 percent for women and 1.5 percent for men (Rochester, 2022). Tavares and Wodon (2018) theorized that higher education was weaker than the workplace in addressing sexual harassment, noting that as of 2017, 60 percent of countries worldwide lacked laws addressing sexual harassment in education settings, while only 21 percent lacked these laws for the workplace. Finally, sexual violence can be prevented by focusing more on improved early sexual education and a better understanding of consent culture, to learn more refer to 9.2 Puberty, Sexual Behavior, and Sexual Health in Adolescence.

### Intersections and Contexts: Title IX and Equivalents around the World

Title IX was first enacted in the United States in 1972 to address inequities in education (Rochester, 2022), but has since been expanded to include all forms of discrimination based on sex and gender. Under this policy, any educational institutions receiving federal money are required to provide a fair educational experience to their students regardless of sex, gender, sexual orientation, or gender identity. This includes avoiding gender-based discrimination and preferential treatment in the classroom, allocating equivalent resources to athletics teams regardless of player gender, and responding quickly and appropriately to incidents of sexual harassment, sexual abuse, and sexual assault.

Do countries outside the U.S. have similar policies to protect students? It depends on where you go. In 2011, the human rights organization Council of Europe (CoE) developed a treaty called the "Istanbul Convention", which states that governments have a responsibility to prevent violence against women. This treaty has been ratified by 39 of the 46 nations that belong to the CoE, including 22 of the 27 nations in the European Union (Council of Europe, 2011), and has led to improvements in how many of those nations handle these issues. For example, in France, each public university is now required to have an employee trained to handle issues of gender inequality and discrimination, including sex- and gender-based maltreatment (Rochester, 2022).

In other places, the outlook is less optimistic, often in ways that reflect the gender-related views of the larger culture (Eng & Yang, 2020; Rao & Olson-Strom, 2020). As of 2017, 65 percent of countries in the East Asia and Pacific region and 86 percent of countries in the Middle East and North African region lacked laws addressing sexual harassment in education settings (Tavares & Wodon, 2018). In some Asian cultures, textbooks and course content downplay or even eliminate discussion of women's contributions to the field of study, and instructors may openly show bias toward male students (Olson-Strom & Rao, 2020). LGBTQ+ students may have even more difficulty due to the stigma that exists in many cultures; for example, expressions of same-sex or same-gender sexual activity or interest are considered criminal acts in some nations, including Malaysia and Brunei. This makes it hard for students to seek help and also makes it difficult for public universities to support LGBTQ+ students due to likely backlash (Bondestam & Lundqvist, 2020; Eng & Yang, 2020).

## References

Baskin-Sommers, A., & Sommers, I. (2006). The co-occurrence of substance use and high-risk behaviors. *Journal of Adolescent Health*, *38*(5), 609–611. https://doi.org/10.1016/j.jadohealth.2005.07.010

Bondestam, F., & Lundqvist, M. (2020). Sexual harassment in higher education – A systematic review. *European Journal of Higher Education, 10*(4), 397–419. doi.org/10.1080/21568235.2020.1729833

Byers, E. S., Henderson, J., & Hobson, K. M. (2009). University students' definitions of sexual abstinence and having sex. *Archives of Sexual Behavior, 38*(5), 665-74. https://doi.org/10.1007/s10508-007-9289-6

Centers for Disease Control and Prevention. (2021). *New HIV diagnoses and people with diagnosed HIV in the US and dependent areas by area of residence, 2021*. www.cdc.gov/hiv/basics/statistics.html

Centers for Disease Control and Prevention. (2023). *How you can prevent sexually transmitted diseases*. www.cdc.gov/std/prevention/default.htm

Centers for Disease Control and Prevention. (2024, April 12). *Treating HIV*. https://www.cdc.gov/hiv/treatment/index.html

Centers for Disease Control and Prevention. (2024.) *Sexually transmitted infections surveillance, 2022*. www.cdc.gov/std/statistics/2022/default.htm

Centers for Disease Control and Prevention. (2024, September 25). *Preventing pregnancy-related deaths*. U.S. Department of Health and Human Services. https://www.cdc.gov/maternal-mortali...ths/index.html

Chen, E. Y. J., Enright, R. D., & Tung, E. Y. L. (2016). The influence of family unions and parenthood transitions on self-development. *Journal of Family Psychology*, *30*(3), 341.

Constantinou, G., Varela, S. M., & Buckby, B. (2021). Reviewing the experiences of maternal guilt – the "motherhood myth" influence. *Health Care for Women International*, *43*(3), 1–25. doi.org/10.1080/07399332.2020.1835917

Christensen, H. T. (1960). Cultural relativism and premarital sex norms. *American Sociological Review*, 31–39.

Council of Europe. (2011). *Explanatory report to the Council of Europe Convention on preventing and combating violence against women and domestic violence*. https://rm.coe.int/1680a48903

de Villiers, T., Duma, S., & Abrahams, N. (2021). "As young men we have a role to play in preventing sexual violence": Development and relevance of the men with conscience intervention to prevent sexual violence. *PloS One, 16*(1), e0244550. https://doi.org/10.1371/journal.pone.0244550

Eng, K. H., & Yang, D. W. (2020). Gender and sexual diversity in Asian universities. In C. S. Sander & N. W. Gleason (Eds.), *Diversity and inclusion in global higher education: Lessons from across Asia* (pp. 231-262). Palgrave Macmillan. https://library.oapen.org/bitstream/...5.pdf#page=237

Flood, M. (2022). Sexual violence prevention with men and boys as a social justice issue. In L. M. Orchowski & A. Berkowitz (Eds.), Engaging boys and men in sexual assault prevention: Theory, research and practice (pp. 49-70). Elsevier. xyonline.net/content/sexual-...-justice-issue

GLAAD. (2024a). Glossary of terms: LGBTQ. In *GLAAD Media Reference Guide – 11th Edition*. https://glaad.org/reference/terms

GLAAD. (2024b). Glossary of terms: Transgender. In *GLAAD Media Reference Guide – 11th Edition*. https://glaad.org/reference/trans-terms

General Social Survey (GSS) Data Explorer (2022). Key Trends. gssdataexplorer.norc.org/trends

Hall, W. J., Dawes, H. C., & Plocek, N. (2021). Sexual orientation identity development milestones among lesbian, gay, bisexual, and queer people: A systematic review and meta-analysis. *Frontiers in Psychology, 12*, 753954. https://doi.org/10.3389/fpsyg.2021.753954

Hans, J. D., & Kimberly, C. (2011). Abstinence, sex, and virginity: Do they mean what we think they mean? *American Journal of Sexuality Education, 6*(4), 329–342. doi.org/10.1080/15546128.2011.624475

Harding, D. J., & Jencks, C. (2003). Changing attitudes toward premarital sex: Cohort, period, and aging effects. *The Public Opinion Quarterly*, *67*(2), 211–226.

Heggeness, M. L. (2020). Estimating the immediate impact of the COVID-19 shock on parental attachment to the labor market and the double bind of mothers. *Review of Economics of the Household*, *18*, 1053–1078. https://doi.org/10.1007/s11150-020-09514-x

HIV.gov (2022). *Symptoms of HIV*. https://www.hiv.gov/hiv-basics/overv...ymptoms-of-hiv

Jackson, C. (2023). *Pride month 2023: 9 percent of adults identify as LGBT+*. Ipsos. www.ipsos.com/en/pride-month...entify-as-lgbt

Jones, J. M. (2024). *LGBTQ+ identification in U.S. now at 7.6 percent*. Gallup. https://news.gallup.com/poll/611864/...ification.aspx

Kim, T., Draucker, C. B., Bradway, C., Grisso, J. A., & Sommers, M. S. (2017). Somos hermanas del mismo dolor (we are sisters of the same pain): Intimate partner sexual violence narratives among Mexican immigrant women in the United States. *Violence Against Women, 23*(5), 623–642. doi.org/10.1177/1077801216646224

Kusunoki, Y., & Barber, J. S. (2020). The dynamics of intimate relationships and contraceptive use during early emerging adulthood. *Demography, 57*(6), 2003–2034. doi.org/10.1007/s13524-020-00916-1

Landberg, M., Lee, B., & Noack, P. (2019). What alters the experience of emerging adulthood? How the experience of emerging adulthood differs according to socioeconomic status and critical life events. *Emerging Adulthood*, *7*(3), 208–222. doi.org/10.1177/2167696819831793

Lopez-Gonzalez, D.M., Kopparapu, A.K. (2024). Postpartum care of the new mother. [Updated 2022 Dec 11]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing. www.ncbi.nlm.nih.gov/books/NBK565875/

Macleod, A., & McCabe, M. (2020). Defining sexuality in later life: A systematic review. *Australasian Journal on Ageing, 39*(suppl. 1), 6-15. doi.org/10.1111/ajag.12741

Martos, A., Nezhad, S., & Meyer, I. H. (2015). Variations in sexual identity milestones among lesbians, gay men and bisexuals. *Sexuality Research & Social Policy, 12*(1), 24–33. https://doi.org/10.1007/s13178-014-0167-4

Medaris, A. (2024, July 1). *Americans are having fewer kids—if they have them at all*. American Psychological Association. https://www.apa.org/monitor/2024/07/fewer-children

Morgan, E. M. (2013). Contemporary issues in sexual orientation and identity development in emerging adulthood. *Emerging Adulthood, 1*(1), 52-66. doi.org/10.1177/2167696812469187

Mumford, E. A., Potter, S., Taylor, B. G., & Stapleton, J. (2020). Sexual harassment and sexual assault in early adulthood: National estimates for college and non-college students. *Public Health Reports, 135*(5), 555-559. doi.org/10.1177/0033354920946014

Muteeb, G., Rehman, M. T., Shahwan, M., & Aatif, M. (2023). Origin of antibiotics and antibiotic resistance, and their impacts on drug development: A narrative review. *Pharmaceuticals, 16*(11), 1615. https://doi.org/10.3390/ph16111615

National Cancer Institute. (2023). *HPV and cancer*. https://www.cancer.gov/about-cancer/...hpv-and-cancer

National Sexual Violence Resource Center (2010). What is sexual violence? [Fact sheet]. https://www.nsvrc.org/sites/default/...violence_1.pdf

Olson-Strom, S., & Rao, N. (2020). Higher education for women in Asia. In C. S. Sander & N. W. Gleason (Eds.), *Diversity and inclusion in global higher education: Lessons from across Asia* (pp. 263-282). Palgrave Macmillan. https://library.oapen.org/bitstream/...5.pdf#page=269

Osterman, M. J. K., Hamilton, B. E., Martin, J. A., Driscoll, A. K., & Valenzuela, C. P. (2024). *Births: Final data for 2022*. National Vital Statistics Reports, Vol 73, No 2. https://dx.doi.org/10.15620/cdc:145588.

O'Connor J. (2021). The Longitudinal Effects of Rape Myth Beliefs and Rape Proclivity. *Psychology of men & masculinity*, *22*(2), 321–330. doi.org/10.1037/men0000324

Phillips II, G., Beach, L. B., Turner, B., Feinstein, B. A., Marro, R., Philbin, M. M., Salamanca, P., Felt, D., & Birkett, M. (2019). Sexual identity and behavior among U.S. high school students, 2005-2015. *Archives of Sexual Behavior, 48*(5), 1463–1479. https://doi.org/10.1007/s10508-019-1404-y

Phipps, A., Ringrose, J., Renold, E., & Jackson, C. (2018). Rape culture, lad culture and everyday sexism: Researching, conceptualizing and politicizing new mediations of gender and sexual violence. *Journal of Gender Studies, 27*(1), 1-8. doi.org/

10.1080/09589236.2016.1266792

Piotrowski K. (2020). How good it would be to turn back time: Adult attachment and perfectionism in mothers and their relationships with the processes of parental identity formation. *Psychologica Belgica*, *60*(1), 55–72. https://doi.org/10.5334/pb.492

Potard, C., Courtois, R., & Rusch, E. (2008). The influence of peers on risky sexual behaviour during adolescence. *The European Journal of Contraception & Reproductive Health Care*, *13*(3), 264–270. doi.org/10.1080/13625180802273530

Rokach, A., & Patel, K. (2021). *Human sexuality: Function, dysfunction, paraphilias, and relationships*. Academic Press. https://doi.org/10.1016/B978-0-12-819174-3.00015-2

Rosati, F., Pistella, J., Nappa, M. R., & Baiocco, R. (2020). The coming-out process in family, social, and religious contexts among young, middle, and older Italian LGBQ+ adults. *Frontiers in Psychology, 11*, 617217. https://doi.org/10.3389/fpsyg.2020.617217

Sexuality Education Resource Centre MB. (n.d.). *Sexuality wheel*. https://serc.mb.ca/sexual-health-inf...xuality-wheel/

Stotzer, R. L. (2009). Violence against transgender people: A review of United States data. *Aggression and Violent Behavior*, *14*(3), 170-179.

Taylor, J., Bernstein, A., Waldrop, T., & Smith-Ramakrishnan, V. (2022, March 2). *The worsening U.S. maternal health crisis in three graphs*. The Century Foundation.

Thomas, J. C., & Kopel, J. (2023). Male Victims of Sexual Assault: A Review of the Literature. *Behavioral sciences (Basel, Switzerland)*, *13*(4), 304. https://doi.org/10.3390/bs13040304

Tulane University. (n.d.). *Timeline of the history of sexual violence in the U.S*. https://allin.tulane.edu/content/tim...al-violence-us
Washington Coalition of Sexual Assault Programs. (n.d.). *History of the movement*.

Tavares, P., & Wodon, Q. (2018). *Ending violence against women and girls: Global and regional trends in women's legal protection against domestic violence and sexual harassment*. World Bank. https://pubdocs.worldbank.org/en/679...ws-Feb2018.pdf

Ueda, P., Mercer, C. H., Ghaznavi, C., & Herbenick, D. (2020). Trends in frequency of sexual activity and number of sexual partners among adults aged 18 to 44 years in the US, 2000-2018. *JAMA Network Open*, *3*(6), e203833. doi.org/10.1001/jamanetworkopen.2020.3833

UN Women. (2019). *Progress of the World's Women 2019–2020*. www.unwomen.org/sites/defaul...19-2020-en.pdf

van Bergen, D. D., Wilson, B. D. M., Russell, S. T., Gordon, A. G., & Rothblum, E. D. (2021). Parental responses to coming out by lesbian, gay, bisexual, queer, pansexual, or two-spirited people across three age cohorts. *Journal of Marriage and Family, 83*(4), 1116-1133. doi.org/10.1111/jomf.12731

World Health Organization. (2024). *Maternal mortality*. https://www.who.int/news-room/fact-s...rnal-mortality

Wright, L. A., Zounlome, N. O. O., & Whiston, S. C. (2020). The effectiveness of male-targeted sexual assault prevention programs: A meta-analysis. *Trauma, Violence & Abuse, 21*(5), 859–869. doi.org/10.1177/1524838018801330

Yost, M. R., & McCarthy, L. (2012). Girls gone wild? Heterosexual women's same-sex encounters at college parties. *Psychology of Women Quarterly, 36*(1), 7-24. doi.org/10.1177/0361684311414818

This page titled 15.9.4: Sexuality in Early Adulthood is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

- 11.3: Sexuality in Early Adulthood by OpenStax is licensed CC BY 4.0. Original source: https://openstax.org/details/books/lifespan-development.

# 15.9.5: Cognitive Development in Early Adulthood

## Learning Objectives

By the end of this section, you will be able to:

- Identify the cognitive capabilities that develop during early adulthood
- Describe the developmental changes in social cognition associated with early adulthood
- Describe the contextual and cultural factors that influence the development of early adult cognitive capabilities

Devon finished a pipefitting apprenticeship a year ago and is now living fully on their own for the first time. They have just been offered a position managing a small group of people at work. They are excited to be promoted but anxious about overseeing others. It was challenging enough to prioritize their personal life and budget for food, bills, and rent. Now they have to learn how to prioritize projects, make major decisions at work, and delegate parts of each project to those in their work group, on top of making sure they are able to get their work done.

Some of the cognitive tasks and milestones during early adulthood include taking on more responsibilities, finding employment or a career (which may include attending college or a trade school), attaining abstract thought, increasing awareness of our own limitations and strengths, honing decision-making skills, becoming fully independent (including financially independent), being less swayed by peer pressure, and adjusting to changes in relationships with family. Developing and honing new cognitive skills during this time is essential for solving the kinds of complex problems we will encounter for the rest of our lives. Fortunately, our brain continues to develop in ways that make these tasks easier.

## Changes in the Brain during Early Adulthood

Just like the rest of the body, the brain reaches maturity and peak functioning during early adulthood. However, we continue to develop new synapses—a lifelong process—and myelination of our axons continues, particularly in the prefrontal cortex (Dvorak et al., 2021; Hochberg & Konner, 2020; Kwon et al., 2020; Mills et al., 2021), throughout the lifespan. These changes in the brain within the area of the prefrontal cortex are mostly completed by age 25 (citation), and are associated with improved cognitive functioning, specifically in the efficacy and speed of processing and performance of higher-order functions like planning, organizing, solving problems, and resisting impulses (Hochberg & Konner, 2020; Kwon et al., 2020).

In addition to the development within the prefrontal cortex, the process of synaptic pruning continues until the mid-20's. We also know from research that , with the prefrontal cortex is the last area where synaptic pruning finally winds down within the brain (Cohen et al., 2016; Dennis et al., 2013). These two processes, final synaptic pruning and the continued myelination of nerve fibers in this area, helps increase the efficiency of signals between neurons within the brain. Instead of processing information locally, the brain begins to connect more distant regions, allowing information to be processed in many areas (Hochberg & Konner, 2020; Taber-Thomas & Pérez-Edgar, 2015). Once these connections have been well established, both impulse control and emotional control are enhanced (Simpson, 2018; Wood et al., 2017). Thus, these brain changes help young adults become better at making decisions, delaying gratification, solving problems, assessing risk, prioritizing, and regulating their emotions. Improvements don't happen all at once. For example, research conducted by Cohen and colleagues (2016) investigated differences in brain functioning between adolescents (ages 13–17), emerging adults ages 18–21, and ages 22–25. The prefrontal cortices of the 18–21-year-olds functioned more like those of adolescents than of the 22–25-year-olds on a task assessing inhibition of a behavior. These results also support Arnett's theory that emerging adulthood is a discrete developmental state and involves gradual progression rather than an abrupt transition.

### Intersections and Contexts: Brain of Emerging Adults: Impulse Control and Risk-Taking Behaviors

Although people can act impulsively regardless of age, such as calling in sick for a week to attend a once-in-a-lifetime music festival or changing one's choice of college major on a whim, this type of behavior occurs more frequently in emerging adulthood than later in adulthood (Brodbeck et al., 2013). Life experience, or lack of, plays some role in the differences in

risk-taking and impulsive behaviors between emerging adults and adults. However, these differences are also likely the result of changes in the frontal lobes and other brain areas (Brodbeck et al., 2013). Changes in the brain help it shift from a priority of developing skills and obtaining knowledge about the world to actually using that knowledge and skills to live as an adult.

Unfortunately, this means that while people are exploring options and making decisions more independently, their brain is still in transition, and thus, people may not always make the best decisions. Within the brain, areas that are involved in impulsive behaviors, including risk-taking and decision-making, are also involved in emotional regulation, including impulse control and emotional control. Research has found that people who had difficulty with emotional regulation, based on clinical tests and self-report are prone to more impulsive behaviors related to substance misuse and gambling (Schreiber et al., 2012). Thus, until refinements within these areas are complete, people may make impulsive decisions that bring immediate rewards instead of making decisions based on long-term rewards (Parr et al., 2022).

Another contributor to impulsivity may be the neurotransmitter dopamine. Children, teens, and adults of different ages have different amounts of dopamine in their brains, with dopamine levels decreasing as we age (Lee & Kim, 2022). Similarly, children, teens, and adults of different ages aren't all equally good at controlling impulses and making goal-based decisions, with older adults being better at this than other age groups, including younger adults. However, some younger adults appear to have less trouble with this than others, suggesting that individual differences may also be at work. Having less dopamine as we age may help us, along with our increased cognitive skills and personal experiences, to better resist impulsive behaviors (Parr et al., 2022).

## Early Adult Cognitive Characteristics

Some of the cognitive abilities that develop or become refined through both physiological changes in the brain and experience in daily life are reflective thought, crystallized intelligence, post-formal thought, and dialectical thinking. Up until now, a lot of our coverage of cognitive development has focused on Piaget's theory and stages. Piaget believed that formal operational thought was the last stage in our cognitive development, but is this actually the case? Do you currently have the same cognitive skills and reason the same way you did when you were 14? Put another way, do you currently have the same problems and life circumstances you had when you were 14?

Researchers since Piaget have proposed the existence of post-formal thought, a stage beyond formal operations that is more flexible, complex, and capable of recognizing more than one objectively correct answer to problems (Kincheloe & Steinberg, 1993; Sinnott, 1998; Griffin et al., 2009). Though adolescents in the formal operational stage can easily think hypothetically, they lack experience with the world and are often unable to consider as many possibilities as adults can. Adults are better able to predict likely outcomes or consequences, combining abstract thought and logic with intuition and life experience. This ability to think of potential outcomes is one of the hallmarks of post-formal thought, and it extends Piaget's ideas about formal operations to the unique skills and abilities developed during emerging adulthood and adulthood. Thus, it helps people think critically, accept contradictions and ambiguity, and understand situations they've never experienced. Table 11.4 shows some key characteristics of post-formal thought and how they may be applied in real life.

*Table 11.4 Characteristics of Post-Formal Thought*

| Cognitive Characteristic | What It Does | Example |
|---|---|---|
| Flexible | Aids our ability to transfer between forms of logic, such as between abstract and concrete thought. | A person can think concretely about their favorite video game and then abstractly about how video games can be used for education or stress relief. |
| Helpful in defining problems | Allows us to describe an issue. | Students in a group project might define conflicts they have as miscommunication or a personality clash. |
| Practical | Points us to pragmatic solutions. | Someone weighing two job offers can evaluate the practical aspects of each one (e.g., commute time, work hours, benefits) to decide which one will better meet their goals. |

| Cognitive Characteristic | What It Does | Example |
|---|---|---|
| Open to multiple solutions | Helps us acknowledge that most problems have more than one cause and solution and that people facing the same problem may have different goals. | A marriage counselor has to consider their clients' individual situations and not take a "one size fits all" approach. |
| Open to paradox | Shows us that sometimes a situation that seems contradictory may work. | A student doing a term paper spends time writing an outline and researching sources before actually starting to write, enabling them to finish more efficiently than a classmate who just starts writing with no plan in mind. |

In young adulthood, we continue to use many of the cognitive abilities we acquired earlier in life. Skills like memory, perspective taking, and problem solving are still important, although we may use them for different tasks. For example, we no longer just use memory to recall information—we also use it to apply information, remembering not only facts but also how those facts can be used. Nurses must know more than what different medications do; they also have to know how medications interact, how and when they should be administered, and what a typical dosage is. This allows them to detect possible interactions and errors and provide better patient care. We also use existing problem-solving skills to address challenges of adult life, such as what to do in case of a flat tire or how to go about finding an internship for the summer.

During early adulthood, people increase their problem-solving and decision-making skills, become aware that the world is full of gray areas, and recognize that little in life is absolute. They're better able to see that historical, cultural, and social factors play a role in events, and that different people might view the same event differently due to these factors. Thus they gain a deeper understanding of relativism, or the idea that cultural standards, values, and ethics are a product of the time and cultural context within which they developed, and what is proper, relevant, or true for one individual may not be for another. They also increase their knowledge base, gain more experience with the world and with interacting with others, become more flexible, and hone skills such as planning, prioritizing, strategizing, time management, self-control, and emotional regulation. Table 11.5 lists some cognitive skills and how they develop during early adulthood. Several types of cognitive skills improve or peak at this life stage.

*Table 11.5 Cognitive Skill Development in Early Adulthood*

| Cognitive Skill | What Happens in Early Adulthood | Example of Relevant Tasks |
|---|---|---|
| Fluid intelligence | Peaks in our 20s | A psychology student can interpret statistical information to understand a journal article. |
| Crystallized intelligence | Increases until our 40s, when it peaks | An artist can use her knowledge of different sculpture materials to determine the best one to use. |
| Working memory | Improves during our 20s and peaks around age 30 | A nurse can calculate drug dosages in his head. |
| Inhibitory control | Peaks in our 20s | A salesclerk can inhibit their impulse to argue with an unhappy customer. |
| Vocabulary | Increases until late adulthood | A therapy client can find the right words to use when expressing feelings during a session. |
| Speed of processing | Peaks in our 20s | A parent driving kids to school can react quickly to unexpected road hazards. |

## Dialectical Thinking and Reflective Thought

One form of cognitive processing refined during early adulthood is dialectical thinking, the ability to remain practical, flexible, and open to the multiple factors and solutions in a given situation. Where adolescents think in absolute terms, seeing something as either good or bad, adults are more likely to realize life is full of gray areas and that an event might be a "'double-edged" sword or a "blessing in disguise". For example, breaking up with a romantic partner may result in someone finding a more fulfilling relationship or being able to pursue goals they'd previously put on hold. This ability to combine two opposing points of view is at the core of dialectical thinking (Figure 11.18).



Figure 11.18 Though most adolescents and emerging adults can attain formal operational thinking, or the ability to think abstractly, we often need experience to do so. The saying 'practice makes progress' perfectly describes the way we hone this ability. (credit: "What's She Thinking?" by Chad Madden/Wikimedia Commons, CC0 1.0)

Solving adult problems also requires us to constantly consider many sources of information. Reflective thought relies on logical thought processes such as continuous, active evaluation of information and beliefs using evidence and past experiences. It allows us to continually question facts, draw inferences, and make connections between different types of information (Immordino-Yang et al., 2019). It emerges between 20 and 25 years of age, coinciding with brain myelination. Higher education may also stimulate and hone reflective thinking (Sherman, 2021), as students often need to relate new information to old, think through hypothetical situations, and apply their knowledge and skills to solve unfamiliar problems and issues. For example, when learning about the country of Morocco, which is located in Northern Africa near Spain, a learner may be surprised to learn of a Middle Eastern country that is so far from the core group of countries typically associated with the Middle East. In addition, the learner will need and have the ability to hypothesize how Middler Eastern culture may take on different aspects given the distance of Morocco from the Middle East, and its close proximity to Western Europe. Similarly, changes in crystallized intelligence also occur and are believed to be mediated by both an individual's life experiences and, for those pursuing a degree, the college courses they take (Hochberg & Konner, 2020).

## Heuristics

Our thinking also becomes more efficient in early adulthood. Heuristics are mental shortcuts that help us process information more quickly. They frequently simplify a problem or decision point and reduce the time and energy needed to come up with a solution. Because our brains are metabolically "expensive," meaning they require a lot of energy to function, being efficient when facing mental tasks makes sense. Common heuristics are the familiarity heuristic, affect heuristic, and scarcity heuristic. All have their advantages and their downsides.

The familiarity heuristic makes us feel more comfortable with things or people we have experience with than with those we have yet to experience or meet. Often, we will choose the most comfortable or familiar option, but then we may never know whether the novel thing or person was a better choice. For example, you may buy apples every week because apples are a familiar choice, not considering less familiar fruits like mangoes, even though you might enjoy mangoes more than apples if you tried them.

The affect heuristic causes us to use emotions more than other factors when making a decision. We can also consider this similar to intuition or a "gut instinct". Decisions we make using the affect heuristic aren't always bad—for example, a person on a job interview "gets a bad feeling" about the way the employees interact with each other, declines a job offer, and later learns of a hostile environment lawsuit against that company. However, using the affect heuristic can also cause us to make impractical decisions, such as letting our emotions talk us into adopting a rescue dog even though our living arrangements aren't appropriate for a dog.

Finally, the scarcity heuristic causes us to believe that the rarer or less available something is, the more valuable it is. Advertisers sometimes count on the scarcity heuristic to sell products, telling us that "quantities are limited" and we should "act now".

Unfortunately, this can cause us to waste money on things we don't really need.

While heuristics can help us use short-cuts to make decisions, they aren't always the best way to make a decision. An emerging adult might have ideas about what it would be like to live in a big city based on what they've seen in movies and be excited about all the activities to explore and people to meet, but not realize potential drawbacks, such as the high cost of living, traffic, pollution, and so on. Taking the time to think through a decision like moving to a new area should be done rationally and purposefully, not using a heuristic.

### Problem Solving and Divergent Thinking

The use of both convergent and divergent thought to solve problems increases during early adulthood. Convergent thought uses a known solution to deal with a problem, whereas divergent thought creates a new solution. Divergent thought is closely associated with creativity because it often leads to "thinking outside the box" or creating multiple potential ways to solve a problem (Runco, 2014). Although they're different ways of thinking, convergent and divergent thought can be used together. By combining divergent thought processes with reflective thought, and by honing convergent thought processes, people can gain a deeper understanding of a situation or problem and come up with multiple solutions. A college student who wants to make more friends could use divergent thinking to brainstorm all the possible ways they could do that (e.g., joining clubs, playing intramural sports, attending tutoring sessions) and then use convergent thinking to gather more information (e.g., what available clubs there are) and narrow down options based on factors like time commitment, interests, and other characteristics (e.g., the Chemistry Club is only for chemistry majors, rushing a fraternity would be too expensive).

## Social Cognition in Early Adulthood

Social cognition is an area of psychology concerned with what people are thinking within social situations. It asks what information we keep about our previous social interactions, how we use this information in future social interactions, and how we interpret the social motives of others. In this section, we'll consider several aspects of social cognition: Theory of mind, empathy, moral development, and prosocial behavior.

### Theory of Mind and Empathy

Like many other cognitive skills, theory of mind appears in early childhood and continues to develop as we grow up. Cognitive theory of mind is the ability to draw conclusions about another person's intentions and beliefs, and affective theory of mind is the ability to draw conclusions about another person's feelings. In general, both types of theory of mind improve as we age (Baksh et al., 2021; Kilford & Blakemore, 2020; Velikonja et al., 2019), giving us a better ability to form connections and interact with others. Empathy also develops in early childhood and improves as we mature (Figure 11.19). As with theory of mind, we can consider both cognitive empathy (being able to adopt someone's point of view) and affective empathy (being able to vicariously experience someone's emotions). A potentially important component of empathy is our ability to recognize and process faces, including facial displays of emotion. Several studies have indicated that this ability improves from adolescence to emerging adulthood due to maturation of relevant parts of the brain (Gur & Gur, 2016; Kilford & Blakemore, 2020; Tousignant et al., 2016; Velikonja et al., 2019).



Figure 11.19 Showing empathy is an important interpersonal skill. (credit: “Student marching against police brutality” by Vitor Marinho/Flickr, CC BY 2.0)

## Moral Reasoning and Prosocial Behavior

Another theory that touches on social cognition related to our behavior is Kohlberg’s theory of moral development. Remember from earlier chapters that in Kohlberg’s theory, emerging adults are more likely than teenagers and children to use postconventional reasoning, considering broader ethical principles such as justice and fairness to make moral decisions. However, Kohlberg’s theory has some limitations, such as ignoring the interpersonal aspects of morality and focusing too much on objective justice instead of the needs of others (Miller et al., 2018). Kohlberg (1969) also felt that men advanced farther than in their moral development and viewed women as deficient in their moral reasoning abilities. These ideas met with criticism from, among others, Carol Gilligan, who was a research assistant of Kohlberg. She consequently developed her own ideas of moral development, arguing that women aren’t deficient in their moral reasoning, but rather just reason differently than men do. Specifically, Gilligan proposed that in their moral reasoning, girls and women focus more on staying connected and the importance of interpersonal relationships (Gilligan, 1982). Another criticism of the theory is that Kohlberg’s stories, such as the Heinz dilemma, were culturally biased and did not apply well to all cultures, particularly collectivistic cultures that prioritize interdependence more than independence (Jia & Krettenauer, 2017; Moheghi et al., 2020). Indeed, culture does play a role in cognitive development, as we’ll discover in the next section.

Early adulthood may mean increased moral dilemmas as well as more opportunities to behave in moral ways. Lapsley and colleagues (2023) point out that the moral dilemmas of adult life are often ambiguous and solving them requires considering multiple factors, such as avoiding harm versus doing good, the long-term consequences of the decision, and whether the punishment fits the crime. This maps onto the elements of post-formal thought described earlier. Emerging adults are also faster and more flexible in their moral decision-making than adolescents are (Padilla-Walker, 2016).

Theory of mind, empathy, and moral reasoning can all affect prosocial behavior by giving us more information we can use to help others. When we can both consider other people’s perspectives and identify with them, we can better meet their needs. Being able to consider multiple dimensions of complex moral situations enables us to make decisions that have a better chance of being beneficial. Additionally, in early adulthood we may have more opportunities and more ability to engage in prosocial behavior by, for example, voting or giving a friend a ride somewhere after their car breaks down (Padilla-Walker, 2016).

### Link to Learning

How empathic are you? This video gives some interesting perspective on our experience of empathy toward people who are different from us.

# Contextual and Cultural Variations in Cognition

People from different cultures approach problems differently, and they value different factors when making decisions. The way an individual forms their identity, and their cultural and societal norms and beliefs, all influence the way they process information and the development of cognitive skills in early adulthood.

## Variations in Practical Thinking

In general, collectivistic cultures show a preference for a holistic style of thinking that relies on contextual information, situational attributions, low tolerance for ambiguity, and dislike of competition. Western cultures, on the other hand, tend to be more individualistic and emphasize dispositional (personality) attributions (explanations for behavior), competition, and reliance on absolute facts, with a higher tolerance for ambiguity (Grossman, 2018; Her & Haron, 2016; Rachev & Petkova, 2019). These differences appear to influence some specific aspects of cognition. For example, Rachev and Petkova discovered that Bulgarian business owners were extremely susceptible to the affect heuristic, and attributed this to a collectivistic tendency to prioritize emotional satisfaction over competition; in other words, because emotional factors are so important, they become a primary focus when making decisions (2019). A study comparing Israeli and Taiwanese children ages 4–11 found that the Israeli children demonstrated the scarcity heuristic by age 7, while the Taiwanese children never showed it. The researchers explained this difference in individualistic/collectivistic terms: When an item is viewed as scarce, members of individualistic cultures are more likely to want it because it helps them stand out, but this isn't a priority for members of individualistic cultures (Diesendruck et al., 2018). While this is child research and not adult research, it provides more support for the idea that cultural factors may influence use of specific cognitive strategies, and that this influence may start well before adulthood.

Culture may also affect views of convergent and divergent thinking as well as creativity. Specifically, collectivistic cultures may prioritize convergent thinking over divergent thinking because it focuses on finding the "right answer" and therefore reducing uncertainty (Her & Haron, 2016). Consistent with this, Paletz and colleagues note that Eastern and Western cultures tend to define creativity somewhat differently; Eastern cultures tend to define creativity in terms of appropriateness to the context of prevailing cultural norms, while Western cultures tend to define it in terms of novelty (2018). This may influence the way people generate solutions to problems. For example, a person from a Western culture may consider all possible solutions to a problem, regardless of how feasible they are, but someone from an Eastern culture may only consider solutions that are practical (Figure 11.20).



Figure 11.20 Divergent thinking and creativity may involve scientific exploration, not just artistic pursuits. (credit: "NIH Medical Research Scholars Program" by NIH Image Gallery/Flickr, Public Domain)

Life circumstances other than culture can also affect adult cognition. Research comparing the use of availability heuristics in Italy and Sweden has demonstrated that while residents of both countries use these heuristics, the focus varies depending on what's most salient to residents of those countries. Specifically, when asked to estimate the likelihood of flood, drought, and wildfires, the respondents rated as more likely the specific events that had occurred in their country most recently (Di Baldassarre et al., 2021). Thus, while the ability to use heuristics is universal, the information that we use to shape our judgments depends on experience.

## Variations in Social Cognition

Specific cultural values may affect social cognition. For example, the value of *familism*, prevalent in Latino culture, emphasizes the importance of helping others and is related to expressed prosocial tendencies (Knight et al., 2016; 2018). A study of college students in India, Japan, and the United States found that the Japanese and American students were more likely to use exchange norms (either repaying a debt or anticipating future benefit) when deciding whether to help a friend, while Indian students were more likely to use communal norms (helping with no expectation of reciprocity; Miller et al., 2017). Also, a study comparing European American and Hindu Indian adults found that when evaluating the reasons why a person did something (e.g., didn't help someone in need), European American participants tended to attribute this behavior to personality characteristics (e.g., being selfish), while Hindu Indian participants tended to attribute it to contextual factors (e.g., not wanting to be late for work; Miller et al., 2018). This suggests that while the ability to consider others' inner states is common across cultures, there may be cultural differences in what people prioritize when making those judgments Figure 11.21.



Figure 11.21 People help each other for many reasons. (credit: "AFGE Volunteers at Mobile Food Pantry" by AFGE/Flickr, CC BY 2.0)

Contextual factors other than culture may also be relevant. For example, people who experience autism spectrum disorder have more difficulty than neurotypical people on tasks requiring theory of mind (e.g., Baksh et al., 2021; Sasson et al., 2019), although this may depend to some extent on underlying general intellectual ability (Sasson et al., 2019). Also, when asked to explain their motivation for performing prosocial acts, people with autism spectrum disorder tend to provide egocentric answers ("I'm nice") instead of answers that indicate larger understanding of social norms ("It's important to help people"; Baksh et al., 2021).

## References


Baksh, R. A., Abrahams, S., Bertlich, M., Cameron, R., Jany, S., Dorrian, T., Baron-Cohen, S., Allison, C., Smith, P., MacPherson, S. E., & Auyeung, B. (2021). Social cognition in adults with autism spectrum disorders: Validation of the Edinburgh Social Cognition Test (ESCoT). *The Clinical Neuropsychologist, 35*(7), 1275-1293. doi.org/10.1080/13854046.2020.1737236

Brodbeck, J., Bachmann, M. S., Croudace, T. J., & Brown, A. (2013). Comparing growth trajectories of risk behaviors from late adolescence through young adulthood: An accelerated design. *Developmental Psychology, 49*(9), 1732–1738. doi.org/10.1037/a0030873

Cohen, A. O., Breiner, K., Steinberg, L., Bonnie, R. J., Scott, E. S., Taylor-Thompson, K., Rudolph, M. D., Chein, J., Richeson, J. A., Heller, A. S., Silverman, M. R., Dellarco, D. V., Fair, D. A., Galván, A., & Casey, B. J. (2016). When is an adolescent an adult? Assessing cognitive control in emotional and nonemotional contexts. *Psychological Science*, *27*(4), 549–562. doi.org/10.1177/0956797615627625

Dennis, E. L., Jahanshad, N., McMahon, K. L., de Zubicaray, G. I., Martin, N. G., Hickie, I. B., Toga, A. W., Wright, M. J., & Thompson, P. M. (2013). Development of brain structural connectivity between ages 12 and 30: A 4-Tesla diffusion imaging study in 439 adolescents and adults. *NeuroImage*, *64*, 671–684. https://doi.org/10.1016/j.neuroimage.2012.09.004

Di Baldassarre, G., Mondino, E., Rusca, M., Del Giudice, E., Mård, J., Ridolfi, E., Scolobig, A., & Raffetti, E. (2021). Multiple hazards and risk perceptions over time: the availability heuristic in Italy and Sweden under COVID-19. *Natural Hazards and Earth System Sciences Discussions, 24*(11), 3439-3447. https://doi.org/10.5194/nhess-21-3439-2021

Diesendruck, G., Chiang, W. C., Ferera, M., & Benozio, A. (2019). Cultural differences in the development of a preference for scarce objects. *Developmental Psychology, 55*(1), 89. doi.org/10.1037/dev0000620

Dvorak, A. V., Swift-LaPointe, T., Vavasour, I. M., Lee, L. E., Abel, S., Russell-Schulz, B., Graf, C., Wurl, A., Liu, H., Laule, C., Li, D. K. B., Traboulsee, A., Tam, R., Boyd, L. A., MacKay, A. L., & Kolind, S. H. (2021). An atlas for human brain myelin content throughout the adult life span. *Scientific Reports, 11*(1), 269. https://doi.org/10.1038/s41598-020-79540-3

Ferguson, H. J., Brunsdon, V. E. A., & Bradford, E. E. F. (2021). The developmental trajectories of executive function from adolescence to old age. *Scientific Reports, 11*, 1382. https://doi.org/10.1038/s41598-020-80866-1

Gilligan, C. (1982). *In a different voice: Psychological theory and women's development*. Harvard University Press.

Griffin, J., Gooding, S., Semesky, M., Farmer, B., Mannchen, G., & Sinnott, J. (2009). Four brief studies of relations between postformal thought and non-cognitive factors: Personality, concepts of God, political opinions, and social attitudes. *Journal of Adult Development, 16*(3), 173–182. https://doi.org/10.1007/s10804-009-9056-0

Grossmann, I. (2018). Dialecticism across the lifespan: Toward a deeper understanding of the ontogenetic and cultural factors influencing dialectical thinking and emotional experience. In J. Spencer-Rodgers & K. Peng (Eds.), *The psychological and cultural foundations of East Asian cognition: Contradiction, change, and holism* (pp. 135–180). Oxford University Press.

Gur, R. C., & Gur, R. E. (2016). Social cognition as an RDoC domain. *American Journal of Medical Genetics. Part B, Neuropsychiatric Genetics, 171B*(1), 132–141. doi.org/10.1002/ajmg.b.32394

Hartshorne, J. K., & Germine, L. T. (2015). When does cognitive functioning peak? The asynchronous rise and fall of different cognitive abilities across the life span. *Psychological Science, 26*(4), 433-443. doi.org/10.1177/0956797614567339

Her, E. L. W., & Haron, F. (2016). The association of giftedness, creativity, and postformal thinking in Malaysian adults. *Advanced Development, 15*, 47-62. www.proquest.com/scholarly-j...781544923/se-2

Hochberg, Z., & Konner, M. (2020). Emerging adulthood, a pre-adult life- history stage. *Frontiers in Endocrinology, 10*(918). https://doi.org/10.3389/fendo.2019.00918

Immordino-Yang, M. H., Darling-Hammond, L., & Krone, C. R. (2019). Nurturing nature: How brain development is inherently social and emotional, and what this means for education. *Educational Psychologist, 54*(3), 185–204. doi.org/10.1080/00461520.2019.1633924

Jia, F., & Krettenauer, T. (2017). Recognizing moral identity as a cultural construct. *Frontiers in Psychology, 8*, 412. https://doi.org/10.3389/fpsyg.2017.00412

Kilford, E. J., Garrett, E., & Blakemore, S. J. (2016). The development of social cognition in adolescence: An integrated perspective. *Neuroscience and Biobehavioral Reviews, 70*, 106–120. https://doi.org/10.1016/j.neubiorev.2016.08.016

Kincheloe, J. L., & Steinberg, S. R. (1993). A tentative description of post-formal thinking: The critical confrontation with cognitive theory. *Harvard Educational Review, 63*(3), 296-320. www.proquest.com/scholarly-j...212279037/se-2

Knight, G. P., Carlo, G., Mahrer, N. E., & Davis, A. N. (2016). The socialization of culturally related values and prosocial tendencies among Mexican American Adolescents. *Child Development, 87*(6), 1758-1771. doi.org/10.1111/cdev.12634

Knight, G. P., Mazza, G. L., & Carlo, G. (2018). Trajectories of familism values and the prosocial tendencies of Mexican American adolescents. *Developmental Psychology, 54*(2), 378-384. doi.org/10.1037/dev0000436

Kohlberg, L. (1969). Stage and sequence: The cognitive-developmental approach to socialization. In D. A. Goslin (Ed.), *Handbook of socialization theory* (pp. 347-480). Rand McNally.

Kwon, D., Pfefferbaum, A., Sullivan, E. V., & Pohl, K. M. (2020). Regional growth trajectories of cortical myelination in adolescents and young adults: longitudinal validation and functional correlates. *Brain Imaging and Behavior, 14*(1), 242–266. https://doi.org/

10.1007/s11682-018-9980-3

Lapsley, D., LaPorte, E., & Kelley, K. (2023). Moral cognition in adolescence and emerging adulthood. In L. J. Crockett, G. Carlo, & J. E. Schulenberg (Eds.), *APA handbook of adolescent and young adult development* (pp. 123–138). American Psychological Association. doi.org/10.1037/0000298-008

Lee, J., & Kim, H. J. (2022). Normal aging induces changes in the brain and neurodegeneration progress: review of the structural, biochemical, metabolic, cellular, and molecular changes. *Frontiers in Aging Neuroscience, 14*, 931536. https://doi.org/10.3389/fnagi.2022.931536

Miller, J. G., Akiyama, H., & Kapadia, S. (2017). Cultural variation in communal versus exchange norms: Implications for social support. *Journal of Personality and Social Psychology, 113*(1), 81–94. doi.org/10.1037/pspi0000091

Miller, J. G., Wice, M., & Goyal, N. (2018). Contributions and challenges of cultural research on the development of social cognition. *Developmental Review, 50*(Part A), 65–76. https://doi.org/10.1016/j.dr.2018.03.003

Mills, K. L., Siegmund, K. D., Tamnes, C. K., Ferschmann, L., Wierenga, L. M., Bos, M. G. N., Luna, B., Li, C., & Herting, M. M. (2021). Inter-individual variability in structural brain development from late childhood to young adulthood. *NeuroImage, 242*, 118450. https://doi.org/10.1016/j.neuroimage.2021.118450

Moheghi, M., Ghorbanzadeh, M., & Abedi, J. (2020). The investigation and criticism moral development ideas of Kohlberg, Piaget and Gilligan. *International Journal of Multicultural and Multireligious Understanding, 7*(2), 362-374. http://dx.doi.org/10.18415/ijmmu.v7i2.1516

Padilla-Walker, L. M. (2016). Moral development during emerging adulthood. In J. J. Arnett (Ed.), *The Oxford handbook of emerging adulthood* (pp. 449–463). Oxford University Press.

Paletz, S. B. F., Bogue, K., Miron-Spektor, E., & Spencer-Rodgers, J. (2018). Dialectical thinking and creativity from many perspectives: Contradiction and tension. In J. Spencer-Rodgers & K. Peng (Eds.), *The psychological and cultural foundations of East Asian cognition: Contradiction, change, and holism* (pp. 267–308). Oxford University Press.

Parr, A. C., Calabro, F., Tervo-Clemmens, B., Larsen, B., Foran, W., & Luna, B. (2022). Contributions of dopamine-related basal ganglia neurophysiology to the developmental effects of incentives on inhibitory control. *Developmental Cognitive Neuroscience, 54*, 101100. https://doi.org/10.1016/j.dcn.2022.101100

Rachev, N. R., & Petkova, M. (2019). How prone are Bulgarians to heuristics and biases? Implications for studying rationality across cultures. *Journal of Cognition and Culture, 19*(3-4), 322-342. https://doi.org/10.1163/15685373-12340062

Runco, M. A. (2014). *Creativity theories and themes: Research, development, and practice*. Academic Press. https://doi.org/10.1016/B978-0-12-410512-6.00001-1

Sasson, N. J., Morrison, K. E., Kelsven, S., & Pinkham, A. E. (2020). Social cognition as a predictor of functional and social skills in autistic adults without intellectual disability. *Autism Research, 13*(2), 259-270. doi.org/10.1002/aur.2195

Schreiber, L. R. N., Grant, J. E., & Odlaug, B. L. (2012). Emotion regulation and impulsivity in young adults. *Journal of Psychiatric Research*, *46*(5), 651–658. https://doi.org/10.1016/j.jpsychires.2012.02.005

Sherman, G. L. (2021). Transformative learning and well-being for emerging adults in higher education. *Journal of Transformative Education, 19*(1), 29-49. doi.org/10.1177/1541344620935623

Simpson, A. R. (2018). *Brain changes*. Young Adult Development Project. https://hr.mit.edu/static/worklife/y...ult/brain.html

Sinnott, J. D. (1998). What characterizes postformal thought? In *The development of logic in adulthood* (pp. 23-49). Springer. https://doi.org/10.1007/978-1-4757-2911-5_3

Stebbins, R. C., Yang, Y. C., Reason, M., Aiello, A. E., Belsky, D. W., Harris, K. M., & Plassman, B. L. (2022). Occupational cognitive stimulation, socioeconomic status, and cognitive functioning in young adulthood. *SSM-Population Health, 17*, 101024. https://doi.org/10.1016/j.ssmph.2022.101024

Taber-Thomas, B., & Pérez-Edgar, K. (2015). Emerging adulthood brain development. In J. J. Arnett (Ed.), *The Oxford handbook of*

*emerging adulthood* (pp. 126-141). Oxford University Press. doi.org/10.1093/oxfordhb/9780199795574.013.15

Tousignant, B., Sirois, K., Achim, A. M., Massicotte, E., & Jackson, P. L. (2017). A comprehensive assessment of social cognition from adolescence to adulthood. *Cognitive Development, 43*, 214–223. https://doi.org/10.1016/j.cogdev.2017.05.001

U.S. Department of Transportation, Bureau of Transportation Statistics (2023). *Transportation statistics annual report 2023*. https://doi.org/10.21949/1529944

Velikonja, T., Fett, A. K., & Velthorst, E. (2019). Patterns of nonsocial and social cognitive functioning in adults with autism spectrum disorder: A systematic review and meta-analysis. *JAMA Psychiatry, 76*(2), 135–151. doi.org/10.1001/jamapsychiatry.2018.3645

Whitley, E., Deary, I. J., Ritchie, S. J., Batty, G. D., Kumari, M., & Benzeval, M. (2016). Variations in cognitive abilities across the life course: Cross-sectional evidence from Understanding Society: The UK Household Longitudinal Study. *Intelligence, 59*, 39-50. https://doi.org/10.1016/j.intell.2016.07.001

Wood, D., Crapnell, T., Lau, L., Bennett, A., Lotstein, D., Ferris, M., & Kuo, A. (2017). Emerging adulthood as a critical stage in the life course. In N. Halfon, C. B. Forrest, Lerner, R. M., & E. M. Faustman (Eds.), *Handbook of life course health development* (pp. 123–143). Springer. https://library.oapen.org/bitstream/...7.pdf#page=138

This page titled 15.9.5: Cognitive Development in Early Adulthood is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

- 11.4: Cognitive Development in Early Adulthood by OpenStax is licensed CC BY 4.0. Original source: https://openstax.org/details/books/lifespan-development.

# 15.9.6: Contexts - Higher Education and Work Achievement in Early Adulthood

## Learning Objectives

By the end of this section, you will be able to:

- Describe the challenges and opportunities facing young adults in preparing for work and career
- Describe formal and informal educational opportunities in early adulthood
- Explain the considerations surrounding workforce entry for the developing young adult

Moira has been attending a community college part-time for the past few years while working as a server in her uncle's restaurant. She enjoys her work (especially as it keeps her connected to her family), but she doesn't want to work there forever. When she thinks about transferring to a four-year school, however, she feels overwhelmed by the cost—especially when she isn't sure what she "wants to be when she grows up." She likes the ocean and loves marine mammals (especially dolphins and whales), but she doesn't enjoy science courses. She also enjoys photography. She took photos of her next-door neighbor's family, and they turned out so well that she has been asked to photograph other families. However, she doesn't know if she'll be able to support herself long-term by turning this hobby into a job. She wonders if she could intern with the local newspaper to get some journalistic photography experience.

One of the most profound tasks facing young adults is preparing for life after high school. Education in childhood and adolescence is focused on learning basic skills and gaining knowledge helpful to becoming an independently functioning adult. Now people must decide what they may want to do next and how to achieve those goals. High school guidance counselors sometimes use the idea of "the 4 E's" to describe actions students can take after graduating high school. They are *enlisting* in the military, *enrolling* in a college or vocational program, becoming *employed*, and/or taking a gap year to *explore* possibilities (Figure 11.22). In this section, we'll examine two of the most common actions in that list: Employment and enrollment in higher education.



Figure 11.22 Becoming an adult often means choosing a pathway to take in life, at least for now. (credit: "two roads between trees" by Jens Lelie/Wikimedia Commons, CC0 1.0)

## Work and Career Preparation

There's no one single way to decide what you want to do for work or a career. We all take different paths to find our way to that destination, sometimes through a series of different pathways. Some of us know our interests from an early age, while others

aren't sure even after starting college or embarking on a first job. And many people decide to change their careers as they move through adulthood, as well. We should also note that additional groups of people may not pursue paid employment because they take on responsibilities such as raising children or caring for elderly relatives. Adulthood allows us to make these choices, many times changing pathways throughout the course of a person's lifespan.

The choice of work or career as a person enters early adulthood oftentimes depends to a great extent on an individual's identity and life circumstances, especially their skills, values, beliefs, and goals. Someone who aspires to a specific lifestyle might choose their career based on expected salary. For some people, the chance to travel, help others, or apply a specific skill like language proficiency or musical talent might be their main goal. Thus, career choices often depend on the person's having done some self-exploration and developing a sense of identity and purpose. The process of self-exploration may also include actively investigating jobs of interest by discussing the jobs with those in the field, volunteering, interning, doing internet searches, and taking college courses or completing a vocational program or certification course.

Life circumstances may also affect work choices. As we learned at the beginning of this chapter, having a low SES may prevent a person from exploring personally fulfilling career options and instead focus on meeting immediate needs like paying for food and shelter. Larger societal factors such as the nation's economy and the availability of jobs in one's community may also affect a person's options. Having children may necessitate getting a job to provide for them or prevent a person from getting a job if the cost of childcare is too prohibitive. Overall childcare costs are hard to quantify because these figures depend on area population, the age of the child, and whether the care is provided in home or in a center. However, recent U.S. Census data indicate that families in the United States can spend from 8 percent to 19 percent of their income on childcare, an annual cost of between $5,357 and $17,171 in 2022 dollars (Grundy, 2024). For some people, it may make more financial sense to not pursue a career if paying for childcare would significantly cut into their earnings.

Having the opportunity to receive education beyond high school may also affect career and job decisions. While certain careers require more than a high school diploma or GED, an individual's career path may not need to include a 2- or 4-year college degree, or and may not need to include higher education at all. In the section that follows, we'll cover not only a "traditional" college education (i.e., one that leads to a bachelor's degree) but also possible alternatives, such as vocational training and apprenticeships.

## College as Context in Early Adulthood

Many jobs now require some form of degree or certification beyond high school, a change that has had a profound influence in making emerging adulthood a distinct developmental stage in many countries. According to U.S. Census data (Figure 11.23), while only 24 percent of people completed high school in 1940, that number rose to 41 percent in 1960, then 55 percent by 1970 (U.S. Census Bureau, 1970). According to the latest Census data, 91 percent of people in 2021 reported that they had completed their high school degree or high school equivalent degree (GED) (U.S. Census Bureau, 2022). People completing advanced degrees such as a masters or doctorate increased from 10.9 percent to 14.4 percent in the years from 2011 to 2021 (U.S. Census Bureau, 2022).

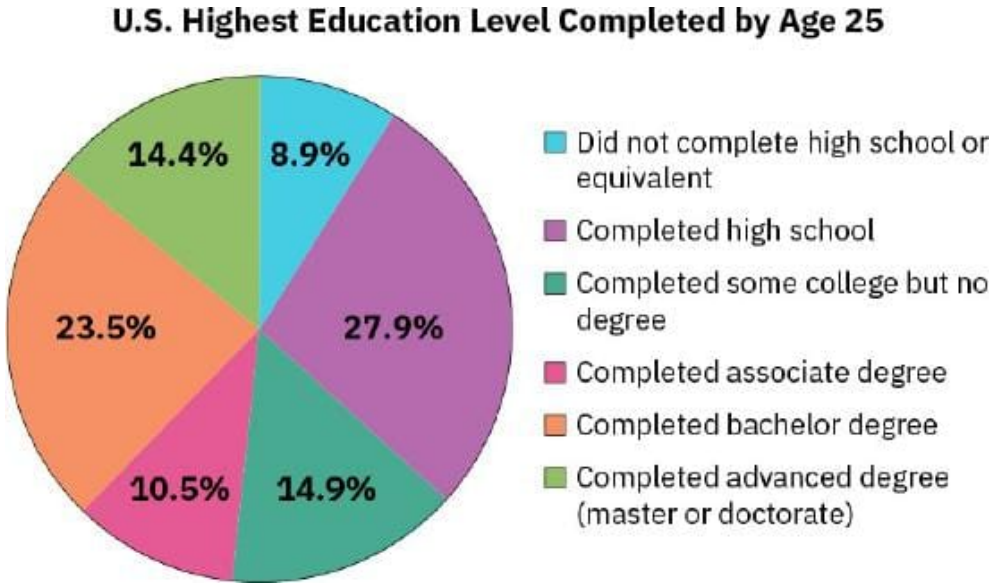



Figure 11.23 This chart shows the 2021 percentages of people's educational attainment by age 25 in the United States. Note that almost a quarter of respondents earned a bachelor's degree. (data source: U.S. Census Bureau, 2022; attribution: Copyright Rice University, OpenStax, under CC BY 4.0 license)

In the Fall 2021 semester, approximately 18,580,000 people were enrolled in college in the United States (U.S. Department of Education, 2023a). Similar data from Canada indicate that approximately 1,440,000 people were enrolled in college there in the Fall 2023 semester (Universities Canada, 2023). These figures represent only people currently enrolled, not people who've completed a college education. It should be noted that data for both countries include international students who aren't considered official residents of country where they attend school. This makes it somewhat challenging to determine the proportion of the population these figures represent, but ballpark estimates suggest that these figures represent roughly 5.6 percent of the United States population and 3.7 percent of the Canadian population.

Of the roughly two million bachelor's degrees earned in in the United States during the 2021–2022 academic year, the top six most common majors were business (18.6 percent), health professions (13.1 percent), social sciences and history (7.5 percent), biology/biomedical sciences (6.5 percent), psychology (6.4 percent), and engineering (6.1 percent; U.S. Department of Education, 2023b). Perhaps not surprisingly, many of these popular majors have obvious ties to potentially rewarding career fields. Careers in fields such as health care and psychology may be intrinsically rewarding and lead to greater job satisfaction and personal fulfillment. College education is also frequently touted as a pathway to higher salaries, greater career flexibility, and more opportunities for advancement (Blagg, 2022; Chau et al., 2023; Klor de Alva, 2022; OECD, 2023; Rosenbaum et al., 2017; Warick & Melnick, 2022). In fact, one study of finance majors found that 85 percent of the sample expected a salary at the 70$^{th}$ percentile or higher within 10 years of graduation, despite the statistical unlikelihood of this actually happening (Schnusenberg, 2020).).

Looking at specific demographic variables and their relationship to educational attainment, we see some interesting patterns. In terms of gender, similar numbers of men and women have a high school diploma as their highest degree earned (29.4 percent versus 26.5 percent respectively; U.S. Census Bureau, 2022). However, the gap is a bit larger when it comes to higher education. By age 25, 46.9 percent of men had completed at least a bachelor's degree, compared to 53.1 percent of women (U.S. Census Bureau, 2022).

The picture is somewhat different when we look at race and ethnicity. Recent data indicate that Asian youth had the highest number of baccalaureate degree holders at 61 percent, followed by young adults who were White at 41.9 percent, Black (28.1 percent), and Hispanic (20.6 percent; U.S. Census Bureau, 2022). These discrepancies are likely due to factors such as economic disadvantage, language barriers, and lack of appropriate guidance regarding college education. Some of these factors may intersect with other characteristics. For example, Black and Hispanic youth are proportionately more likely than White and Asian youth to be first-generation college students, a group also more likely to have a lower median income as well as higher risk of dropping out of college (RTI International, 2019). However, the number of Black and Hispanic adults earning higher education degrees is rising. Between 2011 and 2021, the number of Black people with a college degree by the age of 25, increased from 19.9 percent to 28.1 percent, and the percentage of Hispanic youths with a degree increased from 14.1 percent to 20.6 percent (U.S. Census Bureau, 2022)(Figure 11.24).

## Intersections and Contexts: Disparities in Race, Ethnicity, and Gender in STEM Fields

Research suggests there are differences in types of jobs (professional, service-oriented, STEM) and in the wages earned by people of different racial or ethnic groups. For example, people who are Hispanic, especially Hispanic women, have a higher chance of having jobs that offer lower than average wages, and White people are more likely than Black people to have better job security (Earle et al., 2014).

STEM fields (science, technology, engineering, and math) are one area with large discrepancies in ethnic, racial, and gender representation. According to Fry et al. (2021), many minorities are underrepresented within STEM fields, especially Hispanic (17 percent of STEM jobs) and Black (9 percent of STEM jobs). Employment within STEM fields often requires a college degree and as of 2018, Black and Hispanic individuals represented 7 percent and 12 percent respectively of bachelor's degrees within STEM fields, with White and Asian students earning the majority of STEM degrees (Fry et al., 2021).

Though women represented just over half the STEM degrees earned in 2018, they're still underrepresented in some areas. Most degrees women earned within STEM fields were in fields related to health care (85 percent), as opposed to degrees in engineering (22 percent) and even computer science(19 percent). Though women do represent a little over half of all STEM-related degrees, Hispanic and Black women are underrepresented, together comprising only 17 percent of the STEM workforce (Fry et al., 2021).

These discrepancies persist after these graduates get to the workplace. Not only are Black and Hispanic workers underrepresented in STEM fields, but they also often get paid less than White and Asian counterparts. Race and ethnicity also intersect with sex; Black and Hispanic women receive the lowest wages within STEM fields (Fry et al., 2021). There are groups attempting to erase these discrepancies within STEM fields by providing resources such as peer mentoring, financial support for student research activities, and summer bridge programs for rising college freshmen (Estrada et al., 2016); however, increasing inclusion in these fields and college majors is complex, as many minorities do not have access to resources, especially educational resources, helpful to increasing representation in STEM fields. STEM is not always incorporated into early education programs, which may also decrease exposure to these fields for young children.

Here are links to the National Science Foundation Initiative to increase participation in STEM fields and a list of organizations that are working to increase diversity within STEM fields from National University.

## Link to Learning

The United States Department of Education "College Scorecard" website contains a search tool that allows prospective students to find information about different schools, programs of study, and degree options. It also contains a section titled "Alternative Pathways to a Career" that provides links to information about apprenticeships and training programs.



Figure 11.24 College provides many opportunities for learning both in and out of the classroom. (credit: "Multicultural Mashup Melds Languages, Cultures at COD 58" by COD Newsroom/Flickr, CC BY 2.0)

Earning a bachelor's degree has other benefits besides potentially increased income and career satisfaction. A fundamental purpose of college is to help people gain and refine cognitive abilities including verbal skills, quantitative skills, and critical thinking skills. While these skills can also develop outside of a college education, college provides a setting in which all three of them are regularly used, with desirable consequences for successful performance. These skills are transferrable to nearly every area of life, as are the "soft" skills that emerging adults can also hone in college, including planning, organizing, taking initiative, managing time, leading, and persuading. While interacting with classmates and working cooperatively on group projects, college students also develop social skills such as interpersonal communication, perspective-taking, and conflict resolution. Having a college degree is associated with improved decision-making about issues such as online safety and with prosocial civic engagement activities such as voting and volunteer work (OECD, 2023). College can also provide an excellent opportunity for finding purpose during emerging adulthood. Self-exploration at college can help people settle on their adult values and belief systems, further shape their identity, and develop complex, long-lasting relationships both platonic and romantic.

Along those lines, it's not unusual for students to try out different majors before following through on the education or training required to attain a job within their field of choice. According to the U.S. Department of Education, around 30 percent of students enrolled in a two- or four-year degree program change their major before graduating, and at least 10 percent change their major multiple times (Leu, 2017). This is developmentally appropriate in the context of emerging adulthood and identity formation, discussed at the beginning of the chapter. Also, as we'll see, college is not the only route to a career.

## COVID and the College Experience

In Section 11.2, we examined how the COVID-19 pandemic affected mental health in emerging adulthood. Here, we will further consider how it affected the college experience. Around the world, in-person instruction shifted to online instruction on short notice, with students, faculty, staff, and families often having only a week or two to prepare. Not surprisingly, this change – combined with the circumstances that caused it – was associated with academic challenges. For many of them, they now had to share computer time and equipment with other family members, potentially limiting their ability to complete assignments or participate in synchronous online class meetings. These students were also cut off from academic resources such as tutoring as well as the social support and companionship of their friends and student organizations, which are also important components of the college experience.

Not all students entered this transition with equal challenges. For example, Birmingham and colleagues found that while college students were generally comfortable with technology, a third of them had never taken an online class prior to the pandemic (2023). Demographic factors also appeared to affect the adjustment to online learning. Students of color tend to perform lower in online classes than in face-to-face classes (Shankar et al., 2023). While financial concerns were common across demographic groups, people of color and families with low SES were more likely to experience financial challenges (Ibarra-Mejia et al., 2023; Molock & Parchem, 2022).

However, some valuable lessons may have been learned in the process. The pandemic provided the opportunity for a "natural experiment" in that students couldn't self-select into online versus in-person classes, therefore allowing us to study performance in online classes while minimizing the effects of self-selection bias. Online classes with synchronous meetings tend to have better student outcomes than ones that are entirely asynchronous. (Reference needed). Large introductory-level classes conducted face-to-face may not typically enable high-impact practices such as small group discussions and flipped classrooms, but these things can be accomplished online. Finally, to address concerns about potential cheating on online exams, instructors could move away from multiple-choice, memorization-based questions to application-based questions that require short answer or essay responses. These questions may encourage more student engagement and represent a better assessment of learning (Shankar et al., 2023).

## Alternatives to a College Degree

While an associate or a bachelor's degree is a common educational pathway in emerging adulthood, it's not the only option out there. People can also choose to earn an associate's degree by attending a community college or a vocational school such as a trade school or technical institute (Figure 11.25). Less costly than a four-year college, these institutions offer one- to two-year training or licensing programs for jobs like HVAC technician, veterinary assistant, dental assistant, electrician, plumber, and pharmacy technician. Some of these schools offer two-year courses of study—similar to the general education curriculum portion of a bachelor's degree—leading to associate's degrees that may be transferrable to four-year institutions. Associate's degrees are a good alternative to a bachelor's degree for people whose career goals don't require one or who aren't completely certain about going to college. They may also be a way for someone who's earned some credits but isn't able to complete a bachelor's degree to avoid leaving higher education empty-handed (Institute for Higher Education Policy, 2017).

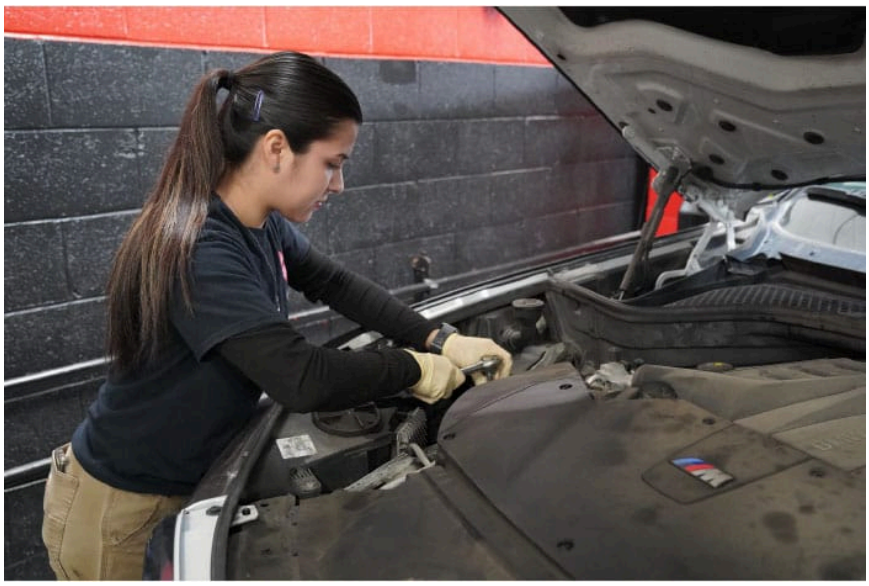


Figure 11.25 Community colleges and vocational schools offer training and education to prepare for a variety of careers. (credit: "female mechanic" by Mike Skoropad/Flickr, CC BY 2.0)

At vocational schools, courses are hands-on and intensive, with small classes focused on specific skills and preparation for any testing required for the job. In some countries, vocational training includes more than just blue-collar occupations. For example, an apprenticeship is a paid position involving a combination of on-the-job training, mentoring, and classroom learning, often leading to employment in a specific field. Apprenticeship programs often focus on skilled trades such as information technology, manufacturing, food service, or cosmetology, but not always. Germany has an apprenticeship system, offered as an alternative to college, that involves all sectors of the workforce, including civil service jobs (government jobs that don't involve political appointments or legal work, such as urban planners, budget analysts, sanitation workers, and firefighters; Deissinger & Gonon, 2021). In Japan, high school students can enroll in specialized training schools called *senmon gakko*, designed to prepare students to meet workforce needs in such diverse areas as agriculture, health care, apparel and homemaking, and the arts (Kogirima, 2014; Taylor, 2020). Other countries regard vocational training as a possible alternative to, but not necessarily a replacement for, college. In Québec, students enroll in either a pre-university program or a vocational training program after finishing high school, and completion of either program makes them eligible to get a university education if they want one (Taylor, 2020).

In some cases, a 2-year or 4-year degree may not be necessary. For some positions, a short certificate training course opens the path to becoming a certified personal trainer, medical transcriptionist, court reporter, or security guard. Many service-sector jobs such as bartending and construction work may also require only supervised training and a test to become certified; for these positions, a high school degree or GED may not even be needed. There's a wide range of employment opportunities out there, with a corresponding wide range of education and training necessary (or not) for each. No one educational path or career field is objectively better than any other; each person has to find what's best for them.

Also, not all learning occurs in the context of formal education. Informal education is education that occurs without a set curriculum. Learning is hands-on and can include talking with and listening to others, helping organize events, and sharing experiences. Participation can help people learn about others, including those whose lives are unlike their own, and can expand their perspective-taking skills along with learning more about themselves. Thus, informal learning can be a form of experiential learning, a form of learning that involves not only gaining understanding by doing, but also reflecting on the experiences. It can occur in a college setting through internships and service learning courses as well as outside college through activities like volunteering and even activism (Gross & Rutland, 2017).

## Costs and Rewards of College

College isn't the path for everyone, but it's still a popular choice for many young adults to explore options in life, specifically options for work. However, it comes with a literal cost that can vary greatly. According to the United States Department of Education, in the 2021–2022 academic year, the yearly cost of tuition and fees ranged from $,4000 at two-year public colleges, to $9,700 at four-year public colleges, to an average of $38,800 at private colleges (National Center for Education Statistics, 2023). We should note that these figures for public colleges represent in-state tuition rates only; out-of-state students typically pay more, oftentimes double the costs annually. Also, these figures only represent tuition and fees; they don't include the additional costs of necessities such as textbooks and housing. These costs can vary widely depending on the program of study, geographic location, whether a college is public or private, and whether a student lives on or off campus. However, recent data indicate that college students can expect to spend between $1,000 and $1,400 per year on textbooks and materials, and between $7,000 and $13,000 per year on housing and food (Hanson, 2023).

### Link to Learning

Visit this website from the U.S. government on tools for assessing the cost of college to learn more.

It also takes time to earn a degree, and many young adults have to work in order to partially or fully support themselves while pursuing their degree. Thus, finding time to attend classes and study while working can be stressful. This may cause students to reduce their working hours (and thus their earnings) to make time for classes, or to take reduced class loads (and thus take longer to graduate as well as pay more overall in fees) to accommodate their job. Either approach has financial consequences. Compared to many other countries, the United States provides more financial aid in the form of loans and scholarships, but tuition costs are higher than in many other countries (Bouchikra, 2024; Hanson, 2021; also see "Intersections and Contexts" feature box). Many students in the United States take out loans to pay for college, but the loans must be paid back, which can be a heavy financial burden on someone starting out at a job. Starting salaries for many occupations are typically much lower than the average salaries posted online, and someone expecting their first post-college job to give them enough money to immediately pay off their student loans will likely be in for a nasty surprise.

### Intersections and Contexts: The Cost of College Around the World

The higher education costs we've seen so far only apply to colleges in the United States. There's a lot of variability in how countries outside the United States manage the financial aspects of higher education. While it's impossible to cover every single nation's approach to college, we can identify some overall trends.

In many European countries, such as Denmark, Norway, and Sweden, college tuition is free. Often this benefit is just for residents of that country (or, in the case of Denmark and Sweden, the European Union; Bouchikra, 2024; Hanson, 2021); students from other countries will have to pay to go to school there, but this is reasonable considering that the primary purpose of public education is to educate the citizens of that country. Having free tuition means, obviously, that higher education is more accessible and that college graduates can enjoy higher earning potential without the burden of student loans.

In the United Kingdom, tuition costs are similar to those in the United States. However, most baccalaureate degrees are 3-year programs instead of the 4-year programs typically offered in the United States, reducing potential costs. Also, loans don't have to be repaid until after a recipient crosses a certain income threshold depending on which payment plan they're enrolled in (Hanson, 2021; *Repaying Your Student Loan*, n.d.). By contrast, in the United States, loan repayment is expected to start as soon as the recipient is no longer in school.

South and East Asian countries vary widely in their tuition costs. For example, students at public universities in India pay only $50 per year in tuition, compared to $2200 per year in China and approximately $8000 in Japan and the Republic of Korea (Bouchikra, 2024). However, the cost of living is very high in some of these countries; many Chinese students live in residence halls or even with host families because they can't afford to rent an apartment (Hanson, 2021). In contrast, cost of living and college tuition costs in many Latin American countries are lower than in many other countries (Bouchkira, 2024; Hanson, 2021), partly because of poor economic conditions in many of those countries. Recently, Chile has instituted a taxpayer-funded *gratuidad* program to provide free college tuition for citizens in its lowest income bracket. In addition to increasing access to higher education, this program also attempts to compensate for poor quality college preparation in primary and secondary schools in impoverished areas (Bouchikra, 2024; Nadworny et al., 2019).

What's the payoff of attaining a degree? There are many ways to answer that question. Financially speaking, college graduates generally earn higher salaries and have higher earning potential. In the United States, the median yearly salary of a 4-year college graduate in 2022 was around $74,464, versus $52,260 for people with an associate's degree or a certificate from a vocational program. Those with only a high-school diploma earn around $44,356, and people without a high school diploma or GED earn around $35,464 (U.S. Bureau of Labor Statistics, 2023). However, the difference in earnings between levels of educational attainment isn't universal. The wage gap between people with different levels of education tends to be relatively small early in employment, but widens in middle adulthood, with amount of education and earnings being positively correlated (OECD, 2023). Earnings for any job also depend on factors other than education, such as age, gender, geographic location, and demand/availability (OECD, 2023). For example, a person with a bachelor's degree in art history may have a lot of difficulty finding work in that field if they live in a rural, low-income area. Their earnings and job prospects may not perfectly reflect the value of their degree if it doesn't happen to fit a need in the place where they live.

However, a college degree in many arts and sciences fields, such as history, biology, and music, doesn't limit what a person can actually do with that degree. Thanks to the soft skills and general knowledge they confer, college degrees may also increase an individual's ability to get jobs outside the field of their degree. For instance, a college graduate who majored in English may become a technical writer for a pharmaceutical company despite not having any background in chemistry. Having a post-high school degree conveys that a person has knowledge, communication skills, and the ability to set and complete goals, all characteristics valuable to employers regardless of that person's major (Figure 11.26).



Figure 11.26 College teaches a wide variety of skills that can be applied to many different careers. (credit: "Spring 2023 commencement ceremony" by Germanna Community College/Flickr, CC BY 2.0)

This value is reflected in different unemployment rates for people with different amounts of education. U.S. Bureau of Labor

Statistics data from 2022 indicated that people without a high school degree had an unemployment rate of 5.5 percent, while people with a high school diploma had an unemployment rate of 4 percent. For people with a four-year college degree the rate was 2.2 percent (2023). Interestingly, the unemployment rate for people with some college but no degree is 3.5 percent, compared with just 2.7 percent for people with an associate's degree (U.S. Bureau of Labor Statistics, 2023). While these people may have completed similar numbers of college credits, and people in the "some college, no degree" group may even have completed more credits than people with associate's degrees, employers clearly don't regard these two statuses as equivalent. This provides more support for earlier statements about the utility of two-year degree programs as an alternative to a four-year degree.

## Workplace as Context

In previous generations, it wasn't unusual to stay with a company for life, working their way up in responsibility or even building their own business over time. This pattern has changed dramatically due to multiple factors, including the increasing role of technology in every aspect of life. When Generation X (born between 1965 and 1981) joined the workforce, technology and a changing employment landscape no longer guaranteed working for one employer for life, and many people no longer expected to do so. These changes influenced attitudes about work as well. Instead of prioritizing loyalty to a company, many people now place more value on work they enjoy or find meaningful (Črešnar & Nedelko, 2020)—although, as mentioned earlier, life circumstances may not make this possible for everyone to achieve.

Other work-related views are likely influenced by life events and experiences. Research on younger Millennials and Generation Z (those born between 1995 and 2010) finds that many report feeling less "engaged" in their work (Pendell & Vender Helm, 2022). Putting this in context, Generation Z is the first cohort to live in a digital world, meaning they have been interacting with or using technology since birth (Benítez-Márquez et al., 2022). They express increased concern about environmental issues such as climate change and societal issues such as equal rights, and place importance on working for a company that plays a positive role in addressing these issues (Barhate & Dirani, 2022; Črešnar & Nedelko, 2020; Whitney Gibson et al., 2011). They've also witnessed global phenomena such as financial crises and a world-wide pandemic; not surprisingly, this cohort of workers also reports feeling increasingly stressed, and working for employers that offer a good work-life balance or who care about the well-being of their employees is important in choosing a job (Črešnar & Nedelko, 2020; Pendell & Vender Helm, 2022). As a result, members of Generation Z actively desire careers, but those that allow flexibility and enhance personal well-being (Črešnar & Nedelko, 2020; Whitney Gibson et al., 2011).

Though our views of work might be changing, Pew Research data on workers of all ages show that most appear happy with their job, if not so satisfied with their pay or ability to be promoted. Workers over 65 tended to feel most positively toward their employer and reported the least amount of stress at work, finding their work fulfilling, while younger people reported feeling more stress and less fulfillment. People with higher incomes also reported more satisfaction with their benefits, pay, and promotion opportunities than people with lower incomes (Horowitz & Parker, 2023).

What can be done for those who are unhappy at work, especially about finding a better work-life balance? It's hard to define what work-life balance means to all people. For some, it means having a job that allows them to spend enough time with family, while for others it involves being able to manage health problems while still performing their job effectively (Gragnano et al., 2020; Sirgy & Lee, 2018).

Other valued aspects of the work environment include flexibility (being able to choose whether to work from home or in the office, along with having flexible hours at work), access to childcare, and resources for enhancing physical and mental health. Research has shown that employers that emphasize or have programs that address? these things see increased productivity, morale, and physical and mental health in their workforce, along with lower employee turnover (Kalev & Dobbin, 2022).

## References

Barhate, B., & Dirani, K. M. (2022). Career aspirations of generation Z: A systematic literature review. *European Journal of Training and Development*, *46*(1/2), 139-157. https://doi.org/10.1108/ejtd-07-2020-0124

Benítez-Márquez, M. D., Sánchez-Teba, E. M., Bermúdez-González, G., & Núñez-Rydman, E. S. (2022). Generation Z within the workforce and in the workplace: A bibliometric analysis. *Frontiers in Psychology*, *12*(1). https://doi.org/10.3389/fpsyg.2021.736820

Birmingham, W. C., Wadsworth, L., Lassetter, J. H., Graff, T. C., Lauren, E., & Hung, M. (2023). COVID-19 lockdown: Impact on college students' lives. *Journal of American College Health, 71*(3), 879-893. doi.org/10.1080/07448481.2021.1909041

Blagg, K. (2022). The limits and potential of program-level earnings in higher education accountability. In J. D. Delisle (Ed.), *Student outcomes and earnings in higher education policy*. American Enterprise Institute. http://files.eric.ed.gov/fulltext/ED621363.pdf

Bouchikra, I. (2024). *How much does college cost in 2024: Breakdown for the US and other countries*. Research.com. research.com/universities-co...s-college-cost

Bureau of Labor Statistics, U.S. Department of Labor (2022). *High school graduates with no college had unemployment rate of 4.5 percent in February 2022*. www.bls.gov/opub/ted/2022/hi...ruary-2022.htm

Chau, H., Bana, S. H., Bouvier, B., & Frank, M. R.. (2023). Connecting higher education to workplace activities and earnings. *PLoS ONE, 18*(3), e0282323. https://doi.org/10.1371/journal.pone.0282323

Črešnar, R., & Nedelko, Z. (2020). Understanding future leaders: How are personal values of Generations Y and Z tailored to leadership in Industry 4.0? *Sustainability*, *12*(11), 4417. https://doi.org/10.3390/su12114417

Deissinger, T., & Gonon, P. (2021). The development and cultural foundations of dual apprenticeships–a comparison of Germany and Switzerland. *Journal of Vocational Education & Training, 73*(2), 197-216. doi.org/10.1080/13636820.2020.1863451

Earle, A., Joshi, P., Geronimo, K., & Acevedo-Garcia, D. (2014.). Job characteristics among working parents: Differences by race, ethnicity, and nativity. *Monthly Labor Review* U.S. Bureau of Labor Statistics. www.bls.gov/opub/mlr/2014/ar...ng-parents.htm

Estrada, M., Burnett, M., Campbell, A. G., Campbell, P. B., Denetclaw, W. F., Gutiérrez, C. G., Hurtado, S., John, G. H., Matsui, J., McGee, R., Okpodu, C. M., Robinson, T. J., Summers, M. F., Werner-Washburne, M., & Zavala, M. (2016). Improving underrepresented minority student persistence in STEM. *CBE Life Sciences Education, 15*(3), es5. https://doi.org/10.1187/cbe.16-01-0038

Fry, R., Kennedy, B., & Funk, C. (2021). *STEM jobs see uneven progress in increasing gender, racial and ethnic diversity*. Pew Research Center. https://www.pewresearch.org/science/...TEM_REPORT.pdf

Gragnano, A., Simbula, S., & Miglioretti, M. (2020). Work–life balance: Weighing the importance of work–family and work–health balance. *International Journal of Environmental Research and Public Health*, *17*(3), 907. https://doi.org/10.3390/ijerph17030907

Gross, Z., & Rutland, S. D. (2017). Experiential learning in informal educational settings. *International Review of Education, 63*, 1–8. https://doi.org/10.1007/s11159-017-9625-6

Grundy, A. (2024). *Estimated revenue for child day care services climbed as child care options declined in 2021*. United States Census Bureau. https://www.census.gov/library/stori...care-cost.html

Hanson, M. (2021). *Average cost of college by country*. EducationData.org. https://educationdata.org/average-co...ege-by-country

Hanson, M. (2023.) *Average cost of college & tuition*. EducationData.org. https://educationdata.org/average-cost-of-college

Horowitz, J., & Parker, K. (2023). *How Americans view their jobs*. Pew Research Center. https://www.pewresearch.org/social-t...ew-their-jobs/

Ibarra-Mejia, G., Lusk, M., & Umucu, E. (2023). Mental health among college students during the COVID-19 pandemic at a Hispanic-serving institution. *Health Promotion Practice, 24*(3), 455-464. doi.org/10.1177/15248399221092750

Institute for Higher Education Policy (IHEP), Wheatle, K., Taylor, J., Bragg, D., & Ajinkya, J. (2017). *The potential of degree reclamation: A path to reclaiming the nation's unrecognized students and degrees*. Institute for Higher Education Policy. http://files.eric.ed.gov/fulltext/ED591575.pdf

Kalev, A., & Dobbin, F. (2022, August 15). The surprising benefits of work/life support. *Harvard Business Review*. https://hbr.org/2022/09/the-surprisi...k-life-support

Klor de Alva, J. (2022). Accounting for demographics, selectivity, and risk in postcollege earnings. In J. D. Delisle (Ed.), *Student outcomes and earnings in higher education policy*. American Enterprise Institute. http://files.eric.ed.gov/fulltext/ED621363.pdf

Kogirima, A. (2014). *Senmon gakko (professional training colleges) in Japan*. National Institute for Educational Policy Research.

www.nier.go.jp/English/educa.../201403SMG.pdf

Leu, K. (2017). *Beginning college students who change their majors within 3 years of enrollment*. U.S. Department of Education. https://nces.ed.gov/pubs2018/2018434.pdf

Molock, S. D., & Parchem, B. (2022). The impact of COVID-19 on college students from communities of color. *Journal of American College Health, 70*(8), 2399–2405. doi.org/10.1080/07448481.2020.1865380

Nadworny, E., Marcus, J., & Gutierrez, M. (2019, November 25). *What the U.S. can learn from free college in Chile*. National Public Radio. https://www.npr.org/2019/11/25/77601...lege-in-chile/

National Conference of State Legislatures. (2024). *Long COVID-19 and disability accommodations in the workplace*. https://documents.ncsl.org/wwwncsl/L...-Workplace.pdf

National Center for Education Statistics. (2023). Price of attending an undergraduate institution. *Condition of education*. U.S. Department of Education, Institute of Education Sciences. https://nces.ed.gov/programs/coe/indicator/cua

OECD. (2023). *Education at a glance 2023: OECD indicators*. Organization for Economic co-operation and development. doi.org/10.1787/e13bef63-en

Pendell, R., & Vander Helm, S. (2022, November 11). *Generation disconnected: Data on Gen Z in the workplace*. Gallup.com. https://www.gallup.com/workplace/404...workplace.aspx

*Repaying your student loan*. (n.d.) UK.GOV. https://www.gov.uk/repaying-your-student-loan/print

Rosenbaum, J. E., Ahearn, C. E, & Rosenbaum, J. E. (2017). *Bridging the gaps: College pathways to career success*. Russell Sage Foundation. https://eric.ed.gov/?redir=http%3a%2...ridging-gaps-0

RTI International. (2019). *First-generation college students: Demographic characteristics and postsecondary enrollment*. NASPA. https://firstgen.naspa.org/files/dmf...ctSheet-01.pdf

Schnusenberg, O. (2020). Overconfidence in salary expectations after graduation. *Journal of Education for Business, 95*(8), 513–518. doi.org/10.1080/08832323.2019.1707750

Shankar, K., Arora, P., & Binz-Scharf, M. C. (2023). Evidence on online higher education: The promise of COVID-19 pandemic data. *Management and Labour Studies, 48*(2), 242-249. doi.org/10.1177/0258042X211064783

Sirgy, M. J., & Lee, D.-J. (2018). Work-life balance: An integrative review. *Applied Research in Quality of Life*, *13*(1), 229–254. https://doi.org/10.1007/s11482-017-9509-8

Taylor, A. (2020). *Skills system international case studies*. City-REDI (City Region Economic Development Institute), University of Birmingham, UK. www.birmingham.ac.uk/documen...al-version.pdf

Universities Canada (2023). *Fall 2023 full-time and part-time fall enrolment at Canadian universities*. https://univcan.ca/universities/facts-and-stats/

U.S. Bureau of Labor Statistics. (2023). Education pays, 2022. *Career Outlook.*: U.S. Bureau of Labor Statistics. www.bls.gov/careeroutlook/20...ation-pays.htm

U.S. Census Bureau (1970, March). *Educational attainment: March 1970*(Current Population Reports Series P-20 #207). https://www.census.gov/content/dam/C...mo/p20-207.pdf

U.S. Census Bureau. (2022). *Census Bureau releases new educational attainment data*. https://www.census.gov/newsroom/pres...ttainment.html

U.S. Department of Education. (2023a). *Total fall enrollment in degree-granting postsecondary institutions, by attendance status, sex of student, and control of institution: Selected years, 1947 through 2031*. Digest of Education Statistics. https://nces.ed.gov/programs/digest/...t23_303.10.asp

U.S. Department of Education. (2023b). *Bachelor's degrees conferred by postsecondary institutions, by field of study: Selected*

*academic years, 1970-71 through 2021-22*. Digest of Education Statistics. https://nces.ed.gov/programs/digest/...t23_322.10.asp

Wang, X., Hegde, S., Son, C., Keller, B., Smith, A., & Sasangohar, F. (2020). Investigating mental health of US college students during the COVID-19 pandemic: Cross-sectional survey study. *Journal of Medical Internet Research, 22*(9), e22817. https://doi.org/10.2196/22817

Warick, C., & Melnick, S. (2022). Using earnings data in college advising. In J. D. Delisle (Ed.), *Student outcomes and earnings in higher education policy*. American Enterprise Institute. http://files.eric.ed.gov/fulltext/ED621363.pdf

Whitney Gibson, J., Greenwood, R. A., & Murphy, Jr., E. F. (2011). Generational differences in the workplace: Personal values, behaviors, and popular beliefs. *Journal of Diversity Management (JDM)*, *4*(3), 1-8. https://doi.org/10.19030/jdm.v4i3.4959

This page titled 15.9.6: Contexts - Higher Education and Work Achievement in Early Adulthood is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

- 11.5: Contexts - Higher Education and Work Achievement in Early Adulthood by OpenStax is licensed CC BY 4.0. Original source: https://openstax.org/details/books/lifespan-development.

# 15.9.7: Key Terms

**abstinence**
not engaging in sexual activity

**affect heuristic**
mental shortcut that causes us to use emotions more than other factors when making a decision

**affective empathy**
being able to vicariously experience someone's emotions

**affective theory of mind**
ability to draw conclusions about another person's feelings

**apprenticeship**
paid position involving a combination of on-the-job training, mentoring, and classroom learning

**availability heuristic**
mental shortcut that helps us think of memorable information quickly and use it to make decisions

**barrier method**
type of contraception and STI prevention that prevents exchange of bodily fluids

**cisgender**
describes an individual who has a gender identity compatible with their sex assigned at birth

**civil service job**
government job that doesn't involve political appointments or legal work; examples include urban planners, budget analysts, sanitation workers, and firefighters

**cognitive empathy**
being able to adopt someone's point of view

**cognitive theory of mind**
ability to draw conclusions about another person's intentions and beliefs

**communal norm**
helping others with no expectation of reciprocity

**convergent thought**
using a known solution to deal with a problem

**dental dam**
thin piece of latex of polyurethane that's placed over the vulva or anus prior to oral sex

**dialectical thinking**
ability to remain practical, flexible, and open to the multiple factors and solutions

**divergent thought**
creating new solutions to deal with a problem; related to creativity

**emerging adulthood**
beginning stages of adulthood characterized by the achievement of new legal statuses as well as intense exploration of career options, beliefs, and relationships

**epiphyses**
ends of long bones like the ones in arms and legs

**exchange norms**
either repaying a debt or anticipating future benefit when deciding whether to help another

**experiential learning**
education that involves “learning by doing” and reflecting on the learning experience

**familiarity heuristic**
mental shortcut that makes us feel more comfortable with things or people we have experience with than with those we have yet to experience or meet

**future orientation**
ability to think about and plan for what lies ahead, including predicting the consequences of one’s actions

**gender expression**
external manifestation of a person’s gender identity, including the way a person dresses, uses their voice, and presents themselves to the world

**heuristic**
mental shortcut used to process information more quickly

**informal education**
education that occurs without a set curriculum

**obesity**
when an individual’s BMI is over 30; correlated with many health issues including high blood pressure, diabetes, and heart disease

**obesity paradox**
observation that people with a high BMI who develop heart disease sometimes live longer and are in better health than people with a lower BMI who develop heart disease

**post-formal thought**
stage beyond formal operations that is more flexible, complex, and capable of recognizing more than one objectively correct answer to problem

**pre-exposure prophylaxis (PreP)**
medication taken regularly to reduce the chances of getting HIV

**presbyopia**
difficulty seeing things close up due to changes in the lens of the eye

**reflective thought**
logical thought processes involving continuous, active evaluation of information and beliefs using evidence and past experiences

**relativism**
idea that cultural standards, values, and ethics are a product of the time and cultural context within which they developed, and what is proper, relevant, or true for one individual may not be for another

**scarcity heuristic**
mental shortcut that causes us to believe that the rarer or less available something is, the more valuable it is

**sexual assault**
nonconsensual sexual contact

**sexual harassment**
unwanted physical or verbal attention with a sexual basis

**sexually transmitted infection (STI)**
disease caused by certain types of viruses, bacteria, or microorganisms and spread through contact with bodily fluids such as semen and blood

**spermicide**
substance that kills sperm cells

**substance abuse**
: use of drugs or alcohol in excess or for purposes for which they weren't intended, leading to problems in physical, social, and/or psychological functioning, often termed substance misuse or problematic substance use in order to avoid stigma of "abuse"; often related to substance use disorder (SUD)

This page titled 15.9.7: Key Terms is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

# 15.9.8: Summary

## 11.1 Becoming an Adult

- Arnett's theory of emerging adulthood proposes that the time period from ages 18–25 is a time of identity exploration, instability, self-focus, feeling in-between, and being in an age of possibilities. People in this age group are taking on roles and responsibilities of adult life, but gradually, and may not have long-term commitments to careers or relationships.
- Marcia's theory of identity development proposes there are four statuses to crystalizing one's identity, depending on a person's degree of exploration and commitment: identity diffusion (little exploration, no commitment), foreclosure (commitment without exploration), identity moratorium (exploration, but no commitment), and identity achievement (exploration with commitment).
- While emerging adulthood occurs in a variety of contexts and cultures, there may be differences in the way this transition is experienced. Factors such as SES and the degree to which exploration is encouraged or discouraged can influence whether and how individuals explore educational and career options and commit to jobs and relationships

## 11.2 Physical Health and Growth in Early Adulthood

- By the time most of us reach emerging adulthood, we've completed puberty, and our bodies can be considered to be fully mature.
- Various body organs, such as the muscles, endocrine system, and bone mature or reach their peak during emerging adulthood. Some declines in some of these systems start in our mid-20s, although others will remain steady until middle age.
- Problematic substance use, obesity, stress, mental health concerns, and sleep influence health during this time and may influence health later in life. Establishing good habits now is important.

## 11.3 Sexuality in Early Adulthood

- Sexuality is a broad concept that involves thoughts, feelings, and behaviors. It also includes our sense of our own gender, what aspects of gender we choose to express, and who if anyone we're attracted to.
- Sexual orientation and gender identity aren't identical concepts. Knowing a person's sexual orientation doesn't tell us anything about their gender identity.
- STIs and pregnancy are possible outcomes of sexual activity and can have significant effects on a person's life.
- Sexual assault and sexual harassment are unwanted elements of sexual behavior that can create distress.

## 11.4 Cognitive Development in Early Adulthood

- Our cognitive abilities continue to develop during adulthood in ways that allow us to solve more complex problems. Cognitive skills such as crystalized intelligence, heuristics, post-formal thought, and reflective thought allow us to use information gained from past experience, sometimes to simplify information to process it more quickly (heuristics) or to combine it with logical thought (post-formal thought) or evidence (reflective thought). Dialectical thinking occurs when we combine two opposing points of view. Divergent thought enables us to create new solutions to an issue.
- Our ability to understand and empathize with others improves during emerging adulthood. We also have more potential to perform prosocial behaviors and understand more complex moral dilemmas.
- Cultural differences such as collectivism and the definition of terms such as creativity may affect the expression of cognitive skills. Contextual variables such as a diagnosis of autism spectrum disorder may affect the degree to which a person experiences empathy and theory of mind.

## 11.5 Contexts: Higher Education and Work Achievement in Early Adulthood

- Deciding on a career path involves many factors, including cultural, economic, and educational resources.
- A college education can increase earning power, but getting this education is expensive and time-consuming. Other post-high school educational options, such as apprenticeships and technical college, need to be made more accessible as viable

alternatives to a 4-year degree.
- Today's workers are likely to seek jobs that are personally meaningful, allow for work-life balance, and facilitate physical and mental well-being. However, life circumstances and societal factors may affect job choices.

This page titled 15.9.8: Summary is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

- 11.7: Summary by OpenStax is licensed CC BY 4.0. Original source: https://openstax.org/details/books/lifespan-development.

# 15.9.9: Review Questions

1.
Shariq has avoided making an appointment at the college career center and has changed his major four times in his first year. When asked whether he likes his current major, he says, “Sure, but if something better comes along, I’ll switch.” According to James Marcia, at which identity stage is he?

a. identity achievement
b. identity diffusion
c. identity foreclosure
d. identity moratorium

2 .
What has been the impact of globalization on cultural values such as collectivism and individualism?

a. They have caused intracultural strife, as younger generations seek to maintain the values of their predecessors.
b. It has caused many cultures to become wary of and unwelcoming of outsiders to their communities.
c. The lines between these cultural values have become less distinct and may, in fact, be outdated.
d. It has led to more and more legislation that governs which behaviors are unacceptable within a given culture.

3.
Emerging adulthood is a developmental period that is

a. a time where irresponsible decisions and “experience one’s wild side” are regarded as normal and healthy
b. rejected as a concept in most collectivistic countries, but is embraced in individualistic cultures
c. bound by specific neurological changes rather than specific ages where the period begins and ends
d. recognized in some countries as a “buffer” between adolescence and full adulthood

4 .
Unintentional injuries are the leading cause of death during emerging adulthood, and the majority of them are caused by

a. overdose on recreational substances
b. head injuries during athletic or recreational events
c. accidental shootings
d. automobile accidents

5.
The American Heart Association recommends that adults get _____ of moderate intensity aerobic activity each week, though this should be spread out over multiple occasions.

a. 90 minutes
b. 4 hours
c. 150 minutes
d. 1 hour

6 .
Chronic sleep deprivation appears to damage brain tissue in the _____ and _____, producing problems with working memory, attention, and numerical processing.

a. thalamus and hypothalamus
b. prefrontal cortex and hippocampus
c. cerebellum and pons
d. amygdala and motor cortex

7.
In a 2021 study by the Urban Institute, which group of individuals was found to have the lowest percentage of children “on track” for healthy developmental outcomes?

a. White children
b. Native American and Indigenous children
c. Hispanic children
d. Black children

8 .
The quality and amount of _____, a lubricant that keeps our joints healthy, starts to decline by our 30s, which can lead to join stiffness over time.

a. collagen
b. lymph
c. synovial fluid
d. cartilage

9.
The ages at which people are most at risk of contracting an STI are

a. 20 to 30
b. 17 to 25
c. 16 to 22
d. 18 to 24

10 .
Which STI is caused by a parasite?

a. Trichomoniasis
b. Syphilis
c. Gonorrhea
d. Chlamydia

11.
What is the best way to describe the process of “coming out” for people in the LGBTQ+ community?

a. It cannot happen until one feels that they will be accepted by their family of origin.
b. It involves several tasks that are often experienced sequentially.
c. It is the only way an LGBTQ+ person can find inner peace with their sexuality.
d. It typically happens after a feeling psychological pressure has built up and must be released all at once.

12 .
Medical conditions that occur more commonly in people with weakened immune systems are called:

a. Nosocomial infections
b. Iatrogenic conditions
c. Opportunistic infections
d. Comorbid conditions

13.
Logical thought processes that rely on continuous, active evaluation of information and beliefs using evidence and past experiences are called:

a. Social cognition
b. Reflective thought
c. Crystallized intelligence
d. Divergent thinking

14 .
Changes in the brain during emerging adulthood include:

a. The end of synaptic pruning, decreased myelination, and more processing of information between more adjacent brain areas
b. The beginning of synaptic pruning, decreased myelination, and more processing of information between more distant brain

regions
c. The beginning of synaptic pruning, increased myelination, and more processing of information between more adjacent brain areas
d. The end of synaptic pruning, increased myelination, and more processing of information between more distant brain regions

15.
The ability to draw conclusions about another person's intentions and beliefs is called:

a. Cognitive theory of mind
b. Affective theory of mind
c. Cognitive altruistic empathy
d. Affective altruistic empathy

16 .
Heuristics are best described as

a. Pitfalls to problem solving that cause us to get stuck using the same solution repeatedly
b. Step-by-step plans for solving problems that always lead to solutions.
c. Shortcuts that help us process information more quickly to make decisions
d. Paradoxes in thought that cannot be resolved quickly.

17.
Convergent thought uses _____ to deal with a problem.

a. a known solution
b. new solutions
c. help from others
d. a solution that works for everyone

18 .
What are the four E's?

a. Enroll, enlist, explore, enjoy
b. Enroll, enlist, explore, employment
c. Enroll, enlist, enter, employment
d. Enroll, enlist, explore, estimate

19.
In the 2021–2022 academic year, the most common major among U.S. college students was

a. Business
b. Psychology
c. Engineering
d. Biology

20 .
According to the U.S. Department of Education, approximately what percentage of students enrolled in a two- or four-year degree program change their major before graduating?

a. 10 percent
b. 60 percent
c. 5 percent
d. 30 percent

21.
Which group of workers tends to feel most positively toward their employer and report the least amount of stress at work?

a. Workers with a bachelor's degree
b. Workers with long COVID
c. Workers over age 65

d. Workers who completed apprenticeship programs before employment

22 .
People with some college but no degree have an unemployment rate _____ than that of people with a bachelor's degree and _____ than that of people with an associate's degree.

a. Higher; lower
b. Lower; lower
c. Higher; higher
d. Lower; higher

This page titled 15.9.9: Review Questions is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

- 11.8: Review Questions by OpenStax is licensed CC BY 4.0. Original source: https://openstax.org/details/books/lifespan-development.

# 15.9.10: Check Your Understanding Questions

23 .
Identify three outcomes of a lower socioeconomic status that can play a role in people's experience of emerging adulthood.
24 .
Contrast Arnett's and Marcia's theories of emerging adulthood.
25 .
What are possible reasons that using electronic devices close to bedtime is associated with poorer sleep?
26 .
List and discuss some of the strategies noted in the text that will help with managing the effects of stress in one's life.
27 .
Compare and contrast HPV, herpes, and HIV.
28 .
Why is it accurate to surmise that one's stated sexual orientation may not fully encapsulate the range of a person's sexual feelings?
29 .
Explain the concept of post-formal thought in your own words.
30 .
Discuss the difference in how creativity is understood between people from Eastern versus Western cultures.
31 .
Explain the difference between experiential learning and informal education and the connection between them.
32 .
Explain how low SES, being a parent, and the availability of and demand for jobs can affect a person's job choices.

This page titled 15.9.10: Check Your Understanding Questions is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

# 15.9.11: Personal Application Questions

33 .
Reflect on your current stage of life. Do you feel that you are still exploring your identity, or have you made commitments in key areas such as career, relationships, and beliefs? Provide specific examples to illustrate where you are in your journey toward adulthood.
34 .
Arnett mentions the “feeling in-between” that many people experience in emerging adulthood. Can you think of a time when you felt this way? How did it impact your decisions, whether in relationships, career choices, or other aspects of life?
35 .
Consider the impact that your socioeconomic background and environment have had on your transition to adulthood. Do you feel that these factors have influenced your opportunities or challenges during this phase of life? Reflect on your experiences with education, employment, or family dynamics.
36 .
Think of three habits or behaviors that could affect your health, whether you are currently doing them, could start doing them, or should stop doing them. Describe your participation in each and how they influence your health and well-being, whether as you navigated or are currently navigating young adulthood.
37 .
As you navigated or are currently navigating young adulthood, what were or are some major milestones in your physical health and growth? How have these changes influenced your daily life and responsibilities?
38 .
Explain what future orientation means. Reflect on your degree of future orientation or that of someone you know, regardless of your current stage in life. What evidence suggests a high or low future orientation? What factors do you think have influenced this outlook, considering your unique life experiences?
39 .
As you navigated or are currently navigating young adulthood, how have your ideas about sexual maturity evolved? How did factors such as your culture, family values, or media influence your understanding of sexuality as part of your personal development?
40 .
Think about how you, or someone you know, explored or is currently exploring sexual identity and orientation. How has this process been influenced by social support, community acceptance, or cultural attitudes? How did this exploration impact their or your self-concept and relationships?
41 .
Reflect on the connection between sexual health and overall well-being as you navigated or are currently navigating young adulthood. What steps have you taken, or do you plan to take, to ensure you make healthy and informed decisions about sexual activity? Consider topics like STI prevention, consent, and communication with partners.
42 .
As you moved through young adulthood, what have you learned or experienced regarding the risk factors and consequences of sexual harassment and assault? How can individuals and communities work to reduce these incidents and create safer environments for everyone?
43 .
As you navigate or have navigated early adulthood, reflect on a time when you had to solve a complex problem that required a combination of both abstract and practical thinking. How did your ability to consider multiple solutions help you solve the problem?
44 .
Think about a recent social interaction where you had to use theory of mind and empathy to understand someone else’s perspective. How did this affect your decision-making process, and what strategies did you use to consider their emotions and beliefs?
45 .
How has your cultural background influenced the way you approach cognitive tasks such as problem-solving and decision-making? Reflect on an example where cultural values affected the way you viewed a situation or made a choice.
46 .
In what ways do you think your cognitive abilities, such as your problem-solving skills or decision-making processes, have changed as you have matured into or through early adulthood? Can you identify any specific brain or life changes that contributed to these improvements?
47 .
Think about a time when you had to make a significant decision regarding your education or career. What factors influenced your

decision, and how did you weigh the challenges and opportunities before making your choice?

48 .

Reflect on any formal or informal educational experiences you've had in early adulthood. How did these experiences shape your personal and professional development? What did you learn about yourself in the process?

49 .

If you have entered the workforce or are preparing to do so, what have you found to be the most important considerations in your decision-making? Reflect on how factors such as job availability, work-life balance, or financial needs influenced your approach.

50 .

How do you see yourself balancing personal fulfillment with financial stability in your future career choices? Reflect on any conflicts you might face between choosing a passion versus a career that offers security.

This page titled 15.9.11: Personal Application Questions is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

# 15.9.12: Essay Questions

51 .
Explain how cultural factors can shape the experience of emerging adulthood, particularly in the process of identity formation. Consider the differences between individualistic and collectivistic cultures, as well as the impact of globalization on cultural values and identity exploration. Provide examples to illustrate how culture can influence the challenges and opportunities faced during this period.
52 .
Discuss how socioeconomic status (SES) and cultural context influence physical health during young adulthood. Consider how factors such as access to resources, social support, and health-related beliefs may shape an individual's ability to maintain healthy habits. Reflect on the potential long-term consequences of these influences on an individual's health as they transition from early to later adulthood.
53 .
Sleep and stress management are two critical factors for maintaining physical and mental health during early adulthood. In your essay, discuss how sleep habits and stress management techniques during young adulthood influence long-term health outcomes. Reflect on both the immediate and lasting effects of poor sleep and chronic stress, and propose strategies for improving these areas of health as young adults transition to later adulthood.
54 .
As individuals move through emerging adulthood, they often explore their sexual identity and orientation. In this essay, examine how social and cultural factors, such as community acceptance, family support, and media portrayals, influence this process. Reflect on the complexities that individuals face during this stage of development, particularly when their sexual orientation or identity challenges societal norms. Consider how individuals navigate these challenges and how the acceptance or rejection they encounter shapes their overall well-being and identity formation.
55 .
In early adulthood, cognitive development extends beyond Piaget's formal operational stage, evolving into postformal thought. This type of thinking allows for flexibility, practicality, and an understanding that life's problems often have multiple solutions. Reflect on your own experiences during early adulthood (or the period you are currently navigating). Provide an example of when you used flexible thinking, practical problem-solving, and multiple solutions thinking. Explain how each type of thinking helped you make decisions or navigate challenges in your life.
56 .
Reflect on the challenges and opportunities young adults face in preparing for work and career. How do societal, economic, and personal factors influence career decisions, and how might these factors affect the success or satisfaction in the chosen career? Provide examples from your own experiences or observations.
57 .
Discuss the role of formal and informal educational opportunities in early adulthood. How do these learning experiences impact personal growth and career advancement? Provide specific examples of how formal education (such as college) or informal education (such as internships or volunteering) has shaped your personal or professional development.

This page titled 15.9.12: Essay Questions is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

# 15.10: SOCIAL AND EMOTIONAL DEVELOPMENT IN ADOLESCENCE (AGES 12 TO 18)


15.10.1: What Does Psychology Say?

15.10.2: Theories of Adolescent Socioemotional Development

15.10.3: Emotional and Self-Development in Adolescence

15.10.4: Identity and Culture- Race/Ethnicity, Gender, and Sexuality in Adolescence

15.10.5: Social Contexts in Adolescence

15.10.6: Family and Community Contexts in Adolescence

15.10.7: Key Terms

15.10.8: Summary

15.10.9: Review Questions

15.10.10: Check Your Understanding Questions

15.10.11: Personal Application Questions

15.10.12: Essay Questions



This page titled 15.10: Social and Emotional Development in Adolescence (Ages 12 to 18) is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

- 10: Social and Emotional Development in Adolescence (Ages 12 to 18) by OpenStax is licensed CC BY 4.0. Original source: https://openstax.org/details/books/lifespan-development.

# 15.10.1: What Does Psychology Say?



Figure 10.1 Young people are trying their hardest to fit in with their friends and peers while also trying to establish themselves as independent individuals. (credit: modification of work “Teenagers” by Monica Arellano-Ongpin/Flickr, CC By 2.0)

Twelve-year-old Madeleine checks her hair in the mirror one last time, grabs her belongings, and heads out to the car where her mother Cara is waiting. She asks her mother to please roll up the window, worried that a classmate might hear Cara’s outdated music. The car stops at the middle school entrance, and Madeleine quickly gathers her gear and jumps out. Cara calls, “I love you!” and Madeline sighs but offers the smallest smile on her face and a wave. Cara drives away, taking some comfort in the smile on her daughter’s face as Madeleine excitedly joins several friends entering the building. The friends are all wearing the same sneakers and carrying similar backpacks. On her drive to work, a mix of emotions and thoughts cross Cara’s mind:

- Where did my carefree little girl go? Is this the start of her adolescence?
- Why does she always seem annoyed with me these days?
- Why is she so concerned about fitting in?
- Is she too focused on the trends she sees on social media?
- Did she pack enough food for lunch and her after-school track practice?

This chapter explores the field of lifespan development’s perspectives and answers to these and many other everyday concerns of adolescence.

This page titled 15.10.1: What Does Psychology Say? is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

- 10.0: What Does Psychology Say? by OpenStax is licensed CC BY 4.0. Original source: https://openstax.org/details/books/lifespan-development.

# 15.10.2: Theories of Adolescent Socioemotional Development

## Learning Objectives

By the end of this section, you will be able to:

- Discuss theories about the role of adolescence in the lifespan
- Describe adolescence's central challenge: the search for identity
- Identify the developmental tasks and milestones of the adolescent period

Seventeen-year-old Armaan rushes downstairs with a basket full of his laundry. He loads the washer and readies his change of clothes and water bottle for after-school marching band practice. That evening, after a three-hour practice, Armaan grabs a veggie burger with friends. Back home, he takes a quick shower and starts studying for a big history test. Before he goes to bed, he texts with friends as he unloads the dishwasher. It's only Monday, but he's excitedly anticipating watching the high school football game on Friday night and sleeping in on Saturday.

This brief window into the life of an older adolescent leads to some big-picture questions about this period of the lifespan, including what its central developmental tasks are and how psychologists mark progression through them. Adolescence is a time of profound and often rapid change in multiple dimensions, including identity exploration and achievement, and emotional development. These changes necessitate sensitive and accommodating responses from individuals who care for teens, as well as from societal institutions like schools and governments that serve them.

## What Is Adolescence?

Human development is a series of transitions, particularly so in adolescence, which can bring sudden and dramatic changes like the onset of puberty, changes in voice, and growth in height. Adolescence is a time many societies set aside for children to transition to adult stature, status, roles, and capabilities. In other countries, children may quickly transition to adult responsibilities without being afforded the time and space to adjust to this immense developmental shift.

For instance, in several Asian and African cultures, adolescents tend to have strong family obligations and responsibilities, emphasizing group harmony and family loyalty. Older adolescents in Cambodia and rural Vietnam assume caretaking tasks and the family supporter's role (Yi, 2015). Teenage girls may face stricter gender roles and fewer opportunities than boys. Early marriage and childbearing are common in Bangladesh (Uddin, 2021) and Nigeria (Musa et al., 2021). In WEIRD nations like the United States and Canada, many families consider finishing high school a marker of adulthood, and eighteen-year-old graduates may begin to work full time and start their own households or may enter further schooling or a trade. Adolescence focuses on preparation for adulthood, such as through extended formal education, and it precludes adult status and its markers such as driving and beginning to participate in the workforce (Figure 10.2).



Figure 10.2 While the freedom to drive enhances teen autonomy, it also brings significant responsibility to drive safely. (credit: modification of work “With Driver’s License” by “slgckgc”/Flickr, CC BY 2.0)

The smoothness of the adolescent transition in countries such as the United States and Canada also varies by family composition, cultural beliefs and backgrounds, available opportunities, and socioeconomic status (SES). Adolescents from single-parent families, for example, often help with household tasks like caring for younger siblings and may even contribute to household finances. Teens who grow up in farming families or families that own a bodega or other business may begin to help run the family business and then continue to do so, if they also enjoy that industry. Teens who show interest in an academic education beyond high school may spend after-school and summer hours in academic enrichment activities. Still other teens who show interests in craft or trade industries may pursue hobbies such as sewing, electrical work, or woodworking to begin identifying potential occupational options. As these examples show, it is difficult to characterize adolescence in many countries as solely continuous or discontinuous in nature.

To understand the complexities of the adolescent transition, consider the developmental tasks associated with it. These are the biologically, psychologically, and socially relevant challenges of adolescence (Havighurst, 1948; 1972). They include achieving the cognitive development crucial for decision-making, acquiring impulse control and reasoning, developing a sense of self and personal identity, and building friendships while navigating social dynamics to gain a sense of belonging and acceptance. In addition to the biological and physical changes of puberty discussed in Chapter 9 Physical and Cognitive Development in Adolescence (Ages 12 to 18), adolescents also face several psychological and social developmental tasks (Table 10.1). To the extent that they make individual progress on these tasks, adolescents gradually mature into adulthood.

*Table 10.1 Some Developmental Tasks of Adolescence (source: McIntosh et al., 2003)*

| Psychological | Social |
|---|---|
| • In early adolescence, teens think concretely and begin to develop moral ideas, develop their sexual identity, and reassess their body image.<br>• As they grow, they start thinking abstractly but may be egocentric, develop better verbal skills, link laws with morality, and start forming strong beliefs (religious or political).<br>• In late adolescence, their abstract thinking becomes more complex. They see the difference between law and morality, have better impulse control, further develop their personal identity, and either deepen or reject their religious and political beliefs. | • In early adolescence, teens start to develop emotional independence from their parents, strongly identify with peers, and may experiment with risky behaviors like smoking.<br>• As they grow, they continue to develop emotional independence from parents, maintain strong peer connections, are more likely to experiment with health risks (like smoking and drinking), show romantic or sexual interest, and begin thinking about careers.<br>• In late adolescence, they develop social independence, form intimate relationships, and strive to acquire career skills and financial independence. |

Many societies and cultures use explicit markers to recognize progress toward adult status. Anthropologists call such a marker

a rite of passage. Table 10.2 and Figure 10.3 show some examples (Alcorta & Sosis, 2020). Parents, teens, and society alike put much attention and energy into some of these. Notice that no single marker signifies adult status in all areas of life.

*Table 10.2 Some Culture-Based Markers of Adulthood in the United States*

| Marker (Rite) | Age of Adult Status (Years) |
|---|---|
| Participating in bar/bat Mitzvah (Jewish religion) | 12–13 |
| Participating in quinceañera/o (many Latine cultures) | 15 |
| Driving | 15–17 depending on the state |
| Attending “R” rated movie without caregiver | 17 |
| Graduating from high school | 17–19 |
| Voting | 18 |
| Consenting to sexual activity | 16–18 (depending upon U.S. state) |
| Drinking, purchasing alcohol | 21 |
| Renting a car | 25 |
| Procuring own health insurance | 26 (Affordable Care Act, United States) |




(a) (b) (c)

Figure 10.3 Rites of passage include (a) having a quinceañera celebration, (b) graduating from high school, and (c) becoming old enough to vote. (credit a: modification of work “Quinceañeras del bicentenario” by Eneas De Troya/Flickr, CC BY 2.0; credit b: “Graduation” by David Harris/Flickr, CC BY 4.0; credit c: modification of work “who's YOUR candidate?” by Erin Leigh McConnell/Flickr, CC BY 2.0)

**Link to Learning**

Watch this video about a South Korean coming of age celebration to learn more.

## Psychosocial Theory of Development: Identity versus Role Confusion

To a developmental psychologist, a teenager’s social struggles and ever-evolving choices illustrate the work of adolescence: actively exploring interests, abilities, strengths, weaknesses, peer relations, and work and community roles. Collectively, these make up the most important psychosocial development task: the formation of identity.

Identity, also known as ego identity, is an individual’s complete sense of who they are, including their traits, capabilities, interests, values, and social roles. The building of identity is a lifelong process, but it takes on critical importance in adolescence because of both the sheer number of changes experienced and the sense that life is reaching a point at which our decisions and choices could have lifelong consequences (Branje et al., 2021; Crain, 1992). Forming a coherent identity takes time, and adolescence accommodates this key developmental task. Erik Erikson’s contribution to identity is sometimes thought to be one of his greatest

insights, perhaps in part due to his own experience as an immigrant with a varied cultural heritage. Erikson moved across multiple countries in his youth, experienced multiple name changes, identified as multi racial, and studied identity in multiple cultural and historic contexts (Miller, 2011).

Erikson's fifth psychosocial stage, identity versus role confusion, involves forming a stable and whole identity by first exploring various roles and identities. This stage typically occurs from ages twelve to eighteen years and is distinctive as a stage when individuals try out a variety of roles and personas in a journey to discover their individual identity. Developing an identity leads to strength and stability of identity. Failing to develop an identity results in role confusion, sometimes called diffusion, which leads to feeling fragmented or lost (Orenstein & Lewis, 2022). A strong sense of identity helps teenagers reject negative self-evaluations that don't match their inner and outer experiences, reducing anxiety. As they explore their identity, adolescents consider their past experiences, societal expectations, and personal aspirations to establish their values and discover who they are.

A recent study looked at identity development and depressive symptoms in Belgian adolescents between the ages of twelve to twenty-five years. They found young people generally develop a stronger sense of identity and experience less role confusion, though this can vary at different stages. A strong sense of identity is linked to fewer depressive symptoms, while role confusion is linked to more depressive symptoms throughout adolescence (Bogaerts et al., 2021).

### It Depends: Should We Take the Teen Movie Genre Seriously?

Film critics and social commentators may dismiss the latest movies about teenage experiences and the coming-of-age process, but they often become huge popular successes, and for good reason. Not only are they highly entertaining, filled with young stars and amusing plots, but they are tailor-made for a teenage audience that likes to see their own experiences represented, and perhaps to see whether the adult filmmakers truly understand them. Some popular examples of the teenage movie genre include *Perks of Being a Wallflower* (2012), *Spider Man: Homecoming* (2017), *Spider-Man: Into the Spider-Verse* (2018), *The Breakfast Club* (1985), *Eighth Grade* (2018), *Mean Girls* (2004, 2023), *Juno* (2007), and *To All the Boys I've Loved Before* (2018).

Almost without exception, these films take place in and around a U.S. high school, and they frequently introduce the audience to various cliques and larger social groups within the school's social ecosystem. For example, in *The Breakfast Club*, a student lists cliques like "brains" and "jocks." *Mean Girls* starts with a character pointing out different social groups. Each clique and crowd offers teenagers a way to select and try on parts of their possible identity, while some crowds are socially selected for them. *Eighth Grade* shows the life of a middle school-high school student, Kayla (Elsie Fisher), navigating anxiety-inducing social situations, social media overload, typical parent-child communication struggles, questions about sexuality, and her personal and public identity. These films highlight a central adolescent experience—exploring and achieving a complete sense of self. They reflect adolescents' experiences, sometimes playfully naming groups and often depicting characters moving through identities and roles to complete a quest. Adults are sometimes peripheral or absent.

Other adolescent themes frequently depicted in movies include inspiration, social comparison, coping, identification and idealization, and strong social relationships that bring joy, gratitude, and loss (Greenwood & Long, 2015). These themes speak to the youth culture that thrives in high schools, where the most important focus seems to be on social status and peer relations. All else pales in importance, even the whole point of school—academics. While sociocultural context and individual personality traits govern the way teens interpret these films and behave in school and out, by responding to these movies with enthusiasm, adolescent audiences tell us they are valid perspectives on their real-life experience.

Recall that in Erikson's theory, development is motivated and fueled by psychosocial crises or challenges. The relatively rapid changes in the physical bodies of adolescents guarantee that others in the social environment will begin reacting differently when around them. For example, the deep voice, tall stature, and facial hair of a fifteen-year-old male might lead others to expectations of mature thinking and behavior, even as he still struggles with some immature thought processes and lack of adult levels of brain development and self-regulation. Interactions between the developing individual and those in their social environment propel developmental progress. The adolescent is motivated to make sense of their changing place in the world and thus begin the process of identity exploration.

## Identity Statuses

James Marcia built on Erikson's work by focusing on how best to describe the developing adolescent's identity status at any point in time (Marcia, 1966; 1980). Marcia emphasized two key questions in determining the identity status of an individual: "Is there

evidence of identity exploration?" and "Is the individual currently committed to an identity?" The answers, yes or no, establish the adolescent as being in identity achievement, moratorium, foreclosure, or identity diffusion (Figure 10.4). Those who reach identity achievement often arrive after much exploration, while those in moratorium are still exploring different roles without making firm decisions (Kroger et al. 2010). These statuses also take into account various aspects of an individual's identity, including their occupation, sexuality, beliefs, and values. Often, adolescents move through these identity statuses before settling on successful identity achievement.

| Identity Status | | |
|---|---|---|
| | **LOW EXPLORATION** | **HIGH EXPLORATION** |
| **HIGH COMMITMENT** | **Foreclosure** Prematurely committed to goals or identities without sufficient consideration | **Identity Achievement** Thoughtful decisions made regarding emerging adult roles and values |
| **LOW COMMITMENT** | **Diffusion** Undecided because of lack of thought and planning | **Moratorium** Exploring the possibilities but still seeking a calling |

Figure 10.4 Marcia's identity statuses are defined by two questions. Successful identity achievement requires an individual to have explored various roles before committing to a specific identity. Individuals who commit to an identity without exploration are in identity foreclosure. Those who are actively exploring without committing are in moratorium. Diffusion indicates a failure to explore as well as a failure to commit. (CC BY 4.0; Rice University & OpenStax)

In identity moratorium, individuals are actively exploring various identities but not declaring an identity to be fully formed, instead experiencing an "identity crisis." Meeus (2023) noted that adolescents spend much of their time in identity moratorium, where identity is a work in progress. Although the term makes this sound negative, the moratorium provides the psychological space and motivation to explore. A newfound ability to imagine possible selves, various identities they may work toward in the future, motivates adolescents to start on the path toward achieving an identity. For example, people often describe college as a great period of moratorium wherein you explore various academic interests and potential paths while meeting a wider range of people.

In identity diffusion, which most closely aligns with Erikson's role confusion, individuals have low commitment and often feel lost; they do not actively seek an identity. Marcia (1980) described them as lacking a clear sense of where they will fit into society as an adult and at risk of role confusion. This might be an acceptable identity status in early adolescence, but society's expectation is that all individuals will use these years to explore and pursue interests, abilities, and roles. By exploring roles and interests, adolescents move toward identity achievement, the realization and commitment to a coherent understanding of themselves and their relationship with society. This is the pivotal psychosocial achievement of adolescence, and it provides adolescents with an initial sense of direction, purpose, and a starting point in the world at large as they enter adulthood.

In Marcia's concept of identity foreclosure, the developing teen shows an early commitment to an identity, claiming they know who they are and what they stand for, even if there is no evidence they did any exploratory work to reach that conclusion. For example, teens in early and even mid-adolescence will sometimes state their political values—such as by taking a particular stance on climate or immigration or foreign policy—but these values typically match those of their parents, and the adolescent cannot elaborate on any specifics. Identity foreclosure may serve a developmental purpose by giving the young adolescent a starting point for later exploration—after all, the world is complex and having an initial set of answers to help make sense of it can be comforting. The key is for the adolescent to eventually begin actively exploring their values and interests, with the goal of backing their own belief system with experience and/or thoughtful consideration. While an adolescent might align with their parents on a value or identity, such as sharing the same religious identity, an adolescent who has identity achievement will be able to fully explain how they arrived at that identity on their own.

While identity achievement often occurs during adolescence or early adulthood, it is not uncommon for it to take many years beyond adolescence for individuals to fully settle into identity achievement. After all, in the decades beyond adolescence we are

often learning and growing across several aspects of our identity, potentially shifting in our occupations, family and friendship roles, and moral beliefs or personal values. Achieving identity in adolescence represents a pivotal step in identity, rather than a permanent, unchangeable status.

Link to Learning

This short Pew Research Center article explores survey data on the similarities between teens' and their parents' religious and political views.

## References


Alcorta, C. S., & Sosis, R. (2020). Adolescent religious rites of passage: An anthropological perspective. In S. Hupp and J. Jewell (Eds.), *The encyclopedia of child and adolescent development* (pp. 1–12). doi.org/10.1002/9781119171492.wecad326

Bogaerts, A., Claes, L., Buelens, T., Verschueren, M., Palmeroni, N., Bastiaens, T., & Luyckx, K. (2021). Identity synthesis and confusion in early to late adolescents: Age trends, gender differences, and associations with depressive symptoms. *Journal of Adolescence, 87*, 106–116. psycnet.apa.org/doi/10.1016/...ce.2021.01.006

Branje, S., De Moor, E. L., Spitzer, J., & Becht, A. I. (2021). Dynamics of identity development in adolescence: A decade in review. *Journal of Research on Adolescence, 31*(4), 908–927. doi.org/10.1111/jora.12678

Crain, W. C. (1992). *Theories of development: Concepts and applications* (3rd ed.). Prentice-Hall, Inc. psycnet.apa.org/record/1992-98367-000

Greenwood, D., & Long, C. R. (2015). When movies matter: Emerging adults recall memorable movies. *Journal of Adolescent Research, 30*(5), 625–650. doi.org/10.1177/0743558414561296

Havighurst, R. (1972). *Developmental tasks and education*. D. McKay Company. psycnet.apa.org/record/1950-00529-000

Havighurst, R. J. (1948). *Developmental tasks and education*. The University of Chicago Press. psycnet.apa.org/record/1950-00529-000

Kroger, J., Martinussen, M., & Marcia, J. E. (2010). Identity status change during adolescence and young adulthood: *A meta-analysis. Journal of adolescence, 33*(5), 683–698. doi.org/10.1016/j.adolescence.2009.11.002

Marcia, J. E. (1966). Development and validation of ego-identity status. *Journal of Personality and Social Psychology, 3*(5), 551–558. psycnet.apa.org/doi/10.1037/h0023281

Marcia, J. E. (1980). Identity in adolescence. *Handbook of adolescent psychology, 9*(11), 159–187. scholar.google.com/citations...J:u-x6o8ySG0sC

McIntosh, N., Helms, P. J., & Smyth, R. L. (Eds.). (2003). *Forfar & Arneil's textbook of pediatrics* (6th ed.). Churchill Livingstone. https://archive.org/details/forfararneilstex6edunse

Meeus, W. (2023). Fifty years of longitudinal research into identity development in adolescence and early adulthood: An overview. *APA handbook of adolescent and young adult development,* 139–157. psycnet.apa.org/doi/10.1037/0000298-009

Miller, P. H. (2011). *Theories of developmental psychology* (5th ed.). Worth Publishers.

Musa, S. S., Odey, G. O., Musa, M. K., Alhaj, S. M., Sunday, B. A., Muhammad, S. M., & Lucero-Prisno, D. E. (2021). Early marriage and teenage pregnancy: The unspoken consequences of COVID-19 pandemic in Nigeria. *Public Health in Practice, 2,* 100152. https://doi.org/10.1016/j.puhip.2021.100152

Orenstein, G. A., & Lewis, L. (2022). *Eriksons stages of psychosocial development*. In StatPearls [Internet]. StatPearls Publishing. www.ncbi.nlm.nih.gov/books/NBK556096/

Uddin, M. E. (2021). Teenage marriage and high school dropout among poor girls: A narrative review for family pathways in

Bangladesh. *Journal of Research in Social Sciences and Language, 1*(1), 55–76. https://doi.org/10.20375/0000-000D-FF92-F

Yi, C. C. (2015). Adolescents and transition to adulthood in Asia. In S. R. Quah, *Routledge handbook of families in Asia* (pp. 191–210). Routledge. doi.org/10.4324/9781315881706

This page titled 15.10.2: Theories of Adolescent Socioemotional Development is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

- 10.1: Theories of Adolescent Socioemotional Development by OpenStax is licensed CC BY 4.0. Original source: https://openstax.org/details/books/lifespan-development.

# 15.10.3: Emotional and Self-Development in Adolescence

**Learning Objectives**

By the end of this section, you will be able to:

- Describe the course of emotional development during adolescence
- Discuss the development of self-regulation and emotional intelligence in adolescence
- Describe the development of self-concept and self-esteem in adolescence
- Explain the relevance of body image in adolescence

The alarm sounds early on fifteen-year-old Kenji's school days. After dressing and eating breakfast, he practices twenty minutes of meditation each morning. Meditation helps clear his mind and focus his energy and emotions. Today he is especially stressed because he has exams in two classes and a paper due in another. As he enters school, Kenji joins friends exchanging fist bumps. During lunch, two of his tablemates start teasing the girl sitting alone at the end of the table. Kenji weighs saying something to them or moving to a different table to avoid trouble. He decides to move. The end of the school day brings a sense of relief, although several hours of homework await. Once home, he grabs a few rice balls and a piece of candy for a snack, and retreats to his room to scroll through social media for a bit on his phone. Kenji's day is not only busy but full of different motivational states, opportunities for self-regulation, and emotions.

Emotions are the result of a complex set of cognitive, physiological, behavioral, and environmental components and interactions (Ekman et al., 1972, Scherer, 1997). They often motivate behavior, so it's not surprising that they play a prominent role in adolescent experience. They are important as teens develop an understanding of themselves, including their developing emotional intelligence, self-concept, and self-esteem, and their increased ability to self-regulate.

## Emotional Intelligence

For many, adolescence is a time when the social world expands significantly. Not only do teens spend more time outside the home, both in school and at after-school activities, but their new reasoning capabilities, fueled by physical brain developments, make interacting with peers and non family adults a central means of development. They learn to recognize and understand their own emotions, including their triggers, strengths, and weaknesses, and they begin achieving self-awareness. They learn to control impulses, manage stress, and adapt to changing circumstances with the developing skill of self-regulation. They are on their way to achieving emotional intelligence (EI)**,** the ability to recognize their own and others' emotional states and feelings, to regulate emotions, and to remain motivated (Goleman, 1998).

Emotionally intelligent individuals can also express their emotions, convey empathy, and maintain their psychological, social, and emotional well-being (Alina et al., 2021). Through social interactions, adolescents learn to express their emotions in appropriate verbal and nonverbal ways. These communication skills in turn help them grow increasingly adept at resolving conflicts and establishing healthy boundaries in their relationships. And emotional intelligence allows adolescents to use emotions as valuable information for problem-solving with rationality and flexibility.

Parents can also help foster emotional intelligence. In particular, the authoritative parenting style has shown a positive relationship with the development of emotional intelligence; while the authoritarian style has been linked with lower emotional intelligence in adolescents (Nastas & Sala, 2012; Nguyen et al., 2020). Recall that authoritative parents are sensitive to their child's daily needs and emotional states, actively encourage them to express themselves, and help them work through emotional, motivational, and social challenges. These behaviors model the use of emotional intelligence (Reyes-Wapano, 2021).

Emotional intelligence also has long-lasting benefits. Adolescents with high EI have stronger academic performance, are less likely to experience school burnout, have a deeper sense of life satisfaction overall, and tend to view themselves as having the coping skills and capabilities needed to overcome adversity (Collado-Soler, et al., 2023). Next, we'll look at self-regulation more specifically.

## Self-Regulation

The major developments in the frontal lobe and limbic system during adolescence support the growing ability to exert self-regulation**,** the ability to manage and control behavior and emotions without outside assistance (Muraven & Baumeister, 2000; McClelland et al., 2017). This skill allows us to change or inhibit certain thoughts, emotions, and behaviors to achieve better outcomes (Baumeister & Alquist, 2009; Moilanen et al., 2015). Related abilities include task persistence, delayed gratification, self-monitoring, self-reward for progress, management of frustration and distress, and the capacity to seek help when needed (Murray & Rosanbalm, 2017) (Figure 10.5).



(a) (b)

Figure 10.5 (a) Climate activist Greta Thunberg and (b) advocate for female education Malala Yousafzai became activists as teens and have demonstrated persistence in those activities into adulthood. (credit a: modification of work “Greta Thunberg, March 2020 (cropped)” by © European Union 2020 – Source: EP/Wikimedia Commons, CC BY 4.0; credit b: modification of work “Malala Yousafzai” by Southbank Centre/ Flickr, CC BY 2.0)

Self-regulation increases steadily across adolescence, shaped in part by parental and peer influences (Farley & Kim-Spoon, 2014). Caregivers regulate a child’s behavior and provide an initial set of expectations and guidance. As an adolescent develops and exhibits self-control, caregivers can reduce the amount of explicit regulation support they provide. A good-quality parent-adolescent relationship predicts good self-regulatory skills in the developing teen. However, this influence can work both ways, and a teen having difficulty regulating their emotions or behaviors will likely contribute to a difficult parent-teen relationship. Caregivers can model many of the same emotion regulation and self-regulation techniques you’ve learned about to help adolescents improve their own regulation skills. However, they can also begin to reduce their support while offering helpful reminders of emotion-regulation tools when frustration levels seem too high (Murray & Rosanbalm, 2017). For example, if a teen seems frustrated with a challenging homework assignment and is about to give up, a caregiver might remind them of the value of taking a short break, eating a snack, and then breaking the homework down into smaller steps.

Positive peer relationships are also an important predictor for, and outcome of, good self-regulation skills, including emotional self-regulation. This influence also goes both ways. Teens who exhibit strong self-regulation skills have been found to form caring, close friendships with peers. In turn, these close peer relations can help to support and reinforce self-regulation (Scholte & Van Aken, 2006; Meldrum & Hay, 2012).

## Self-Concept and Self-Esteem

Our self-concept is the mental image or representation we have of ourselves, the cognitive portion of identity. During adolescence, it goes beyond the tangible descriptions of middle childhood (like “dog lover” or “middle child”) to encompass abstract qualities like “fair” and “loyal.” Teens develop their self-concept by comparing their qualities with others’ characteristics and abilities (Harter, 2006). For example, a fifteen-year-old might pride herself on being “trustworthy” and “hard working.” She judges herself to be as trustworthy as her best friend; she believes she works far harder than most peers in her classes.

The dimensions of the self-concept, as outlined by Harter (1983), are scholastic competence, social acceptance, athletic

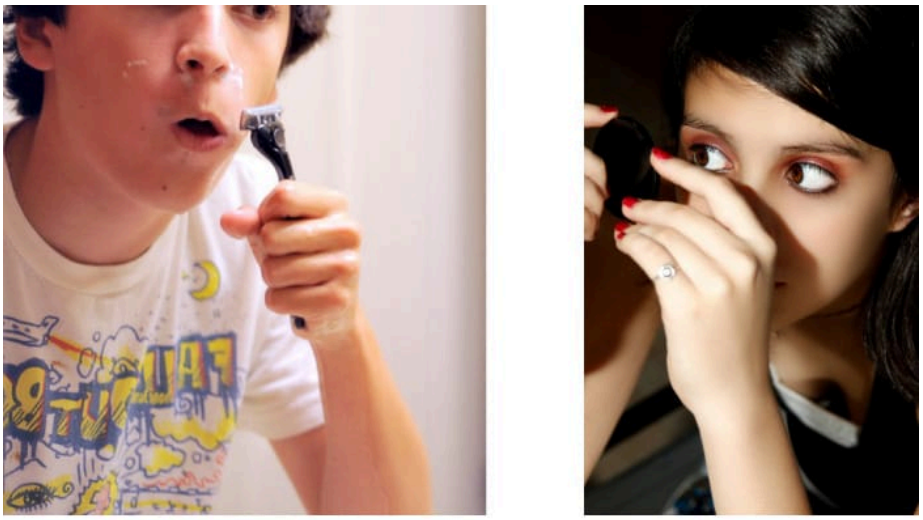
competence, physical appearance, behavioral conduct, and self-acceptance. By the end of adolescence, they have been built into a coherent whole that informs an overall identity. Longitudinal research on children suggests self-concept is relatively stable from middle childhood to middle adolescence (Kuzucu, et al., 2014), which may be a result of peer perception and niche-picking. For example, once a ten-year-old demonstrates athletic prowess, peers will likely continue to react to this by encouraging the child to join their team during athletic games, reinforcing this part of the self-concept (peer perception). Likewise, someone who discovers they are good at a skill or activity will likely seek situations that support it (niche-picking). Encouraging adolescents to try out new opportunities can help them to discover new interests, skills, and parts of their self-concept.

If self-concept is the cognitive understanding of our self, self-esteem is the motivational and emotional piece (Harter & Whitesell, 2003). Numerous studies have found a link between low self-esteem and risks of developing depression (Masselink et al., 2018; Nelis & Bukowski, 2019). Adolescents with low self-esteem have been found to have a smaller group of friends who can offer social support, and to show social adjustment problems (Marshall et al., 2014).

Overall, however, self-esteem rises over the course of adolescence, and the factors most likely to predict positive self-esteem at a later age include positive parental relationships, healthy physical activity, and positive body image (Birkeland et al., 2012). No clear sex differences in average levels of self-esteem have been reported (Masselink et al., 2017). Healthy self-esteem and a sense of mastery can be enhanced by practicing strategies like mindfulness and self-compassion (Marshall et al., 2015). Positive reinforcement, supportive feedback, and encouragement of self-discovery and physical activity can also help.

## Body Image

Physical appearance is one of the main dimensions of self-concept. Our mental image or representation of our body is our body image and is closely related to self-esteem. Given the rapid physical development of adolescence, and the social environment's ever-changing response to these developments, body image becomes a major psychological feature of the adolescent experience (Figure 10.6). If someone's body image is healthy, their mental representation of their body size and shape is healthy and positive. An unhealthy body image is just the opposite: the person's view of their body does not match objective reality and contains negative self-evaluations (Engeln, 2017; Voelker et al., 2015).



(a) (b)

Figure 10.6 Beginning new body care rituals, like (a) shaving or (b) using cosmetics, can be common ways adolescents attempt to fit in, maintain a certain body image, or work to develop a body image that matches their new life stage. (credit a: modification of work "Brotherly Supervision" by Alan Antiporda/Flickr, CC BY 2.0; credit b: modification of work "A Look in the Mirror" by "Hamner_Fotos"/Flickr, CC BY 2.0)

All adolescents are susceptible to the development of an unhealthy body image. The timing of puberty is particularly influential to this because cultural ideals for physical beauty can heighten a teen's sense of being on time or off-track for physical development relative to peers and cultural expectations. For early-maturing adolescent females in the United States, for example, breast and hip development may differ from beauty standards of a thin or athletic body shape (Lee & Styne, 2013; Uhlmann et al., 2018). For both adolescent males and females, early maturation is linked to a variety of negative psychological, social, and health outcomes (Hoyt et al., 2020). This includes being more likely to engage in risky health behaviors like experimenting with drugs and higher risks of depressive symptoms both in adolescence and in young adulthood.

Research on teen body image highlights the interplay among media exposure, cultural values, and individual factors shaping body image perceptions in different racial and ethnic groups. For instance, among Latina girls living in the United States, frequent viewing of mainstream television is linked to decreased body satisfaction, while viewing of Black-oriented television improves body satisfaction for Latina girls who have adopted more U.S. cultural beliefs (Schooler, 2008). Black adolescent girls' exposure to stereotypical media images of Black women predicted more negative interpretations and impacts of these images, particularly when racial identity was low (Jean et al., 2022). This may indicate that having a strong racial identity may protect some adolescents from the harmful influences of negative media images on body image. Asian American girls' body image perceptions are influenced by both mainstream White culture and Asian culture, which can lead to disordered eating and a lower likelihood of receiving treatment for eating disorders (Javier et al., 2019). In a study of Chinese teenagers, girls were generally more unhappy with their gender and physical appearance, while boys were more unhappy with their sexual organs (Zhang et al., 2020). Overall, many contextual influences and individual differences interact to shape an adolescent's body image.

## Link to Learning

Watch this clip to learn more about a school in East London is the first to start lessons using a Body Confidence Campaign Toolkit to help schoolchildren develop healthy confidence in their bodies.

Information that contributes to adolescents' body image comes from peers, family members, television and movies, advertisements, and social media. The Surgeon General of the United States recently published an advisory for parents, educators, and practitioners warning of the dangers of social media use by adolescents (Office of the U.S. Surgeon General, 2023). It notes a particular concern for adolescent girls, citing an increase in the risk for developing a negative body image and eating disorders (Holland & Tiggemann, 2016). Parents' words, attitudes, and behaviors related to health, diet, exercise, and physical development contribute to teens' sense of their physical selves, and mothers play a significant role in their teenage daughters' views (Helfert & Warschburger, 2011; Neumark-Sztainer, et al., 2010). Peers provide feedback about which body types are valued and how someone is doing relative to those standards.

## Life Hacks: Promoting a Healthy Body Image

What can we do to encourage a healthy body image in adolescents? Caregivers can start with developing their own healthy body image so they can better model healthy behaviors, emotions, and thoughts for their children (Jensen et al., 2018). Similarly, adults can embrace and encourage body diversity, the idea that our physical diversity is good, and that people all have different strengths. Further, teaching children about media literacy and critically analyzing media messages builds a good set of lifelong skills, helping children counteract negative information about beauty ideals as represented in the media. Finally, one counter intuitive but important recommendation is to avoid saying positive things about someone based solely on notions of physical beauty. By praising someone for their physicality alone, adults are inadvertently signaling that this matters above other characteristics like personality, intelligence, or talents. Instead, praise desirable characteristics and effort.

Here are some other tips for promoting healthy body image:

1. Avoid making comments about your weight or the weight of others, especially around children and teens (Neumark-Sztainer et al., 2010). In addition, avoid making negative comments about your own body.
2. Promote media literacy by talking about media representations that may model an unhealthy body image. If a character in a show says negative things about their own body or another person's body, caregivers can use that as an opportunity to talk about how to interpret media messages.
3. Engage in healthy behaviors at home to maintain a healthy body, including a good diet and exercise habits. Be careful though—it's better to frame your workout and nutrition choices as being to "stay strong" or "stay healthy" rather than talk about specific beauty or weight goals.
4. If you catch yourself saying something negative about your body, other bodies, or promoting an unhealthy diet—make it right. You can point out that you made a mistake, apologize, and note that you. should do better with being body positive—for your own well-being and the well-being of others.

Link to Learning

Watch this clip of actors depicting a non-judgmental parent-teen conversation about body positivity, followed by some tips about having such conversations from a nutritionist.

## References


Akinnawo, E. O., Akpunne, B. C., & Olufunmilayo, O. (2019). Parenting style, emotional intelligence and psychological health of Nigerian children. *Asian Journal of Pediatric Research, 2*(2), 1–11. www.researchgate.net/publica...erian_Children

Alina, S., Olena, L., & Mykola, K. (2021). Emotional intelligence of teenagers as a prerequisite for their professional determination. *Psychologival sciences perspectives of development of science and practice*, Prague, Czech Republic. (pp. 458–460). https://elibrary.kubg.edu.ua/id/eprint/40016

Banyard, V., Mitchell, K. J., Waterman, E. A., Rizzo, A. J., & Edwards, K. M. (2020). Context matters: Reactive and proactive bystander action to prevent sexual and dating violence in high schools. *Journal of School Violence, 19*(4), 499–511.doi.org/10.1080/15388220.2020.1752221

Baumeister, R. F., & Alquist, J. L. (2009). Is there a downside to good self-control? *Self and Identity, 8*(2–3), 115–130. doi.org/10.1080/15298860802501474

Birkeland, M. S., Melkevik, O., Holsen, I., & Wold, B. (2012). Trajectories of global self-esteem development during adolescence. *Journal of Adolescence, 35*(1), 43–54.

Collado-Soler, R., Trigueros, R., Aguilar-Parra, J. M., & Navarro, N. (2023). Emotional intelligence and resilience outcomes in adolescent period, is knowledge really strength? *Psychology Research and Behavior Management, 16*, 1365–1378. https://doi.org/10.2147/PRBM.S383296

Ekman, P., Friesen, W. V., & Ellsworth, P. (1972). *Emotion in the human face: Guidelines for research and an integration of findings*. Pergamon Press.

Engeln, R. S. (2017). *Beauty sick: How the cultural obsession with appearance hurts girls and women*. Harper. www.researchgate.net/publica...irls_and_Women

Erikson, E. H. (1970). Autobiographic notes on the identity crisis. Daedalus, 99(4), 730–759. psycnet.apa.org/record/1971-24940-001

Farley, J. P., & Kim-Spoon, J. (2014). The development of adolescent self-regulation: Reviewing the role of parent, peer, friend, and romantic relationships. *Journal of Adolescence, 37*(4), 433–440. doi.org/10.1016/j.adolescence.2014.03.009

Goleman, D. (1998). *Working with emotional intelligence*. Bantam Books.

Harter, S. (1983). Development perspectives on the self-system. In Hetherington E. M. (Ed.), *Handbook of child psychology, vol. 4: socialization, personality, and social development*. Wiley. https://api.semanticscholar.org/CorpusID:143903129

Harter, S. (2006). The development of self-esteem. In M. H. Kernis (Ed.), *Self-esteem issues and answers: A sourcebook of current perspectives* (pp. 144–150). Psychology Press. psycnet.apa.org/record/2006-12386-018

Harter, S., & Whitesell, N. R. (2003). Beyond the debate: Why some adolescents report stable self-worth over time and situation, whereas others report changes in self-worth. *Journal of Personality, 71*(6), 1027–1058. doi.org/10.1111/1467-6494.7106006

Helfert, S., & Warschburger, P. (2011). A prospective study on the impact of peer and parental pressure on body dissatisfaction in adolescent girls and boys. *Body Image, 8*(2), 101–109.

Holland, G.,& Tiggemann, M. A. (2016). A systematic review of the impact of the use of social networking sites on body image and disordered eating outcomes. *Body Image17,* 100–10. https://doi.org/10.1016/j.bodyim.2016.02.008

Hoyt, L. T., Niu, L., Pachucki, M. C., & Chaku, N. (2020). Timing of puberty in boys and girls: Implications for population health. *SSM Popul Health, 10*, 100549. https://doi.org/10.1016/j.ssmph.2020.100549

Javier, S. J., & Belgrave, F. Z. (2019). "I'm not White, I have to be pretty and skinny": A qualitative exploration of body image and eating disorders among Asian American women. *Asian American Journal of Psychology, 10*(2), 141–153. doi.org/10.1037/aap0000133

Jean, E. A., Neal-Barnett, A., & Stadulis, R. (2022). How we see us: An examination of factors shaping the appraisal of stereotypical media images of Black women among Black adolescent girls. *Sex Roles, 86,* 334–345. https://doi.org/10.1007/s11199-021-01269-8

Jensen, M., Savoie-Roskos, M. R., Neid-Avila, J., & Bingeman, B. (2022). Tips to encourage a healthy body image in your child. [Fact sheet]. Utah State University. https://digitalcommons.usu.edu/cgi/v...tension_curall

Kuzucu, Y., Bontempo, D. E., Hofer, S. M., Stallings, M. C., & Piccinin, A. M. (2014). Developmental change and time-specific variation in global and specific aspects of self-concept in adolescence and association with depressive symptoms. *The Journal of Early Adolescence, 34*(5), 638–666. doi.org/10.1177/0272431613507498

Lee, Y., & Styne, D. (2013). Influences on the onset and tempo of puberty in human beings and implications for adolescent psychological development. *Hormones and Behavior, 64*(2), 250–261. https://doi.org/10.1016/j.yhbeh.2013.03.014

Marshall, S. L., Parker, P. D., Ciarrochi, J., Sahdra, B., Jackson, C. J., & Heaven, P. C. L. (2015). Self-compassion protects against the negative effects of low self-esteem: A longitudinal study in a large adolescent sample. *Personality and Individual Differences, 74*, 116–121. https://doi.org/10.1016/j.paid.2014.09.013

Masselink, M., Van Roekel, E., Oldehinkel, A. J. (2018). Self-esteem in early adolescence as predictor of depressive symptoms in late adolescence and early adulthood: The mediating role of motivational and social factors. *Journal of Youth and Adolescence, 47*(5), 932–946. https://doi.org/10.1007/s10964-017-0727-z

McClelland, M., Geldhof, J., Morrison, F., Gestsdóttir, S., Cameron, C., Bowers, E., Duckworth, A., Little, T., & Grammer, J. (2017). Self-regulation. In N. Halfon, C. B. Forrest, R., M. Lerner, et al. (Eds.), *Handbook of life course health development* (pp. 275–298.) www.ncbi.nlm.nih.gov/books/NBK543706/

Meldrum, R. C., & Hay, C. (2012). Do peers matter in the development of self-control? Evidence from a longitudinal study of youth. *Journal of Youth and Adolescence, 41*(6), 691–703. https://doi.org/10.1007/s10964-011-9692-0

Miller, P. H. (2011). *Theories of developmental psychology* (5th ed.). Worth.

Moilanen, K. L., Rasmussen, K. E., & Padilla-Walker, L. M. (2015). Bidirectional associations between self-regulation and parenting styles in early adolescence. *Journal of Research on Adolescence, 25*(2), 246–262. doi.org/10.1111/jora.12125

Muraven, M., & Baumeister, R. F. (2000). Self-regulation and depletion of limited resources: Does self-control resemble a muscle? *Psychological Bulletin, 126*(2), 247–259. doi.org/10.1037/0033-2909.126.2.247

Murray, D. W., & Rosanbalm, K. (2017). Promoting self-regulation in adolescents and young adults: A practice brief. Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services. https://www.acf.hhs.gov/sites/defaul..._reduced_0.pdf

Nastas, L.-E., & Sala, K. (2012). Adolescents' emotional intelligence and parental styles. *Procedia - Social and Behavioral Sciences, 33*, 478–482. https://doi.org/10.1016/j.sbspro.2012.01.167

Nelis, S., & Bukowski, W. M. (2019). Daily affect and self-esteem in early adolescence: Correlates of mean levels and within-person variability. *Psychologica Belgica, 59*(1), 96–115. https://doi.org/10.5334/pb.467

Neumark-Sztainer, D., Bauer, K. W., Friend, S., Hannan, P. J., Story, M., & Berge, J. M. (2010). Family weight talk and dieting: how much do they matter for body dissatisfaction and disordered eating behaviors in adolescent girls? *Journal of Adolescent Health, 47*(3), 270–276. https://doi.org/10.1016/j.jadohealth.2010.02.001

Nguyen, Q.-A. N., Tran, T. D., Tran, T. T., Nguyen, T. A., & Fisher, J. (2020). Perceived parenting styles and emotional intelligence among adolescents in Vietnam. *The Family Journal, 28*(4), 441–454. dx.doi.org/10.1177/1066480719896558

Office of the U.S. Surgeon General. (2023). *Social media and youth mental health*. The U.S. Surgeon General's Advisory, U.S. Department of Health and Human Services. www.hhs.gov/surgeongeneral/p...dia/index.html

Reyes-Wapano, M. R. (2021). Does parenting style predict emotional intelligence? *International Journal of Research and Innovation in Social Science, 5*(7), 649–657. https://www.rsisinternational.org/jo...-7/649-657.pdf

Scherer, K. R. (1997). The role of culture in emotion-antecedent appraisal. *Journal of Personality and Social Psychology, 73*(5), 902–922. doi.org/10.1037/0022-3514.73.5.902

Schooler, D. (2008). Real women have curves: A longitudinal investigation of tv and the body image development of Latina adolescents. *Journal of Adolescent Research, 23*(2), 132–153. doi.org/10.1177/0743558407310712

Scholte, R. H., & van Aken, M. A. (2006). Peer relations in adolescence. In S. Jackson & L. Goossens (Eds.), *Handbook of adolescent development* (pp. 175–199). Psychology Press. psycnet.apa.org/record/2006-13178-010

Uhlmann, L. R., Donovan, C. L., Zimmer-Gembeck, M. J., Bell, H. S., & Ramme, R. A. (2018). The fit beauty ideal: A healthy alternative to thinness or a wolf in sheep's clothing? *Body Image*, *25*, 23–30. https://doi.org/10.1016/j.bodyim.2018.01.005

Voelker, D.K., Reel, J. J., & Greenleaf, C. (2015). Weight status and body image perceptions in adolescents: Current perspectives. *Adolescent Health, Medicine and Therapeutics, 6,* 149–158. https://doi.org/10.2147%2FAHMT.S68344

Zhang, Y., Li, T., Yao, R., Han, H., Wu, L., Wu, X., Huaiquan, G., Sun, L., & Fu, L. (2020). Comparison of body-image dissatisfaction among Chinese children and adolescents at different pubertal development stages. *Psychology Research and Behavior Management, 13,* 555–562.

This page titled 15.10.3: Emotional and Self-Development in Adolescence is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

- 10.2: Emotional and Self-Development in Adolescence by OpenStax is licensed CC BY 4.0. Original source: https://openstax.org/details/books/lifespan-development.

# 15.10.4: Identity and Culture- Race/Ethnicity, Gender, and Sexuality in Adolescence

**Learning Objectives**

By the end of this section, you will be able to:

- Describe the development of ethnic and multicultural identity during adolescence
- Discuss how adolescents can develop a bi/multiracial identity
- Outline the process of developing a gender identity in adolescence
- Describe the development of sexual orientation during adolescence

Sixteen-year-old Taylor looked forward to finally being a junior at their high school. The course choices open to upperclass students were more interesting and offered the opportunity to engage more closely with peers who shared similar interests. Taylor generally got along with the various cliques at school, and their closest friends were connections developed over the past few years. This included soccer teammates, lunch buddies (one of whom Taylor had a crush on), some gaming friends, and fellow Hmong students involved in the Hmong student club. Taylor's experiences with these various relationships and contexts serve an important role in establishing their identity at this stage of life.

Many social interactions are informed by our own and others' expectations based on perceived racial and ethnic identity, gender identity, and sexual orientation and identity. Thus, a key part of healthy adolescence is searching for our own identity by exploring these areas.

## Racial and Ethnic Identity Development in Adolescence

Our cultural heritage consists of adaptations to the natural and social world that have shared meaning and are passed from generation to generation (Cohen, 2009). Our *ethnicity* derives from our cultural heritage. *Race*, in contrast, is a socially created construct that often incorporates elements of cultural heritage. (Revisit 1.4 Contexts and Settings of Development to review the overlaps and distinctions between race, ethnicity, and culture.) Learning about and incorporating our cultural heritage into our sense of self is part of the multifaceted achievement of identity.

The demographics of any country's population are always changing. In the United States, the 2020 census revealed that the overall size of many ethnoracial minority groups is increasing, especially among youth (Figure 10.7). According to the census, only 53 percent of those under age eighteen years were reported as "White alone" as their race, compared with 64.1 percent of adults. Black or African American children make up 13.9 percent of the U.S. population, Asian American children 5.5 percent, and American Indian and Alaska Native children 1.4 percent, and fully 15.1 percent of all children identified as being of two or more races. More than one-quarter of all children report having Hispanic or Latino heritage, compared with 16.8 percent of the adult population (U.S Census Bureau, 2020).[1]

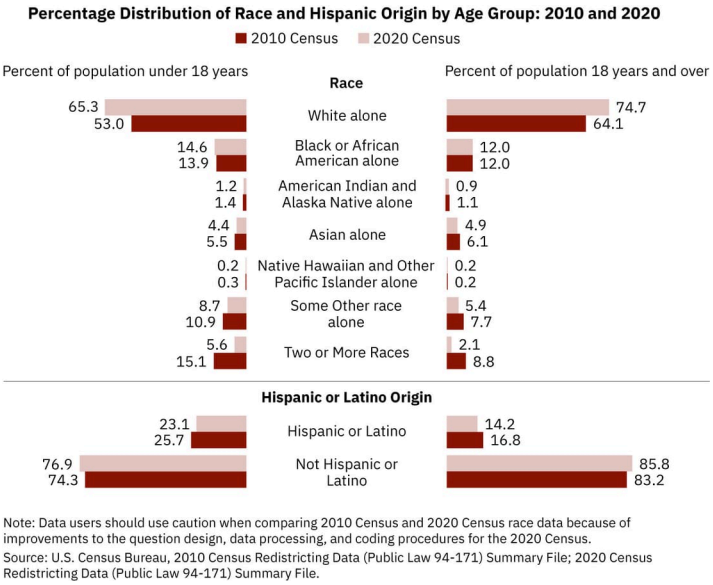



Figure 10.7 Census data illustrate the percentage of various race and ethnic groups in different age groups. Note the differences between 2010 and 2020. (credit: modification of work "Figure 5. Percentage Distribution of Race and Hispanic Origin by Age Group: 2010 and 2020" by U.S. Census Bureau/United States Census Bureau, Public Domain)

These figures point out the value of specific developmental theories and trajectories for adolescents from non-White backgrounds. They also show the irony of using the term "minority" to describe the ethnoracial composition of the United States. Of course, the term "minority" refers to more than just population counts. That is, when people talk about minority or majority groups in psychology, they refer to both the numbers and the opportunities each group has. Similarly, when discussing equity, diversity, and inclusion (EDI), it usually means efforts to ensure all groups have equal chances and access, no matter whether they are a majority or minority group status. For example, research on African American, Asian American, and Latinx adolescents shows that these students experience more regular ethnic/racial discrimination, such as in school, which results in more negative mood and poorer mental health (Del Toro et al., 2024).[2] These experiences are often due to systemic issues like racial bias and may lead to fewer opportunities in adulthood including lower wages and fewer promotion opportunities. However, this research study also showed how resilience was quite likely when adolescents received more culturally inclusive socialization (Del Toro et al., 2024).

Research shows that the development of a positive ethnic or racial identity in teens leads to higher self-esteem, better mental health, and greater resilience against discrimination (Rivas-Drake et al., 2014). This positive identity fosters a sense of belonging and empowerment.

## The Benefits of Positive Ethnic or Racial Identity Development

The term "ethnoracial" highlights the unique racial experiences of individuals within an ethnicity. Black, White, Asian, and Indigenous Latinés each have distinct racial experiences, as do all individuals within each of these groups (Sandoval, 2023; Jiménez et al., 2015). In other words, ethnoracial groups have differences both between groups and within individuals who may share the same ethnoracial identity. For a growing proportion of the adolescent population, developing a positive ethnic and/or racial identity is a critical part of healthy development (Rivas-Drake et al., 2014). A positive ethnoracial identity is one in which the adolescent acknowledges and feels connected with their community, incorporates their social group into their self-concept, and views that part of themselves with healthy esteem. This result is associated with numerous healthy outcomes and has been shown to serve as a safeguard against discrimination (Galliher et al., 2011; Umaña-Taylor & Rivas-Drake, 2021).

For example, Umaña-Taylor and colleagues (2018) conducted a study on a high school intervention called the Identity Project, aimed at developing ethnoracial identity in youth of color. The eight-session program, which addressed identity, stereotypes, racism, and heritage, led to increased ethnoracial identity exploration and better psychological outcomes, including improved coping skills against discrimination. White adolescents may also benefit from developing a healthy ethnoracial identity even when they may be growing up in a White majority culture (Satterthwaite-Freiman & Umana-Taylor, 2023). While White is a racial term, White identities may involve overlapping aspects of cultural and/or national heritage, ethnicity, and race. Research indicates that White American adolescents may choose between a few facets of ethnoracial identity, including an American identity, a sense of connection to their European ancestry (e.g., Irish, German, or Polish ancestry), a connection to an ethnic community (e.g., a local

Greek community in an American city), or a blended identity (Koutrelakos, 2013; Satterthwaite-Freiman & Umana-Taylor, 2023).

A comprehensive review of positive ethnoracial identity found that for African American youth, a positive ethnic identity leads to higher self-esteem, a more positive self-concept, higher academic achievement and engagement, decreased depressive and somatic symptoms (bodily manifestations of psychological distress), better coping and mastery, and decreased perceived stress, especially about discrimination (Rivas-Drake, et al., 2014).[3] For Latino youth, affirmation of their Latino community was associated with higher self-esteem and increased exploration of their culture and community. Such youth also exhibited fewer internalizing symptoms (like depression and anxiety) and less externalizing behavior (such as acting out in a problematic way). There were also positive influences on academic engagement, self-efficacy, and school performance.

## Adolescent Development of Black Identity

Psychology researcher William Cross described an entire developmental pathway for the way Black youth achieve an identity (Cross, 1991, 1995, 2022;[4] Burrell-Craft, 2020). His theory posits a series of stages encountered in sequence, though movement back and forth between the stages is possible. Prior to adolescence, children are in the *pre-encounter phase* of racial identity formation. They internalize messages from the dominant majority culture that emphasize the majority as being positive and that view the minority culture negatively. As a result of exposure to the dominant cultural view, Black children and adolescents may distance themselves from Black culture (Gardner-Kitt & Worrell, 2007).

Adolescence marks the typical beginning of the *encounter phase*. This encounter is often a negative trigger, such as the experience of outright discrimination in the social environment adolescents are now more broadly exposed to. They begin trying to reconcile their ethnoracial identity with what they thought they knew or understood about the dominant cultural group. Often, this means turning toward their ethnoracial group and seeking to learn more about this part of themselves. This stage is called *immersion/emersion*. Black youth in this stage will begin to incorporate visible parts of their heritage into their everyday lives and find support from other Black community members.

The immersion/emersion stage can be seen as a kind of fortifying step, in which "cultural armor" is added. Eventually, developing youth will internalize the more visible and concrete symbols of their heritage, incorporating its ideas and concepts into their own self-view. It is during this *internalization stage* that Black youth feel more comfortable connecting with allies from the dominant culture, and they may then seek positive action and justice in their lives, effectively using their strong ethnoracial identity to make a difference. For example, a Black teenager might join a school club that focuses on social justice, working alongside peers of different backgrounds to promote equality and awareness in their community.

## Adolescent Development of Latino and Hispanic Identity

The Latino community is a heterogenous group, with between- and within-family differences by country of birth; heritage; and racial, indigenous, immigration, and documentation background (Pew Research Center, 2022).[5] Many Latino youths in the United States are raised in Spanish-speaking households, with varying levels of social interactions with other communities and multiple connections with both Latino and non-Latino youths (Patten, 2016; U.S. Census Bureau, 2014).

A leading theory of identity formation for Latino youth proposes not a sequence of stages, but rather a set of "orientations or lenses" (Pabón Gautier, 2016;[6] Ferdman & Gallegos, 2001[7]) that describe various degrees of identification. For example, some Latino youth raised in predominately White areas have only weak identification with their Latino heritage or background (Torres, 2003)[8]. Latinos with darker skin tones are much less likely to identify as White and more likely to identify with non-White labels like Afro-Latinx (Flores, 2023).[9] Others are "Undifferentiated," accepting the dominant culture and adopting *colorblindness* as a stance. That is, they focus on the similarities among ethnoracial groups and claim not to recognize either positive or negative qualities based on ethnicity or race (Ferdman & Gallegos, 2001). A Pew Research Center survey by Gonzales-Barrera (2019)[10] found that light-skinned Hispanic people had similar experiences with discrimination as non-Hispanic White people. Around 25 percent of both groups reported feeling that others were suspicious of them, and about 20 percent said they faced unfair treatment in pay or hiring. About half the Hispanic respondents identified as White, with 68 percent of those with the lightest skin tones doing so. While skin tone affected the way Hispanic people were treated, for Black people, discrimination was more influenced by factors like gender and education level.

Other lenses include "Latino as Other," meaning the individual views themselves generically as Latino with no specific country or cultural connection, and "Subgroup Identified," whose members accept a regional subgroup identification (Central American, for example) (Ferdman & Gallegos, 2001). Finally, those who fully acknowledge and accept their specific Latino heritage, "Latino

Identified," and those who take a more change-oriented "Latino Integrated" view, show full achievement of a Latino identity, and an understanding of the racial structure of society and of ways to push back and challenge these structures (Ferdman & Gallegos, 2001).

You might note a similarity between these lenses and Cross's Black Identity Development model. For example, a teenager who identifies as Afro-Latino might embrace both their African and Latino heritage, actively participating in cultural events from both backgrounds and challenging stereotypes. Latino identity is multifaceted and influenced by a combination of cultural, racial, and societal factors, emphasizing the importance of understanding and respecting this diversity within the community.



Figure 10.8 Navigating the identities and terms associated with Hispanic and Latino identity is complex. (credit: modification of work "3402/vintage" by nappy/CC0 1.0 )

Link to Learning

What is Afro-Latino? This video explores the cultural impact of identity at the intersection of two minorities (Black and Latino).

## Adolescent Development of Asian American and Pacific Islander Identity

The 2020 U.S. Census counted 20.6 million individuals who identified as having Asian, Native Hawaiian, or Pacific Islander heritage, representing 6.2 percent of the overall U.S. population (U.S. Census Bureau, 2020). Statistics Canada reports over seven million Asian Canadians, or 19.3 percent of Canada's population (Statistics Canada, 2024).

Psychiatrist Jean Kim (Kim, 1981, 2001; Choi, 2021; Woo et al., 2020) identified a model that envisions the process of Asian American ethnic identity formation along a continuum, from early childhood through adolescence and into adulthood. Individuals begin by becoming aware of an Asian American ethnicity, and much of the process takes place via interactions with parents and community members. Children are sensitive to both positive and negative messages, conveyed both outright and informally in these interactions.

According to Kim (1981, 2001), as they begin formal schooling, Asian American children tend to enter a *White identification stage*. They encounter attitudes toward Asian-Americans, including prejudices, through interactions with peers and the school environment. Ethnic and racial discrimination and social ranking greatly shape the way minority youth experience being part of a minority. As a result, they frequently choose to (temporarily) minimize their ethnic heritage and identify with the dominant White culture.

You've learned about the increased cognitive skill set that comes with the development of formal operations in children, and the increased opportunities for social interaction afforded by an adolescent's rich and complex social environment. Together these tend to lead to an awakening to social and political consciousness for Asian American youth. The trigger is often the awareness of long-standing prejudices and oppression of minority groups, including their own. This is consistent with what researchers have

seen with other ethnic identity models—the impetus to develop an ethnic identity often arises from a negative encounter with the dominant ethnic group (Cross et al., 2022; Sellers et al., 2006).

The result, according to Kim (1981, 2001), is a decreased desire to identify with the White majority group, and a *redirection stage* wherein Asian American adolescents search for knowledge about their ethnic heritage. There is often a sense of anger about the dominant White culture during this search. Finally, adolescents arrive at an *incorporation stage*: adoption of a positive view of themselves as Asian American and a level of comfort with this aspect of their identity. Notably, anger, distancing from, and even longing to identify with White-dominant culture have faded as the teen or young adult embraces their Asian American identity.

## American Indian and Alaska Native (AI/AN) Identity Development in Youth

U.S. Census Bureau statistics reveal that from 2017 to 2021, 2.7 million U.S. residents identified solely as American Indian and Alaska Native (AI/AN), while 6.3 million identified as AI/AN alone or in combination with other races. Among those aged five years and older, 32.1 percent spoke a non-English language at home, and 58.9 percent of those age sixteen years and over were part of the labor force (U.S. Census Bureau, 2023).[11]

Walters (1999)[12] suggested a model for urban American Indian cultural identity development, where individuals move from internalizing negative stereotypes, to feeling marginalized between two cultures, to rejecting colonization's negative impacts, and finally to having a strong and resilient American Indian identity. A study with urban American Indian adults showed they often started by rejecting their Native identity and ended up embracing it healthily (Lucero, 2010).[13] Kulis and colleagues (2013)[14] found that urban American Indian youth who felt strongly connected to their Indigenous background participated more in traditional cultural practices. In another study, House and colleagues (2006)[15] found that urban American Indian children and adults talked about urban-rural tension, cultural pride, and intergenerational trauma from relocation, which influenced their identity. Thus, American Indian youth often move from internalizing negative stereotypes to embracing a resilient cultural identity, with connections to traditional practices and awareness of intergenerational trauma influencing their identity development.

The lack of Native American representation in modern media affects this group's identity and self-understanding. When represented, Native Americans are often portrayed as outdated figures or negative stereotypes, limiting the perception of what they can achieve in today's society. Leavitt et al., (2015)[16] noted that the lack of representation in the media harms Native American youths' self-understanding by making their identities all seem the same, creating limited and narrow identity examples, and leading to loss of individuality and self-stereotyping among Native American teenagers today. Further, policymakers and educators should support schools in avoiding harmful and negative representations, like mascots, that stereotype and potentially harm Native American students.

## Biracial or Multiracial Ethnic Identity

A growing number of individuals are members of two or more ethnic groups. Carlos Poston (1990)[17] put forth a model of biracial ethnic development that shows the complex and active search for information about their ethnic heritage that biracial adolescents may undergo.

In Poston's model, biracial ethnic identity formation begins with the individual's feeling a need to choose one ethnic group over the other. For example, an Afro-Caribbean teen whose family has immigrated from Jamaica to the United States may feel the need to first identify with her Black ethnoracial identity and de-emphasize her Caribbean heritage. Alternatively, they may feel the need to first identify with their Caribbean heritage while de-emphasizing their Black ethnoracial identity. Choosing one ethnicity over the other may simplify the cultural learning that forms the basis of identity formation. Later, as the model points out, the teen may experience a sense of guilt for exclusively embracing just one aspect of their ethnoracial heritage, often leading to reexamination and further exploration of the other. The end of the process of biracial identity formation often brings a growing appreciation of the benefits of adopting multiple ethnic identities, including a sense of belonging and connection with the person's heritage (Poston, 1990). Identity formation is complete when the adolescent works to integrate both (or more) sets of cultural knowledge and identities into a coherent whole.

One potential benefit of being bi- or multiracial is code-switching, the ability to change our perspective and behavior to match the demands of our current cultural environment.

Code-switching can include changing hairstyle, speech, or name or downplaying cultural identity to avoid negative stereotypes (Hutton, 2022). For example, someone might switch between formal and casual language depending on who they're with. But

code-switching can be exhausting (Johnson et al., 2021) and make someone feel they must change who they are to be accepted. Creating inclusive environments that embrace diversity and encourage alliance can help minimize the need.

Link to Learning

This video shares the experiences of people who code-switch to succeed in the larger culture, especially their workplaces.

## Gender Identity in Adolescence

Gender is a major component of self-concept and a major part of our overall identity. Recall that sex is assigned based on features of biological anatomy and physiology, and it can be male, female, or intersex, while gender consists of society's ideas about the roles, attitudes, and behaviors associated with each sex assignment. Gender identity is our own psychological sense and acceptance of our particular gender. The way we label our gender identity is also related to whether it conforms to society's expectations based on sex assignment, denoted as "cis" if it conforms to those expectations, or "trans" if it is nonconforming.

Ideas about sex and gender constitute some of the earliest social influences on our development, and individuals enter adolescence with an abundance of information about gender and gender norms. For many, gender identity follows from a sense of congruence among their physical sexual characteristics, their assigned gender at birth based on those sexual characteristics, and a childhood of socially reinforced gender-conforming behaviors (Diamond & Butterworth, 2008; Steensma, et al., 2013).

The gender intensification hypothesis (Hill & Lynch, 1983) posits that pressures to conform to gender roles intensify during adolescence, leading to increased self-consciousness and lower self-esteem in girls than in boys. In many European societies, boys are encouraged to demonstrate autonomy, self-assertion, and dominance, while girls are typically taught to prioritize kindness, caring, compassion, and a focus on others (Kollmayer et al., 2018). This study found that fathers' gender-role identities influenced these dynamics; traditional fathers discouraged autonomy in daughters, while egalitarian fathers encouraged it. Fathers of sons were less likely to closely monitor their sons, thereby allowing for more autonomy.

Researchers have also investigated the way gender roles develop in families in childhood through adolescence (Shanahan et al., 2007; Crouter et al., 2007). They found that the chores performed by boys and girls became more gender-specific over time, especially in families that adhered to traditional gender roles. In childhood and adolescence, youth also spent more time with the same-gender parent, particularly if they had different-gender siblings. Girls reported feeling more warmth from their mothers and less from their fathers than their brothers reported. Attitudes toward gender roles changed differently for boys and girls as they grew older, influenced by family context and individual characteristics. Girls became less traditional, while boys initially became less traditional but then became more traditional later.

Another study explored whether adolescents became more gender-stereotypical, and whether doing so predicted depression (Priess et al., 2009). Girls reported higher stereotypical femininity than boys, but no increase in stereotypical gender traits was found over time. Higher stereotypical masculinity in both girls and boys predicted fewer depressive symptoms, especially under moderate stress (Priess et al., 2009). These changes mostly happened during the transition to adolescence.

A recent study used the gender identity theory to explore cultural interest differences between different-gendered adolescents. A sample of Flemish adolescents found that identifying strongly with traditional gender roles and feeling pressure to conform led girls to have more interest in arts and literature, while boys had much less interest (Lagaert et al., 2017). Gender identity and social pressures may reinforce gender-specific cultural preferences.

A feeling of mismatch or discontent with their socially assigned gender serves as the impetus for some adolescents to begin exploration of gender identity (Steensma, et al, 2013). This discontent is likely amplified by the dramatic hormonal and bodily changes that occur during puberty for all adolescents. The developing adolescent's new reasoning skills also strengthen their ability to question the status quo and imagine what is possible. The increased number of social interactions, especially with peers, also gives the developing individual many opportunities for social comparison, modeling, and feedback.

Behavior does not match society's expectations for our assigned gender is gender nonconforming behavior. For instance, a boy wearing a skirt, makeup, and nail polish may be considered gender nonconforming in a culture or community where skirts, makeup, and nail polish are associated with femininity. Some adolescents explore their gender by trying out new roles and personal styles, much as they undergo a process of exploration and commitment in their overall identity. However, there are many other ways adolescents may explore and commit to a gender identity, including seeking support from health-care providers.

Gender nonconforming youth may also benefit from support from health-care professionals particularly as they are at a higher risk of peer victimization. One study of Thai students found that female adolescents and gender nonconforming female adolescents were at a higher risk of social and sexual victimization which in turn increased risks of depression (Cheung et al., 2020).

The formation of gender identity is an important process for transgender and gender nonconforming youth. This process often begins with a sense of incongruence between the gender identity an individual was assigned at birth and their experienced sense of gender identity in early and/or middle childhood (Zaliznyak et al., 2021; Oh et al., 2024). Adolescence and early adulthood represent a pivotal time in gender identity formation, often culminating in a variety of different gender-affirming choices in establishing identity (Oh et al., 2024). These choices vary but may include a combination of socioemotional, legal, medical, surgical, and non-surgical pathways to establishing an identity that will promote wellbeing and long term mental health (Oh et al., 2024; Katz-Wise et al., 2017). Early support for and knowledge of gender identity development, including gender-affirming care, lead to improved quality of life and the healthy development of gender identity as adolescents mature (Oh et al., 2024; Katz-Wise et al., 2017).

About 25 percent of the world's languages assign each noun a gender: masculine, feminine, or neuter. However, some cultures go beyond the binary view and acknowledge, for example, the *hijra* in India, *two-spirit* in some Native American tribes, and *men-women* in Balkan communities (Turban et al., 2018). Cultural changes in the United States have yielded greater awareness of gender possibilities and brought youth a bit more freedom to explore and choose among man, woman, nonbinary, cisgender, transgender, genderfluid, and agender.

Link to Learning

Explore the concept of gender identity with the Trevor Project. Here you will find clear and concise definitions to help you understand the spectrum of gender identities.

# Sexual Orientation in Adolescence

Another important aspect of identity development in adolescence is sexual orientation—the sex of those to whom we are sexually, emotionally, and/or romantically attracted (American Psychological Association, 2012; Worthington et al., 2002).

## Heterosexual Identity Development

The term heteronormativity refers to the idea that heterosexuality is the norm or preferred sexual orientation, and that opposite-sex people of different sexes or genders are best suited for sexual and marital relationships. Most sexual identities are heterosexual -- or straight -- in orientation. Because it is the norm, people with this identity are not often as conscious of it, and it fades into their psychological (and sociological) background. In fact, only recently has psychology begun outlining the developmental process by which someone develops a specifically heterosexual identity (Hoffman, 2004; Ybarra et al., 2016).

Consistent with the biopsychosocial approach, for example, Worthington and colleagues (2002) proposed a model that sees heterosexual identity development as influenced by biology, culture, religion, gender norms, and social attitudes. As adolescents explore their sexuality, these factors help them form a clear sexual identity in which their thoughts, feelings, and behaviors align. The model highlights the value of recognizing and accepting our sexual needs and preferences.

## Sexual Minority Identity Development

Roughly 7.1 percent of individuals in the United States identify as lesbian, gay, bisexual, or transgender (LGBTQ+) (Jones, 2022). In 2015, when the national Youth Risk Behavior Survey (YRBS) first incorporated questions about sexual identity and behavior, Kann et al. (2016) documented that 6.0 percent of U.S. high school students identified as bisexual, 2.0 percent identified as gay or lesbian, and 3.2 percent were unsure of their sexual identity.

The development of one's sexual identity has long been considered a central task of adolescence (Erikson, 1968), but much more is known about the sexual identity development of members of sexual minority groups, those who eventually come to identify themselves as lesbian, gay, bisexual, or another sexual identity (LGBTQ+). Research on LGBTQ+ individuals began from the perspective that their sexuality was a mental illness (Hall et al., 2021), but over the last few decades, psychology has seen it instead as part of a continuum of normative human experience.

Early research on adolescents who identify as gay and lesbian sought to outline a sequence of typical stages on the way to forming and accepting a sexual identity (Cass 1996; Aglipay, 2014). In this view, revealing a gender identity or sexual status different from our birth assignment is a complex process that requires time and reflection and may unfold gradually over developmental stages. Subsequent research suggests milestones instead of a process (Savin-Williams & Cohen, 2015). These markers include first becoming aware of same-sex attractions, engaging in same-sex sexual activity, self-identifying as LGBTQ+, coming out to others, questioning the orientation, feeling different from others, and having a same-sex romantic relationship (Hall et al., 2021).

Gay, lesbian, bisexual, queer, or asexual identity intersects with other parts of a person's identity, like race, socioeconomic status, ability, and religion. Different ethnic groups may have unique views on LGBTQ+ identity due to cultural norms around family, religion, and sexuality (Greene, 1994). For example, people of color may avoid openly disclosing their LGBTQ+ identity to prevent further marginalization and may face rejection from both their ethnic and LGBTQ+ communities, leading to multiple forms of oppression and a sense of abandoning their ethnic identity (Akerlund & Cheung, 2000).

A recent study examined how the timing and pacing of sexual identity development milestones differ across subgroups of Black, White, and Latino sexual minority individuals in the United States (Bishop et al., 2020).[18] Using data from participants aged eighteen to sixty years, it found that more recent cohorts reported earlier and faster milestone achievement than older cohorts. Gay men and those using newer identity labels (e.g., pansexual) reached milestones earlier, and Black and Latino participants reached some earlier than White participants (Bishop et al., 2020). A large-scale review of all existing literature revealed the average age at which various sexual-minority individuals reached the milestones (Table 10.3). Note the average age of first sexual attraction is around twelve to thirteen years of age, while the average age of first sexual contact is eighteen years of age (Hall et al., 2019). This indicates that LGBTQ+ youth are experiencing first sexual contact about a year later than heterosexual youth (National Center for Health Statistics, 2017).

*Table 10.3 Average Ages at which Sexual-Minority Individuals Reach Sexual Milestones (Hall, et al., 2021.)*[19]

| Milestone | Average Age Reached for LGBTQ+ Persons | Social Group Differences |
|---|---|---|
| First sexual attraction | 12.7 years | • Males reach earlier<br>• Hispanics and Blacks reach earlier |
| First sexual contact | 18.1 years | • Males reach earlier<br>• Hispanics and Blacks reach earlier<br>• Blacks reach earliest |
| Self-identified as LGBTQ+ | 17.8 years | • Males reach earlier<br>• Hispanics and Blacks reach earlier |
| Started coming out | 19.6 years | • Hispanics and Blacks reach earlier |
| First romantic relationship | 20.9 years | • Hispanics and Blacks reach earlier |

Gender differences are mixed. For instance, men may take longer to come out and pursue LGBTQ+ relationships due to higher levels of internalized stigma (Barnes & Meyer, 2012). They often realize their same-sex attraction earlier than women and reach some milestones earlier, but they take longer to disclose their sexual identity after recognizing it (Martos et al., 2015; Katz-Wise et al., 2017). Bisexual people were found to reach the milestones later than gay or lesbian people. Bisexual and lesbian women typically reach significant life milestones at older ages than bisexual and gay men (Katz-Wise et al., 2017).

A recent study of teenagers (born after 1997) showed that White LGBTQ+ teens are more likely to be open about their sexuality than Black and Asian teens. Gay teens are more open than bisexual or questioning teens, and those who experienced more victimization are also more open. Factors that made teens less likely to be open and more hesitant to come out include being religious, attending religious services, and feeling higher internalized stigma. Overall, outness among teens varies by sociocultural factors (Moskowitz et al., 2022). Younger cohorts may reach these milestones earlier, likely due to changing sociocultural attitudes

and increased acceptance of sexual minorities.

Heterosexual youth generally experience their first romantic relationship between 16.6 and eighteen years of age (Hall et al., 2021), as much as four years earlier than do LGBTQ+ individuals. Thus, although the cultural landscape is quickly changing, social pressures and differential opportunities remain, resulting in a partially delayed timeline for today's LGBTQ+ youth. A positive environment for LGBTQ+ teens reduces stigma, leading to sexual identity development that aligns more closely with that of heterosexual youth and with the overall process of identity development. To support LGBTQ+ individuals in coming out, we can create safe spaces, provide access to supportive counseling, foster inclusive education, and encourage open and accepting dialogue within families and communities.

### Life Hacks: How to Support a Teen Who Is Coming Out

About 60 percent more teens now identify as gay, bisexual, queer/questioning, or pansexual than in 2005. Most report at least a dawning awareness of their sexual orientation as early as childhood; many came out to their parents in adolescence or young adulthood. The rate and timing of these disclosures are crucial, because openness about our identity has both positive and negative health outcomes. Recall that identity is multifaceted, and exploring and committing to an identity across various aspects of our selves is beneficial to socioemotional well-being.

Coming out is the process of disclosing our sexual orientation to others, and it may be lifelong. One of the leading models envisions six stages in the process (Cass, 1979). It begins with identity confusion and a quest for information about sexual-minority identities. The individual may then progress to initial tolerance and eventually full acceptance of their sexual identity. Finally, they often experience a blossoming, in which they develop a sense of pride and integrate their sexual identity into their self-concept. This process takes time, and the patience and support of others are critical throughout. While the process was documented by Cass based on research and widespread experience, it is not a blueprint and does not reflect the development and emotions of all people. Individuals explore and determine their identity at their own pace and in their own way, and supporters should not emplace expectations or assumptions on others.

How can caregivers, teachers, peers, and mentors support young teens when they come out? PFLAG, the leading advocacy organization for LGBTQ+ individuals in the United States offers this advice:

- Show your love. Remind the person they are loved, no matter how complex your feelings may be. A simple hug conveys a sense of belonging, acceptance, and love.
- Be open to listening. Someone newly coming out likely doesn't have all the words and answers, and you might not either. This is only the beginning of a journey. Practice active listening skills. Feel free to ask open-ended questions when the timing seems right to let the person know you are there to listen—a key step for mutual understanding.
- Show support. If overt actions don't feel right yet, subtle acts can still send powerful messages of support and acceptance. Talk positively about a movie or TV character who is LGBTQ+. Mention news items relevant to sexual minorities to convey your awareness and support of the issues.
- Learn the vocabulary. Many terms associated with the LGBTQ+ community overlap or have nuanced meanings. You may make mistakes, but willingness to learn about and use the terminology is a concrete way to show support.
- Take care of yourself. Go for a walk, practice mindfulness, and give yourself time to sort through your own thoughts and emotions as you consider this complex aspect of the person's identity.
- Start early by being aware of your language, including to very young children. One way to signal you are an ally is to avoid heteronormative language like "Oh, the boys will be banging down your door one day!" when complimenting a female youth, or "I bet the girls love you!" when complimenting a male youth.

### Link to Learning

If you or someone you know is an LGBTQ+ young person who needs information or support, reach out to The Trevor Project for help. Text 678-678, call 1-866-488-7386, or chat through their website to reach a counselor for immediate support. You can also connect with other LGBTQ+ young people through The Trevor Project.

## References

Aglipay, F. A. (2014). The Cass' theory of sexual identity formation: A study of the complexities of queer identity development.

*Journal of Psychology Research, 4*(6), 411–418. https://www.semanticscholar.org/pape...7e2b16ba98f92f

Akerlund, M., & Cheung, M. (2000). Teaching beyond the deficit model: Gay and lesbian issues among African Americans, Latinos, and Asian Americans. *Journal of Social Work Education, 36*(2), 279–292. https://www.academia.edu/27749974/Te..._Deficit_Model
Barnes, D. M., & Meyer, I. H. (2012). Religious affiliation, internalized homophobia, and mental health in lesbians, gay men, and bisexuals. *American Journal of Orthopsychiatry, 82*(4), 505–515. psycnet.apa.org/doi/10.1111/...5.2012.01185.x

Bishop, M. D., Fish, J. N., Hammack, P. L., & Russell, S. T. (2020). Sexual identity development milestones in three generations of sexual minority people: A national probability sample. *Developmental Psychology, 56*(11), 2177–2193. doi.org/10.1037/dev0001105

Burrell-Craft, K. (2020). Are (we) going deep enough? A narrative literature review addressing critical race theory, racial space theory, and Black identity development. *Taboo: The Journal of Culture and Education, 19*(4), 9–26. www.researchgate.net/publica...ty_Development

Cass, V. (1996). Sexual orientation identity formation: A Western phenomenon. In R. P. Cabaj & T. S. Stein (Eds.), *Textbook of homosexuality and mental health* (pp. 227–251). American Psychiatric Association.

Cheung, D. H., Boonmongkon, P., Ojanen, T. T., Damri, T., Samoh, N., Cholratana, M., Ratchadapunnathikul, C., Gilman, S. E., Sass, J., & Guadamuz, T. E. (2020). Peer victimisation and depression among gender conforming and non-conforming Thai adolescents. *Culture, Health & Sexuality, 22*(7), 808–821. doi.org/10.1080/13691058.2020.1737235

Choi, N. G. (2021). Psychosocial aspects of the Asian American experience: Diversity within diversity. *Journal of Comparative Family Studies, 35*(1), 129–131. www.jstor.org/stable/41603924

Cross, W. E., Jr., Parham, T. A., & Helms, J. E. (1991). The stages of Black identity development: Nigrescence models. In R. L. Jones (Ed.), *Black psychology* (3rd ed., pp. 319–338). Cobb & Henry Publishers. psycnet.apa.org/record/1991-98901-019

Cross, W. E., Neville, H. A., Austin, C. L., & Reinhardt, J. S. (2022). Black lives matter and nigrescence theory: When police violence triggers an encounter. *Journal of Black Psychology, 48*(3–4), 309–326. doi.org/10.1177/00957984221086449

Crouter, A. C., Whiteman, S. D., McHale, S.M., & Osgood, D. W. (2007). Development of gender attitude traditionality across middle childhood and adolescence. *Child Development, 78*(3), 911–926. doi.org/10.1111/j.1467-8624.2007.01040.x

Del Toro, J., Atkin, A., Golden, A. R., Ip, K. I., & Wang, M. T. (2024). Ethnic/racial discrimination, school cultural socialization, and negative affect: Daily diaries reveal African American, Asian American, and Latinx adolescents' resilience. *Journal of Educational Psychology*. doi.org/10.1037/edu0000893

Diamond, L. M., & Butterworth, M. (2008). Questioning gender and sexual identity: Dynamic links over time. *Sex Roles, 59*, 365–376. https://doi.org/10.1007/s11199-008-9425-3

Erikson, E. H. (1968). *Identity: Youth and crisis.* Norton & Co. psycnet.apa.org/record/1968-35041-000

Ferdman, B. M., & Gallegos, P. I. (2001). Racial identity development and Latinos in the United States. In C. L. Wijeyesinghe & B. W. Jackson III (Eds.), *New perspectives on racial identity development: A theoretical and practical anthology* (pp. 32–66). New York University Press. scholar.google.com/citations...J:hFOr9nPyWt4C

Flores, C. (2023). *La raza cósmica? The construction of latinx racial identities beyond panethnicity.* Stanford University. https://www.wpsanet.org/papers/docs/...ca%20Paper.pdf

Galliher, R. V., Jones, M. D., & Dahl, A. (2011). Concurrent and longitudinal effects of ethnic identity and experiences of discrimination on psychosocial adjustment of Navajo adolescents. *Developmental Psychology, 47*(2), 509–526. doi.org/10.1037/a0021061

Gardner-Kitt, D. L., & Worrell, F. C. (2007). Measuring nigrescence attitudes in school-aged adolescents. *Journal of Adolescence, 30*(2), 187–202.

Gonzales-Barrera, A. (2019). *Hispanics with darker skin are more likely to experience discrimination than those with lighter skin*. Pew Research Center. https://www.pewresearch.org/fact-tan...arker-skin-are -more-likely-to-experience-discrimination-than-those-with-lighter-skin/

Greene, B. (1994). Ethnic-minority lesbians and gay men: Mental health and treatment issues. *Journal of Consulting and Clinical Psychology, 62*(2), 243–251. psycnet.apa.org/doi/10.1037/...-006X.62.2.243

Hall, W., Dawes, H., & Plocek, N. (2021). Sexual orientation identity development milestones among lesbian, gay, bisexual, and queer people: A systematic review and meta-analysis. *Frontiers in Psychology, 12*. https://doi.org/10.3389/fpsyg.2021.753954

Hill, J. P., Lynch, M. E. (1983). The intensification of gender-related role expectations during early adolescence. In J. Brooks-Gunn & A. Petersen (Eds.), *Girls at puberty: Biological and psychosocial perspectives* (pp. 201–228). Springer. https://doi.org/10.1007/978-1-4899-0354-9_10

Hoffman, R. M. (2004). Conceptualizing heterosexual identity development: Issues and challenges. *Journal of Counseling and Development, 82*(3), 375–380. doi.org/10.1002/j.1556-6678.2004.tb00323.x

House, L. E., Stiffman, A. R., & Brown, E. (2006). Unraveling cultural threads: A qualitative study of culture and ethnic identity among urban southwestern American Indian youth parents and elders. *Journal of Child and Family Studies, 15*(4), 393–407. http://dx.doi.org/10.1007/s10826-006-9038-9

Hutton, S. (2022, June 9). The burden of code-switching. LSA Psychology, University of Michigan. https://lsa.umich.edu/lsa/news-event...switching.html

Jiménez, T. R., Fields, C. D., & Schachter, A. (2015). How ethnoraciality matters: Looking inside ethnoracial "groups." *Social Currents*, *2*(2), 107–115. doi.org/10.1177/2329496515579765

Johnson, D. G., Mattan, B. D., Flores, N., Lauharatanahirun, N., & Falk, E. B. (2021). Social-cognitive and affective antecedents of code switching and the consequences of linguistic racism for Black people and people of color. *Affective Science, 3*(1), 5–13. https://doi.org/10.1007/s42761-021-00072-8

Jones, J. M. (2022, February 17). *LGBT identification in U.S. ticks up to 7.1%*. Gallup. https://news.gallup.com/poll/389792/...-ticks-up.aspx

Kann, L., Olsen, E. O., McManus, T., Harris, W. A., Shanklin, S.L., Flint, K.H., Queen, B., Lowry, R., Chyen, D., Whittle, L., Thornton, J., Lim, C., Yamakawa, Y., Brener, N., & Zaza, S. (2016). Sexual identity, sex of sexual contacts, and health-related behaviors among students in grades 9–12—United States and Selected Sites, 2015. *MMWR Surveillance Summaries, 65*(9), 1–202. https://doi.org/10.15585/mmwr.ss6509a1

Katz-Wise, S. L., Budge, S. L., Fugate, E., Flanagan, K., Touloumtzis, C., Rood, B., ... & Leibowitz, S. (2017). Transactional pathways of transgender identity development in transgender and gender-nonconforming youth and caregiver perspectives from the Trans Youth Family Study. *International Journal of Transgenderism*, *18*(3), 243-263.

Katz-Wise, S. L., Rosario, M., Calzo, J. P., Scherer, E. A., Sarda, V., & Austin, S. B. (2017). Associations of timing of sexual orientation developmental milestones and other sexual minority stressors with internalizing mental health symptoms among sexual minority young adults. *Archives of Sexual Behavior, 46*(5), 1441–1452. https://doi.org/10.1007/s10508-017-0964-y

Klaczynski, P. A., Felmban, W. S., & Kole, J. (2020). Gender intensification and gender generalization biases in pre-adolescents, adolescents, and emerging adults. *British Journal of Developmental Psychology, 38*(3), 415–433. psycnet.apa.org/doi/10.1111/bjdp.12326

Kollmayer, M., Schultes, M.-T., Schober, B., Hodosi, T., & Spiel, C. (2018). Parents' judgments about the desirability of toys for their children: Associations with gender role attitudes, gender-typing of toys, and demographics. *Sex Roles, 79*(5), 329–341. https://doi.org/10.1007/s11199-017-0882-4

Koutrelakos, J. (2013). Ethnic identity: Similarities and differences in White groups based on cultural practices. *Psychological Reports, 112*(3), 745–762. doi.org/10.2466/17.10.PR0.112.3.745-762

Krogstad, J. M., Passel, J. S., Moslimani, M., & Noe-Bustamante, L. (2023). Key facts about U.S. Latinos for national Hispanic heritage month. Pew Research Center. https://www.pewresearch.org/short-re...eritage-month/

Kulis, S., Wagaman, M. A., Tso, C., & Brown, E. F. (2013). Exploring indigenous identities of urban American Indian youth of the Southwest. *Journal of Adolescent Research, 28*(3), 271–298. doi.org/10.1177/0743558413477195

Lagaert, S., Van Houtte, M., & Roose, H. (2017). Engendering culture: The relationship of gender identity and pressure for gender conformity with adolescents' interests in the arts and literature. *Sex Roles, 77*(7–8), 482–495. https://link.springer.com/article/10...199-017-0738-y

Leavitt, P. A., Covarrubias, R., Perez, Y. A., & Fryberg, S. A. (2015). "Frozen in time": The impact of Native American media representations on identity and self-understanding. *Journal of Social Issues, 71*(1), 39–53. psycnet.apa.org/doi/10.1111/josi.12095

Lucero, N. M. (2010). Making meaning of urban American Indian identity: A multistage integrative process. *Social Work, 55*(4), 327–336. doi.org/10.1093/sw/55.4.327

Martos, A. J., Nezhad, S., & Meyer, I. H. (2015). Variations in sexual identity milestones among lesbians, gay men and bisexuals. *Sexuality Research and Social Policy, 12*(1), 24–33. https://doi.org/10.1007/s13178-014-0167-4

Moskowitz, D. A., Rendina, H. J., Alvarado Avila, A., & Mustanski, B. (2022). Demographic and social factors impacting coming out as a sexual minority among Generation-Z teenage boys. *Psychology of Sexual Orientation and Gender Diversity, 9*(2), 179–189. doi.org/10.1037/sgd0000484

National Center for Health Statistics. (2017, August 14). *Key statistics from the National Survey of Family Growth*. Centers for Disease Control and Prevention, U.S. Department of Health & Human Services. https://www.cdc.gov/nchs/nsfg/key_st...sexualactivity

Oh, J. W., Park, S., Lim, S., & Lee, E. S. (2024). Age of first experience of gender incongruence among transgender and non-binary individuals. *Obstetrics & Gynecology Science*, *67*(1), 132.

Pabón Gautier, M. C. (2016). Ethnic identity and Latino youth: The current state of the research. *Adolescent Research Review, 1*(4), 329–340. https://doi.org/10.1007/s40894-016-0034-z

Patten, E. (2016, April 20). *The nation's Latino population is defined by its youth: Nearly half of U.S.-born Latinos are younger than 18*. Pew Research Center. https://www.pewresearch.org/social-t...-by-its-youth/

Poston, W. C. (1990). The biracial identity development model: A needed addition. *Journal of Counseling &* Development, 69(2), 152–155. psycnet.apa.org/doi/10.1002/...1990.tb01477.x

Priess, H. A., Lindberg, S. M., & Hyde, J. S. (2009). Adolescent gender-role identity and mental health: Gender intensification revisited. *Child Development, 80*(5), 1531–1544. doi.org/10.1111/j.1467-8624.2009.01349.x

Rivas-Drake, D., Seaton, E.K., Markstrom, C., Quintana, S., Syed, M., Lee, R. M., Schwartz, S. J., Umaña-Taylor, A. J., French, S., & Yip T. (2014). Ethnic and racial identity in adolescence: Implications for psychosocial, academic, and health outcomes. *Child Development, 85*(1), 40–57. doi.org/10.1111/cdev.12200

Sandoval, M. (2023). Capturing the Racial Identities of Latiné Students at a Mid-size Texas University. Honors Thesis. https://digitalcommons.tamuc.edu/honorstheses/207

Schachter, A. (2014). Finding common ground? Indian immigrants and Asian American panethnicity. *Social Forces, 92*(4), 1487–1512. dx.doi.org/10.1093/sf/sou019

Savin-Williams, R.C., & Cohen, K. M. (2015). Developmental trajectories and milestones of lesbian, gay, and bisexual young people. *International Review of Psychiatry, 27*(5), 357–366. doi.org/10.3109/09540261.2015.1093465

Sellers, R. M., Copeland-Linder, N., Martin, P. P., & L'Heureux Lewis, R. (2006). Racial identity matters: The relationship between racial discrimination and psychological functioning in African American adolescents. *Journal of Research on Adolescence*, *16*(2), 187–216. doi.org/10.1111/j.1532-7795.2006.00128.x

Shanahan L., McHale, S. M., Crouter, A.C., & Osgood, D.W. (2007). Warmth with mothers and fathers from middle childhood to late adolescence: Within- and between-families comparisons. *Developmental Psychology, 43*(3), 551–563. doi.org/10.1037/0012-1649.43.3.551

Statistics Canada. (2024, March 20). *Special interest profile* [table: 98-26-0009]. https://www12.statcan.gc.ca/census-r...dex.cfm?Lang=E

Steensma, T. D., McGuire, J. K., Kreukels, B. P., Beekman, A. J., Cohen-Kettenis, P. T. (2013). Factors associated with desistence and persistence of childhood gender dysphoria: a quantitative follow-up study. *Journal of the American Academy of Child and Adolescent Psychiatry, 52*(6), 582–590.

Torres, V. (2003). Influences on ethnic identity development of Latino college students in the first two years of college. *Journal of College Student Development, 44*(4), 532–547. psycnet.apa.org/doi/10.1353/csd.2003.0044

Turban, J. L., de Vries, A. L. C., Zucker, K. J., & Shadianloo, S. (2018). *Transgender and gender non-conforming youth*. IACAPAP e-Textbook of Child and Adolescent Mental Health. Geneva: International Association for Child and Adolescent Psychiatry and Allied Professions. https://iacapap.org/_Resources/Persi...18-REVISED.pdf

Umaña-Taylor, A. J., & Rivas-Drake, D. (2021). Ethnic-racial identity and adolescents' positive development in the context of ethnic-racial marginalization: Unpacking risk and resilience. *Human Development, 65*(5–6), 293–310. dx.doi.org/10.1159/000519631

Umaña-Taylor, A. J., Douglass, S., Updegraff, K. A., & Marsiglia, F. F. (2018). A small-scale randomized efficacy trial of the Identity Project: Promoting adolescents' ethnic–racial identity exploration and resolution. *Child Development, 89*(3), 862–870. doi.org/10.1111/cdev.12755 doi.org/10.1111/cdev.12755

U.S. Census Bureau. (2020). Hispanic Americans by the numbers. http://www.infoplease.com/spot/hhmcensus1.html

U.S. Census Bureau. (2023). Census Bureau Releases New American Community Survey Selected Population Tables and American Indian and Alaska Native Tables. https://www.census.gov/newsroom/pres...an-tables.html

Walters, K. L. (1999). Urban American Indian identity attitudes and acculturation styles. *Journal of Human Behavior in the Social Environment, 2*(1–2):163–178. psycnet.apa.org/doi/10.1300/J137v02n01_11

Woo, B., Maglalang, D. D., Ko, S., Park, M., Choi, Y., & Takeuchi, D. T. (2020). Racial discrimination, ethnic-racial socialization, and cultural identities among Asian American youths. *Cultural Diversity and Ethnic Minority Psychology, 26*(4), 447–459. psycnet.apa.org/manuscript/2020-13975-001.pdf

Worthington, R. L., Savoy, H. B., Dillon, F. R., & Vernaglia, E. R. (2002). Heterosexual identity development: A multidimensional model of individual and social identity. *The Counseling Psychologist, 30*(4), 496–531. psycnet.apa.org/doi/10.1177/0010000020300040002

Ybarra, M. L., Rosario, M., Saewyc, E., & Goodenow, C. (2016). Sexual behaviors and partner characteristics by sexual identity among adolescent girls. *Journal of Adolescent Health, 58*(3), 310–316. https://doi.org/10.1016/j.jadohealth.2015.11.001

Zaliznyak, M., Yuan, N., Bresee, C., Freedman, A., & Garcia, M. M. (2021). How early in life do transgender adults begin to experience gender dysphoria? Why this matters for patients, providers, and for our healthcare system. *Sexual Medicine*, *9*(6), 100448-100448.

## Footnotes

- 1This study (U.S. Census Bureau, 2020) uses the terms "White alone," "Black or African American alone," "American Indian and Alaska Native alone," "Asian alone," "Native Hawaiian and Other Pacific Islander alone," "Some Other Race alone," and "Two or More Races" as categories for "race"; it uses the terms "Hispanic or Latino" and "Not Hispanic or Latino" as categories for "Hispanic or Latino Origin."
- 2This study (Del Toro et al., 2024) uses the terms "African American," "Asian American," and "Latinx."
- 3This study (Rivas-Drake et al., 2014) uses the terms "African American," "Latino," "Asian American," "Pacific Islander," and "Native American."
- 4Cross' research uses the term "Black."
- 5This study (Pew Research Center, 2022) uses the terms "Hispanic" and "Latino."
- 6This study (Pabon Gautier, 2016) uses the term "Latino."
- 7This study (Ferdman & Gallegos, 2001) uses the term "Latino."
- 8This study (Torres, 2003) uses the term "Latino."
- 9This study (Flores, 2023) uses "Latinx" as a broad term as it explores many identities and associated terms for those identities including "Latino," "Latine," "Hispanic," "Afro-Latino," "Afro-Hispanic," and others. The author notes that the terms "Latine," "Latinx," and "Latino" are used interchangeably in the paper.
- 10This study (Gonzales-Barrera, 2019) uses the term "Hispanic."

- 11This study (U.S. Census Bureau, 2023) uses the terms “American Indian” and “Alaska Native.”
- 12This study (Walter, 1999) uses the term “American Indian.”
- 13This study (Lucero, 2010) uses the term “American Indian.”
- 14This study (Kulis et al., 2013) uses the term “American Indian” and focuses on the southwest U.S.
- 15This study (House et al., 2006) uses the term “American Indian” and focuses on the southwest U.S.
- 16This study (Leavitt et al., 2015) uses the term “Native American.”
- 17Poston’s (Carlos Poston, 1990) research uses the term “biracial.”
- 18This study (Bishop et al., 2020) uses the terms “Black,” “White,” and “Latinx.”
- 19This study (Hall et al., 2021) uses the terms “Hispanic/Latinx,” “Hispanic/Latino,” “Hispanic/Latina,” “Black,” “White,” and “Asian.”

This page titled 15.10.4: Identity and Culture- Race/Ethnicity, Gender, and Sexuality in Adolescence is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

- 10.3: Identity and Culture- Race/Ethnicity, Gender, and Sexuality in Adolescence by OpenStax is licensed CC BY 4.0. Original source: https://openstax.org/details/books/lifespan-development.

# 15.10.5: Social Contexts in Adolescence

## Learning Objectives

By the end of this section, you will be able to:

- Describe the role of peers in social development
- Describe the role of romantic relationships and dating in adolescence
- Discuss the influence of various media on adolescent development
- Describe the context of education and trends in academic achievement across adolescence

Seventeen-year-old Jasmine has been looking forward to the big school dance two weeks from now. She is particularly excited because this is the first time she is going with a date rather than with friends. She met her date while hanging out with mutual friends over the summer. Aside from a shared interest in art and sci-fi movies, they connected over their shared experience of being neurodiverse. Their friendship has grown into a more intimate relationship, and they recently kissed for the first time. This dance will be the first time their classmates will see them as a couple, and Jasmine's excitement is mixed with a bit of pride and concern: "What will everyone think of the two of us together? Will they wonder if we're a good match? What will we do after the dance?" She wonders whether she's ready to commit to this person, to share her hopes and plans and fears with them. And she worries about whether there are unspoken expectations for getting more physically intimate; she doesn't feel ready for more yet. Nevertheless, she is eager to see what new experiences lie ahead (Figure 10.9).



Figure 10.9 Romantic relationships are an important component of identity development during adolescence. (credit: modification of work "Parallel Play Portrait" by Gritchelle Fallesgon/Disabled And Here, Public Domain)

Many parts of development are informed by our own and others' expectations based on the various social contexts in our lives. These include peers, friends, intimate relationships, plus the contexts of media and education. A key part of healthy adolescence is exploring and developing one's identity across these contexts.

## Peer Influences on Development

Brain development in adolescence supports a heightened interest in peers and other social cues, and an increased sensitivity to the rewards they can offer. The sophisticated new skills that come with these cognitive developments allow teens to apply increasingly advanced reasoning about social experiences, including hypothetical ones like, "Everyone is watching" (Elkind's concept of the imaginary audience). Recall also that one of the many developmental tasks facing adolescents is a gradual turning outward from the family and toward society at large (Havighurst, 1973; Manning, 2002). Peers and peer relations become a

transitional force allowing adolescents to do just that (Brown & Larson, 2009; Rubin et al., 2006).

Against the backdrop of these developments, society also purposefully restructures the environment of adolescents, who spend one-third or more of each weekday in school where they interact with their peers almost every day. Adolescence, then, is a time of heightened sociability, often beyond the direct supervision of parents or other adults. Through friendships as well as membership in peer groupings of different sizes, adolescents build and maintain a reputation, gain status within the larger group, and climb the social ladder.

## Friendships

A friendship is an intimate, emotionally close relationship between two individuals (Brown & Larson, 2009). Friendships form based on similar interests such as music or sports and may dissipate if those interests change over time. However, as adolescence progresses, and as individuals actively explore and form their identity, friendships tend to become more stable and enduring. Intimacy is a key feature of friendship, and in a psychological sense it means making ourself vulnerable to another.

Especially in early and midadolescence, friendships can be exclusive and intense, relying on trust and mutual support. Later in adolescence, this intensity is often transferred to a romantic relationship (Costello et al., 2023; Wesche et al., 2023). Research in multiple countries has consistently found that males tend to share personal information with a single best friend, whereas females tend to disclose evenly among their close friends (Ko et al., 2015; Kitts & Leal, 2021). However, it does vary. For example, male students at a Japanese university reported sharing more personal information with close friends than female students did (Fankhauser, 2018). This was true overall and for specific topics. The study used two different measures of self-disclosure, both showing similar results, especially in cross-gender friendships. It also found that feeling close to a friend and trusting the friendship's stability were linked to more self-disclosure (Fankhauser, 2018). These findings highlight the role friendships serve: adolescents switch some of their needs for social and emotional support from their parents to close friends, and in turn these needs for intimacy are also brought into romantic relationships later on.

## Cliques

A close group of three to a dozen or so friends is called a clique (Brown & Larson, 2009). Cliques serve many functions for developing adolescents. First, they break the larger social environment into one of more manageable size and offer a context in which much socialization (“hanging out”) occurs, both within and outside the school setting. They also provide a source of emotional support for members, as well as a sense of belonging and encouragement (McFarland et al., 2014). For example, a group of close-knit friends in a clique who share similar interests, such as skateboarding or a science club, can be there to listen and offer advice during challenging times. When a teen is stressed about an upcoming exam, their clique might organize a study session to help all members prepare, boosting both academic performance and emotional well-being. And they can offer encouragement and celebrate each other's successes, such as cheering on a member at a competition or congratulating them on a good achievement in the classroom.

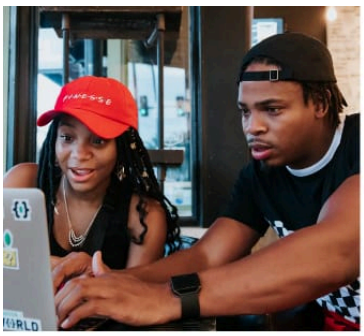
An analysis of adolescents from about 170 secondary school classrooms asked students to identify the cliques in their school and nominate peers as members of each (Pattisellano et al., 2015). First, the study found the average size of a clique was just shy of six members (5.72, to be exact). Second, researchers discovered that some cliques have a status hierarchy, while others are more equality driven, or egalitarian (Pattisellano et al., 2015). Peer status matters in the larger social context of the adolescent world because both aggression and prosocial (helping) behavior are related to social standing. Thus, being a member of a higher-status clique could offer protection against aggression from others, while being a member of a low-status clique could be disadvantageous.

The term relational aggression refers to the practice of including or excluding others or otherwise threatening a sense of belonging such as by spreading gossip. It was associated more with egalitarian cliques. This makes sense, though; one purpose of a social hierarchy is to spell out exactly where everyone stands in relation to one another. In an egalitarian group this is not as easy to discern, and when members are striving for status, an increase in aggression can result. More prosocial behavior toward other members was found within hierarchical groups, as was increased aggression toward other cliques (Kwon & Lease, 2007, Zhao & Li, 2022). This result shows both the function and the power of cliques—to support those within the group, and to advocate for social standing against other groups.

## Crowds

A larger social grouping in the social milieu of adolescents is called a crowd, and it can have many dozens of members, not all

of whom are necessarily friends or even know each other. Crowds can be made up of different cliques and often form around various activities, interests, aspects of youth culture (such as anime), or members' personality characteristics, social status, or reputation (Brown & Larson, 2009) (Figure 10.10). Common crowd names in U.S. high schools include "populars," "jocks," "brains," and "normals" (Crabbe, et al., 2019). The names of crowds may change, but the presence of these common themes in crowds has been around for quite some time.



(a)




(b)



(c)

Figure 10.10 (a) Friends, (b) cliques, and (c) crowds are important groups in teen development. (credit a: modification of work "Friends working on a computer" by "antoinedigital"/nappy, Public Domain; credit b: modification of work "Group of friends hanging out" by "Stacey_jayyy"/nappy, Public Domain; credit c: modification of work "Day 3 - The One Young World Summit 2014" by One Young World/Flickr, Public Domain)

How do individuals become part of a crowd during adolescence? Crowds come together through both selection (people with similar values, interests, and experiences find each other) and socialization (members reinforce shared attitudes and behaviors to uphold their identity and sense of belonging). Research suggests that academic orientation, athleticism, and physical appearance are among the primary characteristics through which teens sort themselves from an early age onward (Brown & Larson, 2009), and that ethnic and racial group membership are not (Brown, et al., 2008). One way to think of crowds and cliques is that crowds exist as part of the large social backdrop of adolescence, while actual peer relationships occur within and between cliques and friendships.

For most adolescents, the way their peers view them is very important, and not being accepted can lead to problems like relational aggression and poor academic performance (Lorijn et al., 2022). Girls are especially likely to worry about conflicts and being rejected by their peers (Chesney-Lind & Irwin, 2008). Girls who feel rejected often seek attention and form cliques to feel accepted (Hamilton, 2010). Popular students may act aggressively because they believe their high status protects them from negative consequences. Within these cliques, teens join the same activities and spend free time together, creating a strong social network. In contrast, less popular students interact less with their classmates and have fewer close friends. Overall, teen friendships help organize social interactions in the classroom, affecting teen mental health and behavior (Long et al., 2021; Casper et al., 2020).

## Peer Social Risks

Teens who struggle to find a social group often face significant isolation and loneliness, which are linked to various negative outcomes including increased risk of depression, anxiety, and low self-esteem (Laursen & Hartl, 2013). Social isolation can also hinder academic performance and school engagement, since the peer support that can encourage and motivate the individual is lacking (Wentzel, 2005). Feelings of exclusion can also arise, and the absence of support increases the likelihood of engaging in harmful behaviors as a coping mechanism (Hawkley & Capitanio, 2015). For example, teenagers who feel isolated and lack positive social connections often seek acceptance in alternative groups, which can include gangs (Dmitrieva et al., 2014). Gangs offer a sense of community and identity, though through engagement in deviant behaviors. Addressing social isolation in teens and providing positive social support systems through parents, teachers, mentors, and community programs are critical to prevent gang involvement as well as promote overall well-being and teen mental health.

# Romantic Relationships and Dating

All the social, physical, emotional, and cognitive developments that occur during adolescence create new ways for us to relate to one another within a romantic relationship. A romantic relationship is a bond psychologically distinct from mere liking and includes components of affection, intimacy, exclusivity, and interdependence (Aron et al., 2006).

Most adolescents enter into at least one romantic relationship during their teenage years (Lenhardt, et al., 2015), as part of the larger trend of shifting their focus from their family of origin toward peers and the larger society (Collins, 2003; Brown, 2004; Sorensen, 2007). Romantic relationships offer the developing adolescent space to explore what it means to be vulnerable (intimate) and connected to another individual, and to find a new source of support and comfort from a peer (Jorgensen-Wells, et al., 2021). They also provide valuable experience in relating to others in a way that will become a major focus in early adulthood.

## Attachment

Recall that our internal working models of relationships provide us with scripts, including what we can expect from a relationship and how others are likely to behave. With these models, adolescents bring their full relationship and attachment history into their first (and subsequent) romantic relationships.

According to Hazan & Shaver (1987), both the ability to enter romantic relationships and the quality of those relationships are also connected to an individual's attachment history (4.4 Social Development in Infants and Toddlers). Individuals with a secure attachment history bring several assets to an adolescent romantic relationship. These include effective communication skills like listening and sharing, appropriate emotional expression, the ability to assert and negotiate needs and expectations, and the capacity to seek support from and provide it to a partner (Carroll et al., 2007; Halford, 2011) (Figure 10.11). Such individuals also show skill in approaching others, forming intimate connections, and benefiting from such connections. They exhibit greater warmth and understanding and use a more constructive approach to resolving disputes (Tan, et al., 2016), which is essential because conflicts within a romantic relationship often arouse strong emotions.



Figure 10.11 Teens with a secure attachment history are often skilled at listening, sharing, and offering emotional support to others. (credit: modification of work "Hugging couple" by freestocks.org/Flickr, Public Domain)

Adolescents who have developed insecure attachment styles, including anxious-preoccupied (termed "ambivalent" in childhood) and avoidant, bring different experiences, expectations, and skill sets to their first romantic relationships (Brar et al., 2023; Choi et al., 2022; Dinero et al., 2008; Stavropoulos et al., 2018). Those with an anxious-preoccupied attachment history are interested in forming romantic relationships and enter such relationships eagerly. However, because of the inconsistent support and confusing mix of disappointment and frustration in their previous relationships, they often lack the confidence that a romantic relationship will bring all the benefits they are hoping for. Instead, they may seek frequent reassurance from their partner about their commitment and support. Romantic partners in turn often experience this need for reassurance as clinginess and may try to distance themselves emotionally. Ironically, this reaction is exactly what the internal working model of someone with anxious-preoccupied attachment predicts. Any resulting distancing, rejection, or breakup reinforces that model.

Adolescents with an avoidant attachment history don't expect much from a romantic relationship, are overly self-reliant, and approach close relationships with skepticism and worry. These expectations often color their experience of early romantic relationships: any instance of dissatisfaction leads them to withdraw, further reinforcing their internal working model (Stavropoulos, et al., 2018).

A central tenet of attachment theory, however, is that partnering with someone who has a secure attachment style can benefit individuals with an anxious-preoccupied or avoidant attachment history. For instance, research shows that teenagers who engage in positive peer relationships, receive mentoring, and experience supportive school environments can develop healthy attachments and show resilience despite early challenges with unhealthy attachment patterns (Grossmann et al., 2005). Thus, we see the potential for positive development and reworking of the insecurely attached individual's internal working model within the context of romantic relationships.

## Dating Violence and Unhealthy Relationships

Teen interpersonal health risks often stem from their socioemotional needs for dating and establishing romantic relationships with appropriate peers. Romantic relationships are crucial for socioemotional development because they help to develop intimacy skills and shape identity and autonomy (Connolly & McIsaac, 2009). However, they can also generate intense emotions and conflicts, sometimes with the potential for teen dating violence (TDV). The Centers for Disease Control and Prevention (2024) defines dating violence as a variety of unsafe behaviors inflicted on a partner. Psychological dating violence includes manipulative actions aimed at indirectly harming the partner. Physical dating violence can range from pushing and slapping to more severe acts like beating, kicking, or strangling. Sexual TDV includes forced sexual activities, from unwanted touching to forced penetration. Stalking is a pattern of repeated, unwanted attention and contact by a current or former partner that causes fear or safety concerns for an individual or someone close to them (CDC, 2024).

Many adolescents report experiencing violence in their romantic relationships. Data from the 2011–2021 Youth Risk Behavior Surveys show significant rates of these experiences among U.S. high school students, with notable disparities affecting females, racial and ethnic minorities, and sexual minority youths (Basile, 2020). In 2021, 8.5 percent reported physical dating violence, 9.7 percent reported sexual dating violence, 11.0 percent reported sexual violence, 15 percent experienced bullying at school, and 15.9 percent faced electronic bullying (Clayton, 2023). A meta-analysis by Wincentak et al. (2017) found that 20 percent of teens aged thirteen to eighteen years have experienced physical dating violence, and 9 percent have experienced sexual dating violence. Given how common dating violence is, and the severity of its effects including psychological distress, suicidal thoughts, and post-traumatic symptoms (Exner-Cortens et al., 2013; Hébert et al., 2017), it is now seen as a serious public health problem. A recent study of late-stage adolescents' views on romantic relationships found that while teens can identify healthy and unhealthy relationship traits, some find it hard to see jealousy and possessiveness as negative behaviors, often mistaking them for signs of strong interest (Brar et al., 2023). Programs promoting healthy dating behaviors, clarifying unhealthy traits, teaching respectful conflict resolution, and encouraging intervention in abusive situations can benefit all teens (Foshee et al., 2014).

Teen dating violence, sexual violence, and bullying during adolescence are linked to health and behavioral issues in adulthood. Victimized teens may engage in risky behaviors like substance misuse or develop eating disorders as coping mechanisms (Batchelder et al., 2022). Studies also indicate that TDV is longitudinally associated with increasing high-risk behaviors, such as marijuana and alcohol use, and poor mental health outcomes (Piolanti et al., 2023). Trauma can also impair academic performance and social relationships, leading to isolation (Cava et al., 2020) and further emotional distress. Addressing these risks requires comprehensive sex and relationship education, preventative socioemotional health services, and accessible intervention support to ensure teens can establish and maintain healthy, respectful relationships. For instance, the reality of TDV should be included in school curricula focused on sex and relationship education. Schools must commit to fostering a violence-free social environment and encourage bystander intervention (Banyard et al., 2020).

**Link to Learning**

To learn more about the signs of a healthy or unhealthy relationship, check out the youth.gov characteristics of healthy and unhealthy relationships for more information.

# Media as Context for Development

Peer relationships rightly take center stage as an important context for adolescent development. However, media, including social media, are also a central feature of adolescent life and are intricately linked to social relationships. Teens' media diet, usually characterized by excessive screen time, often includes social media and messaging apps, which can lead to problematic behaviors like sexting, the transmission of sexually suggestive or explicit images via texts, and sexual harassment. Studies show that increased phone use is associated with higher risks of exposure to inappropriate content and cyberbullying, with negative impacts on teens' mental health and psychological well-being.

## Media Diet

What do we know about the media diet of teenagers today? The most relevant indicator is screen time, which includes time spent watching videos online, playing or watching others play video games, using tablets for creative purposes, using virtual reality devices, browsing the internet, using social media apps, and reading e-books. Average daily screentime for teenagers in 2021 was eight hours and thirty-nine minutes, an increase from six hours and forty minutes daily in 2015 (Rideout et al., 2022).

Research shows that 77 percent of teens watch online videos every day and spend an average of ninety minutes a day using social media apps such as Instagram and Snapchat. The Pew Research Center reports that 19 percent of teens use YouTube "almost constantly," and 16 percent use TikTok with the same level of intensity (Vogels, 2022) (Figure 10.12). Teens from lower-income households report the highest screen use, averaging seven hours and thirty-two minutes per day.

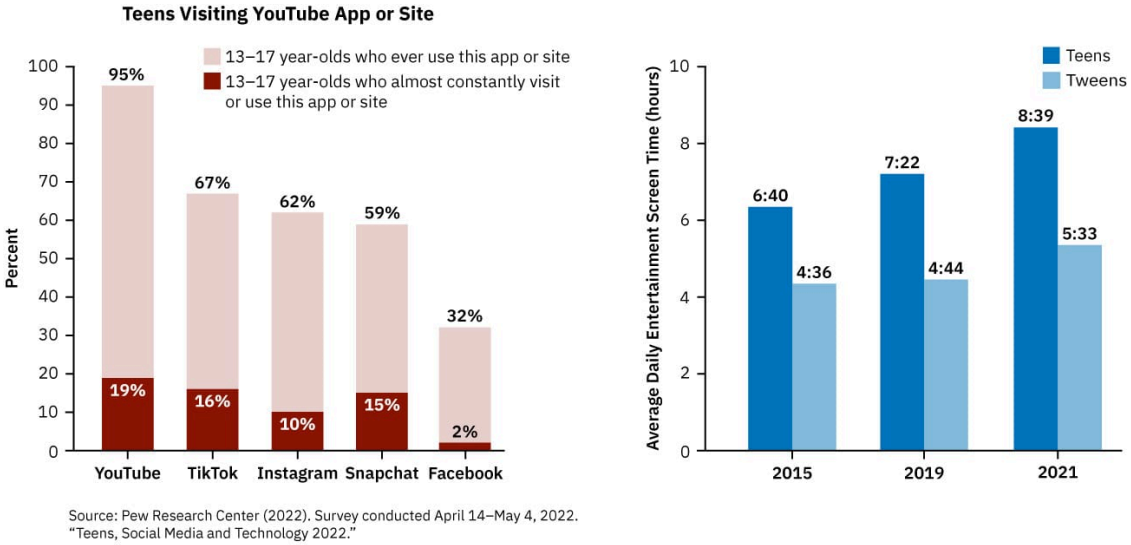



Figure 10.12 The total screen time usage per day for entertainment purposes has significantly increased for both preteens and teens. (data source a: Pew Research Center; data source b: Common Sense Media; attribution: Copyright Rice University, OpenStax, under CC BY 4.0 license)

The COVID-19 pandemic of 2020–2023 markedly increased media use by teenagers. Contributing factors included societywide shutdowns of schools and other gathering places and social distancing protocols that made technology necessary for human interaction. Teenagers spent an average of more than eleven hours a day in front of screens during the pandemic, including for schooling; for more than 40 percent of them, this increase also meant more social media and video viewing (Hamilton et al., 2023; Marciano et al., 2022). Social media did let teens stay connected with one another during the pandemic, however, and its use then has been linked to lower stress, boredom, and loneliness among youth, in contrast to findings about social media use and adolescents' psychological health post-pandemic (Marciano, et al., 2022).

There is a significant rise in anxiety, depression, and mental health issues among teenagers, which is linked to increased screen time and social media use. For example, the amount of media information about the pandemic itself increased teens' feelings of anxiety. Researchers suggest that digital interactions contribute to a decline in face-to-face social skills and an increase in feelings of loneliness and inadequacy. They emphasize the need for reduced screen exposure to improve mental well-being in young people (Twenge, 2020; Haidt, 2024). When adolescents use their screen time as a replacement for social interactions, negative effects do emerge, such as a less positive body image, lower self-esteem, and an uptick in eating disorders (Ramsey, et al., 2023).

## Psychological Effects

What do we know about the psychological effects of extensive media use? First, there are some positives. The primary purpose of all media is to communicate and entertain, facilitate interaction and engagement (especially over long distances), give exposure to new ideas and perspectives, and foster collaboration (American Academy of Pediatrics, 2016). Media sources also provide a way for isolated individuals to connect more easily with other people and resources, and an easier entry point to social interaction for those who may be shy or isolated. Some media are also extremely effective at advocating for certain positions or attitudes, so

they can help spread positive and healthy information.

Psychologists, health professionals, and communications experts have also documented several physical health risks of media use. In a review of the literature, the American Academy of Pediatrics (2016) reports a fivefold increase in the chance of developing obesity among teens who watch more than five hours of media per day. One reason is an increase in snacking or passive eating during television viewing. Heavy media use can also increase sleep disturbances in teens (and adults): the blue cast to the light of screens interferes with the body's melatonin levels, and adolescents have different sleep needs than children. These physical health risks can in turn increase psychological and socioemotional health risks.

In a systematic review of fifty studies from seventeen countries, researchers found that social media use is linked to body image concerns, eating disorders, and poor mental health among young individuals aged ten to twenty-four years. Social media exposure may lead to negative body image perceptions and contribute to the rising prevalence of eating disorders, emphasizing the potential global public health significance of this issue (Dane & Bhatia, 2023). Higher media use is predictive of a long list of other negative impacts including increased alcohol and tobacco use (Lewycka et al., 2018), earlier initiation of sexual behaviors (Smith et al., 2016), desensitization (or normalization) of certain negative content such as self-harming and disordered eating, increased risk of cyberbullying (as target or perpetrator), and sexting (Bozzola et al., 2023).

## Sexting and Sexual Harassment

According to the CDC (2019), "sexual violence can occur in person, online, or via technology, as in the cases of posting or sharing sexual pictures of someone without their consent, or non-consensual sexting." Technology allows people to reach an audience virtually anywhere and at any time, and it is increasingly simple to involve someone by using images and/or videos. Teens report considerable pressure to sext (Abeele et al., 2014; Lunde & Joleby, 2023). Fifteen percent reported having sent a sext and 25 percent had received one (Giordano, et al., 2022). A recent study looked at how common abusive sexting is among Portuguese teens and the psychological traits of those involved, like emotional issues, signs of psychopathy, and past trauma (Barroso et al., 2021). Among twelve- to twenty-year-old participants, about 4.8 percent admitted to abusive sexting and 4.3 percent reported being victims. Abusive sexting was more frequent among males and those in midadolescence, and both perpetrators and victims had higher rates of emotional and behavioral problems, childhood abuse, and aggression (Barroso et al., 2021).

Abusive messages can easily be forwarded to large groups of recipients without the subject's permission. The age of consent, which varies state to state and country to country, is the minimum age at which an individual can legally make decisions to engage in sexual behavior. In some U.S. states, it is a crime to merely receive a sext from someone under the age of consent, depending on the age difference between sender and recipient. According to the Cyberbullying Research Center, in twenty-seven of fifty U.S. states and the District of Columbia, the legal age of consent for sexual acts is sixteen years old and a sexting law is in place. In nine states the legal age for sexting is seventeen years old, and in eleven states, the age of consent is eighteen years old (CRC, 2022). Many teenagers believe it is acceptable to exchange sexts with someone they are dating or are sexually involved with, but this is not legally true.

Sending sexts can lead to serious social consequences if the images are shared or spread widely (Strasburger et al., 2019). When sexting occurs outside legal boundaries or includes coercion and pressure, it constitutes another form of sexual abuse and harassment, posing significant psychological risks for teens. Victims often experience anxiety, depression, and other mental health issues as a result. According to the Cyberbullying Research Center, approximately 12 percent of U.S. adolescents have been coerced into sending explicit images, highlighting the prevalence of this form of sexual victimization (Patchin & Hinduja, 2020).

Another form of sexual harassment is the use of deepfakes, digitally manipulated videos or images that create realistic but false representations of individuals. Sexually explicit deepfakes are of growing concern. Sharing them can be devastating to adolescents (Kristof, 2024). Victims can experience anxiety, depression, and harm to their personal and professional lives (Rousay, 2023). Protecting teens against sexual deepfakes requires a multifaceted approach, including educating them about the risks of sharing personal images online, promoting sufficient digital literacy to recognize and report deepfakes, and advocating for stronger legal protections and enforcement against their creation and distribution (Citron, 2019).

**Link to Learning**

Explore the emerging issue of AI-generated deepfakes and find help and support.

## Best Practices for Healthy Media Use

How can we mitigate the risks associated with heavy media use? The American Academy of Pediatrics (AAP) (2016) recommends that pediatricians partner with parents and educators to communicate the effects of media, both positive and negative. Healthcare professionals should also emphasize healthy activity levels (maximum of one hour of screen time per day) and adequate sleep for teens, recommend that children and teens not sleep with their electronic devices in their rooms, and advocate for media literacy programs in school curricula, youth organization programming, and family discussions.

The U.S. Surgeon General's advisory emphasizes making policy and program changes at the government level, like advocating for media literacy curricula in schools, requiring strict data privacy protections by tech companies that create apps used by teens, and continuing to research and develop usage guidelines (United States Department of Health & Human Services, 2023). Families are urged to develop a family media plan that sets boundaries for technology use at home and to create "tech-free" zones and time periods, such as family meals. Parents should also model appropriate media use for their children.

While phones can be a major source of distraction due to games and social media, they also offer valuable resources for media consumption, such as audiobooks, music, educational apps, and news. By setting clear guidelines and discussing the importance of balance, parents can help their teens develop healthy habits (AAP, 2016). Encouraging responsible use means setting time limits, promoting tech-free family times, and discussing the potential risks and benefits of various apps and online activities (Rideout & Robb, 2018). Recreational apps and games can also promote relaxation and improve cognitive skills like problem-solving and hand-eye coordination.

One particular form of media deserves a special focus: music. Listening to music is one of the hallmark behaviors of adolescence, and music is a part of youth culture that helps to connect each cohort. Robert Sapolsky (1998) posited that our interest in new music wanes at around age thirty-five years, and that the music we listen to in our teenage years largely forms the basis for our lifelong musical preferences. One study found that listening to music was the most common strategy teens use for self-regulation (Saarikallio & Erkkila, 2007). Other reasons for playing music are for entertainment, sensation-seeking, relaxing, discharge of energy, diversion, and solace (Baltazar, 2019). Developing a set of musical preferences is another way adolescents can explore and develop their identities. It's likely that teens (and adults) curate playlists in part so they can have music ready to help them cope with their changing emotional states (Cook et al., 2019). After a frustrating day at school, for example, a fifteen-year-old may listen to some heavy-metal music, nodding to the ferocious beats and discharging some of that negative energy, elevating her mood.

# Education and Academic Achievement in Adolescent Development

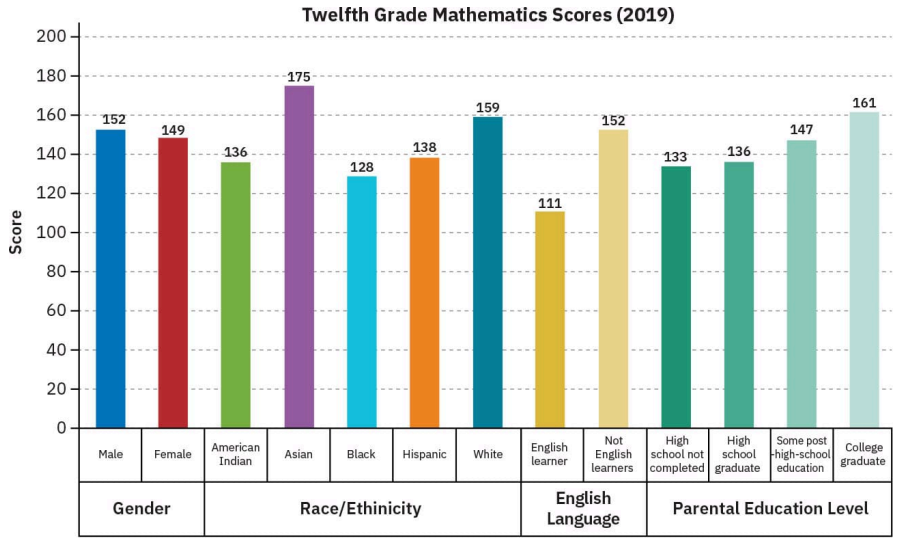
During adolescence, youth undergo significant cognitive development, including improvements in abstract thinking, problem-solving abilities, and critical reasoning skills. Therefore, educational materials and requirements should be appropriately challenging to stimulate cognitive growth without being overwhelming. Goodness of fit in education refers to the compatibility or alignment between the educational environment and the needs, abilities, and characteristics of individual students. We know that students come from diverse backgrounds; thus, an optimal learning experience would occur when these factors are appropriately matched with the educational context. For instance, offering a variety of teaching techniques and resources to accommodate diverse learning preferences and personal circumstances. Additionally, adolescents benefit from incorporating breaks and varied activities to maintain engagement and prevent fatigue. Academic achievement outcomes are multifaceted and heavily influenced by environmental contexts including family and sociocultural factors and individual disparities.

## Outcomes

What kinds of outcomes in academic achievement does schooling produce? The high school graduation rate for the United States overall was 86 percent in the 2018–2019 school year (NCES, 2021). This number has increased consistently since it was first tracked at the national level in 2011. Group-level differences were observed, however. For Asian-American/Pacific Islander students, the rate is 93 percent, for White students 89 percent, for Hispanic students 82 percent, for Black students 80 percent, and for Native American students 74 percent.

The U.S. Department of Education's National Center for Education Statistics (NCES) produces *The Nation's Report Card*, a semiannual snapshot of fourth-, eighth-, and twelfth-grade achievement in mathematics and reading, among other subject areas (NCES, 2021). The most recently available data for twelfth grade are for 2019, one year prior to the onset of the COVID-19 pandemic. For mathematics, 60 percent of twelfth-grade students met or exceeded the basic competence level nationwide, while just 24 percent met or exceeded what the NCES calls a "proficient" level of achievement (Figure 10.13). This represented a slight

decrease in achievement compared with each assessment dating back to 2009. Males and females achieved at roughly similar levels.

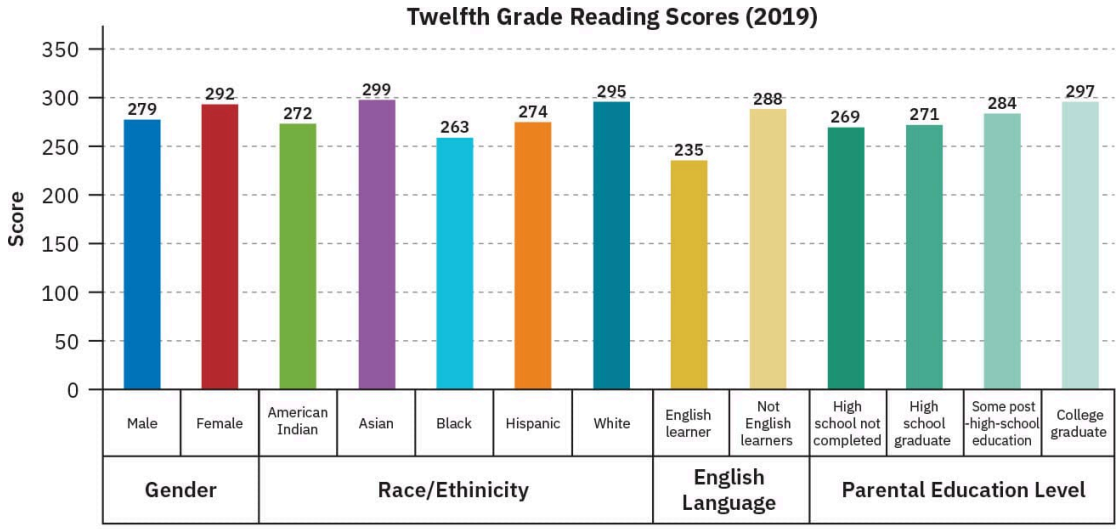



Source: U.S. Department of Education. (2022). NAEP Report Card: Mathematics.

Figure 10.13 Twelfth grade math scores show some range in proficiency based on various sociodemographic factors including gender, race/ethnicity, English language proficiency, and parental education. Note for example, the increase in scores as parent education level increases. (CC BY 4.0; Rice University & OpenStax)

There were significant mathematics achievement gaps between students from different ethnoracial groups, as well as for students from households with different parental levels of schooling, and also for students who were English-language learners. For example, students whose native language was not English showed the largest mathematics achievement gap compared to native English speakers. Finally, the greater the educational attainment of parents, the higher the mathematics achievement of their children: adolescent children of college-educated parents scored higher on average than children whose parents did not graduate from high school. Educational attainment is one of the main components of socioeconomic status, an indicator of the level of social and economic resources a person or family has at their disposal. To support students, it is imperative that governments provide access to high-quality early childhood education programs to help level the playing field for students from disadvantaged backgrounds. Addressing disparities in disciplinary actions and providing culturally responsive curriculum and instruction can foster the academic success of marginalized and disadvantaged students. Finally, socioeconomically disadvantaged students often demonstrate remarkable resilience and perseverance and are highly motivated to succeed academically with the goal to improve their circumstances (Anyaka, 2017).

By twelfth grade, we see similar patterns emerging for reading achievement (Figure 10.14). The NCES reports slight declines in reading achievement levels between 2015 and 2019 for male students and for those whose parents had some education beyond high school (NCES, 2021). Otherwise, scores and achievement gaps between groups were stable for twelfth graders across that time period. Gaps include a difference in favor of students whose parents had graduated from college versus students from homes where the parents did not finish high school, and large achievement gaps between native English speakers and English language learners and between Asian and Black students.




Source: U.S. Department of Education. (2022). NAEP Report Card: Reading.

Figure 10.14 Twelfth-grade reading scores show some range in proficiency based on various sociodemographic factors including gender, race/ethnicity, English language proficiency, and parental education. Note for example the difference in scores between those learning English and those already proficient in English. (CC BY 4.0; Rice University & OpenStax)

## Sociodemographic Factors in Achievement Disparities

When the COVID-19 pandemic began in March 2020, children in the United States experienced major disruptions in schooling, particularly in socially and economically vulnerable groups (Bansak & Starr, 2021; Bailey et al., 2021; Maldonado & DeWitte, 2022). Parents from families with low incomes were more likely to be essential workers exposed to the COVID-19 virus and less likely to have access to high-quality health care (Berube & Bateman, 2020). Additionally, these families were less likely than families with higher income to have reliable internet access and computers at home, which made it harder for children in these homes to participate in online education (Stelitano et al., 2020).

Children in families with low income are also more likely to join public schools that lack the resources needed to support teachers in delivering high-quality online instruction. Additionally, parents with low income are less able to provide extra instructional support through private tutoring and other enrichment activities (Lee et al., 2021). Research from China and Indonesia indicates that students in rural regions experienced more negative impacts after school closures during the pandemic compared to students in urban areas (e.g., Pasani et al., 2021).

Black teens are often aware of the racialized nature of achievement disparities. They are frequently reminded of these disparities in their schools as well as on social media (Hope et al., 2015). For example, a longitudinal study noted that adolescents' structural attributions (i.e., awareness of systemic and institutional factors that contribute to disparities) for racial achievement gaps increased from grade 10 to grade 12 (Bañales et al., 2020). However, when Black students recognize that such factors are rooted in historical and ongoing patterns of discrimination and inequality within educational systems and broader society, it works as an adaptive mechanism for their psychological development. When perceiving the causes of achievement disparities as external rather than internal, they see that their ability level is not fixed, which can help students establish a growth mindset and improve academic outcomes.

Ability grouping, also known as tracking, is a practice in education where students are placed into different classes or groups based on their perceived academic abilities or achievement levels. This practice involves assigning students into "tracks" based on their prior achievement or ability level (Loveless, 2013), such as "honors," "regular," or "remedial" classes, with each track offering varying levels of curriculum difficulty and academic rigor. The primary goal of this placement is to create a more uniform learning environment, allowing teachers to tailor their instruction more effectively to students' needs and enabling students to benefit from interactions with their peers (Steenbergen-Hu et al., 2016). However, it can promote educational inequalities, perpetuate stereotypes, and reinforce self-fulfilling prophecies, wherein students internalize and conform to expectations associated with their assigned track; this is especially seen among students belonging to ethnic minority groups and students of lower SES (e.g., Francis et al., 2017; Peterson et al., 2016). Furthermore, such separating of students based on "ability" contributes to achievement gaps between different social groups, as stereotype threat disproportionately affects marginalized students who are targets of negative stereotypes. Stereotype threat refers to the phenomenon where individuals

experience anxiety or fear of confirming negative stereotypes about their social group, which can impair their performance in academic or other achievement-related tasks (Spencer et al., 2016).

Link to Learning

Do stereotypes affect your test scores? Learn about how it turns out that stereotypes can affect you, whether you believe in them or not.

## Familial and Sociocultural Factors in Academic Achievement and Disparities

The role of family, peer, and cultural influences on academic achievement trajectories is multifaceted and complex as myriad factors influence students' beliefs, behaviors, and experiences. At the familial level, there are SES, parental education level, parental involvement, as well as parental expectations. For example, the level of parental involvement in a child's education, including monitoring homework, attending school events, and communicating with teachers, is strongly associated with academic success (Harper et al, 2012).

At the social level, school climate, disciplinary practices, peer pressure, and influence of academic motivation are some of the forces that can drive a teen's academic achievement trajectory. School climate is defined as "the quality and character of school life," which is derived from "patterns of people's experiences of school life and reflects norms, goals, values, interpersonal relationships, teaching, learning and leadership practices, and organizational structures" (Cohen et al., 2009, p. 182). Research shows that a positive school climate helps protect against the negative contribution of poor SES background on academic achievement (Berkowitz et al., 2017).

A longitudinal study conducted in Los Angeles high schools found that students who experienced authoritative school environments, characterized by high levels of support and structure, exhibited higher levels of self-efficacy and grit in subsequent years (Wong et al., 2021). Additionally, these students reported fewer depressive symptoms, less hopelessness, and reduced stress at school and about the future over time. The study highlights the significant association between a supportive and warm school climate and improved social-emotional health among adolescents. It suggests that interventions focusing on enhancing relationships with teachers and implementing supportive disciplinary practices may be beneficial for promoting the social-emotional well-being of students (Wong et al., 2021). Additionally, one's cultural capital, cultural values and beliefs about education, and cultural identity impact academic performance and achievement trajectory. Specifically, cultural resources such as language, knowledge, values, and traditions passed down within communities can influence students' academic achievement (e.g., Andersen & Jaeger, 2015).

School absenteeism (i.e., temporary periods of unexcused school absence) and permanent school dropout are both complex issues influenced by various risk factors that can occur at the individual, family, social, school, and community levels. According to the NCES (2018), 13 to 15 percent of eighth to twelfth graders were absent at least three days a month, and approximately 6 percent were absent at least five days a month. A comprehensive report from the U.S. Department of Education (2016) revealed that students with disabilities exhibited higher rates of chronic absenteeism compared to their peers without disabilities. Similarly, Native American and Pacific Islander students displayed a greater tendency for chronic absenteeism when compared to students from other racial and ethnic backgrounds. Additionally, non-ELL students were found to have a higher likelihood of chronic absenteeism in comparison to their ELL counterparts (Garcia & Weiss, 2018).

Link to Learning

Several years ago, Cleveland Public Schools discovered that over half of their students were persistently absent, missing at least 10 percent of school. Although they have made consistent efforts to tackle the issue, similar to many school districts nationwide, there is still considerable work to be done. Learn more about this issue at PBS News: Reduce chronic absenteeism from school and what districts are doing to help students attend more consistently.

Understanding the reasons why teens drop out of high school is fundamental to improving intervention efforts to promote graduation. Risk factors for school absenteeism include negative attitudes toward school, problematic substance use, both externalizing and internalizing behaviors, and limited parent-school involvement (Gubbels et al., 2019). In terms of dropout, risk factors include a history of poor academic achievement, lower IQ, and learning difficulties (Gubbels et al., 2019). In addition, earlier research found extreme parental permissiveness to be associated with higher rates of dropping out (Rumberger

et al., 1990). In a similar vein, researchers conducted a survey with young adults who left high school prior to completion. The researchers identified several influential stressors that increased the decision to leave school including mobility, family dynamics, peer influences, school engagement and environment, health issues, and involvement in crime. Issues related to school engagement and the overall school environment were among the most common reasons (McDermott et al., 2019). Hence, addressing the risk factors for school absenteeism and dropout requires a comprehensive, multifaceted approach that involves collaboration between schools, families, communities, and policymakers.

## Interventions

Of note is a large-scale intervention undertaken in the United States in the 1950s and 1960s, namely the racial integration of schools (Pickren, 2004; Stanley, 2017). In *Brown v. Board of Education* (1954), the U.S. Supreme Court ruled that "separate but equal" educational access and services were inherently unequal and ordered an end to racial segregation in the U.S. education system. By the mid-1970s, the first Black students who were young children at the time of the original ruling and its reaffirmation ten years later showed dramatic increases in academic achievement on national standardized tests.

What this highlights is that large-scale improvements in social status and access to resources, along with a general push toward leveling the socioeconomic playing field, can have a big impact on learning for minority subgroups. This evidence points a path forward: as societies address equity gaps in a variety of domains of life, we should see generational increases in achievement levels (Hanushek et al., 2019). Over time, group-level achievement gaps should close with continued prevention and intervention efforts focused on creating equity.

The *Brown* decision is an example of a large-scale, societywide intervention. Psychologists working in educational settings also focus on identifying individual-level psychological factors that have some bearing on educational outcomes. Some key ones include self-determination theory (Ryan & Deci, 2017), expectancy-value theory (Harackiewicz et al., 2016), the stereotype threat process (Spencer et al., 2016), the concept of self-efficacy (Bandura, 1997; Schöber et al., 2018), and the collection of achievement motivation ideas currently known as growth mindset (Dweck, 2017). Across these diverse psychological processes and applications, one theme emerges: a student's level of achievement motivation is strongly sensitive to the social environment. Adolescent learners in particular are highly attuned to the achievement-related messages they receive from their peers, teachers, parents, and broader culture.

# References

Abeele, M. V., Campbell, S. W., Eggermont, S., and Roe, K. (2014). Sexting, mobile porn use, and peer group dynamics: Boys' and girls' self-perceived popularity, need for popularity, and perceived peer pressure. *Media Psychology. 17*(1), 6–33. doi.org/10.1080/15213269.2013.801725American Academy of Pediatrics. (2016). Media and young minds. *Pediatrics, 138*(5), e20162591. doi.org/10.1542/peds.2016-2591

American Academy of Pediatrics. (2016, October 21). Policy on how to help parents manage young children's media use. AAP News. publications.aap.org/aapnews...eck=redirected

Aron, A., Fisher, H. E., & Strong, G. (2006). Romantic Love. In A. L. Vangelisti & D. Perlman (Eds.), *The Cambridge handbook of personal relationships* (pp. 595–614). Cambridge University Press. https://assets.cambridge.org/9780521...rontmatter.pdf

Baltazar, M. (2019). Musical affect regulation in adolescents: A conceptual model. In K. McFerran, P. Derrington, & S. Saarikallio (Eds.), *Handbook of music, adolescents, and wellbeing* (pp. 65–74). Oxford University Press. psycnet.apa.org/doi/10.1093/...98992.003.0006

Barroso, R., Ramião, E., Figueiredo, P., & Araújo, A. M. (2021). Abusive sexting in adolescence: Prevalence and characteristics of abusers and victims. *Frontiers in psychology, 12,* 610474. https://doi.org/10.3389/fpsyg.2021.610474

Basile, K. C., Clayton, H. B., DeGue, S., Gilford, J. W., Vagi, K. J., Suarez, N. A., Zwald, M. L., & Lowry, R. (2020). Interpersonal violence victimization among high school students—youth risk behavior survey, United States, 2019. *Morbidity and Mortality Weekly Report,* 69(1), 28–37. https://www.cdc.gov/mmwr/volumes/69/...gestedcitation

Batchelder, H. R., Martz, D. M., Curtin, L., & Jameson, J. P. (2022). Interpersonal violence victimization and eating disorder behaviors in rural adolescents. *Journal of Rural Mental Health, 46*(2), 140–150. dx.doi.org/10.1037/rmh0000186

Bozzola, E., Spina, G., Agostiniani, R., Barni, S., Russo, R., Scarpato, E., Di Mauro, A., Di Stefano, A. V., Caruso, C., Corsello, G.,

& Staiano, A. (2022). The use of social media in children and adolescents: Scoping review on the potential risks. *International Journal of Environmental Research and Public Health, 19*(16), 9960. https://doi.org/10.3390/ijerph19169960

Brar, P., Boat, A. A., & Brady, S. S. (2023). But he loves me: Teens' comments about healthy and unhealthy romantic relationships. *Journal of adolescent research, 38*(4), 632–665. doi.org/10.1177%2F07435584221079726

Brown, B. B. (2004). Adolescents' relationships with peers. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of Adolescent Psychology* (2nd ed., pp. 363–394. John Wiley & Sons. psycnet.apa.org/record/2004-12826-011

Brown, B. B., Herman, M., Hamm, J. V., & Heck, D. J. (2008). Ethnicity and image: Correlates of crowd affiliation among ethnic minority youth. *Child Development, 79*(3), 529–546. doi.org/10.1111/j.1467-8624.2008.01141.x

Brown, B. B., & Larson, J. (2009). Peer relationships in adolescence. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology: Contextual influences on adolescent development* (3rd ed., pp. 74–103). John Wiley & Sons. psycnet.apa.org/doi/10.1002/...3.adlpsy002004

Carroll, J. S., Willoughby, B., Badger, S., Nelson, L. J., McNamara, Barry C., Madsen, S. D. (2007). So close, yet so far away: The impact of varying marital horizons on emerging adulthood. *Journal of Adolescent Research, 22*(3), 219–247. doi.org/10.1177/0743558407299

Casper, D. M., Card, N. A., & Barlow, C. (2020). Relational aggression and victimization during adolescence: A meta-analytic review of unique associations with popularity, peer acceptance, rejection, and friendship characteristics. *Journal of Adolescence, 80,* 41–52. doi.org/10.1016/j.adolescence.2019.12.012

Cava, M. J., Tomás, I., Buelga, S., & Carrascosa, L. (2020). Loneliness, depressive mood and cyberbullying victimization in adolescent victims of cyber dating violence. *International Journal of Environmental Research and Public Health, 17*(12), 4269.

Centers for Disease Control and Prevention. (2024, January 23). About sexual violence. *Sexual violence prevention.* U.S. Department of Health and Human Services. https://www.cdc.gov/sexual-violence/.../fastfact.html

Chesney-Lind, M., & Irwin, K. (2008). *Beyond bad girls: Gender, violence and hype.* Routledge. doi.org/10.4324/9780203940860

Centers for Disease Control and Prevention. (2024). About teen dating violence. *Intimate Partner Violence Prevention*. U.S. Department of Health and Human Services. https://www.cdc.gov/intimate-partner...-violence.html

Choi, H. J., Cooke, J. E., Madigan, S., & Temple, J. R. (2022). The impact of parent-child closeness and romantic attachment on dating violence perpetration in adolescence. *Journal of Interpersonal Violence, 37*(23–24). doi.org/10.1177/08862605211072160

Citron, D. K. (2019). Sexual privacy. *Yale Law Journal, 128*(7), 1870–1960. https://papers.ssrn.com/sol3/papers....act_id=3233805

Clayton, H. B. (2023, April 28). Dating violence, sexual violence, and bullying victimization among high school students—Youth risk behavior survey, United States, 2021. *Morbidity and Mortality Weekly Report, 72*(1), 66–74. http://dx.doi.org/10.15585/mmwr.su7201a8

Collins, W. A. (2003). More than myth: The developmental significance of romantic relationships during adolescence. *Journal of Research on Adolescence, 13*(1), 1–24. doi.org/10.1111/1532-7795.1301001

Connolly, J. A., & McIsaac, C. (2009). Romantic relationships in adolescence. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (3rd ed., vol. 2, pp. 101–151). Wiley. doi.org/10.1002/9780470479193.adlpsy002005

Cook, T., Roy, A. R. K., & Welker, K. M. (2019). Music as an emotion regulation strategy: An examination of genres of music and their roles in emotion regulation. *Psychology of Music, 47*(1), 144–154. doi.org/10.1177/0305735617734627

Costello, M. A., Allen, J. P., Womack, S. R., Loeb, E. L., Stern, J. A., & Pettit, C. (2023). Characterizing emotional support development: From adolescent best friendships to young adult Romantic relationships. *Journal of Research on Adolescence, 33*(2), 389–403. doi.org/10.1111/jora.12809

Crabbe, R., Pivnick, L. K., Bates, J., Gordon, R. A., & Crosnoe, R. (2019). Contemporary college students' reflections on their high school peer crowds. *Journal of Adolescent Research, 34*(5), 563–596. doi.org/10.1177%2F0743558418809537

Cyberbullying Research Center. (2022). *Sexting laws across America*. https://cyberbullying.org/sexting-laws

Dane, A., & Bhatia, K. (2023). The social media diet: A scoping review to investigate the association between social media, body image and eating disorders amongst young people. *PLOS Global Public Health, 3*(3), e0001091. https://doi.org/10.1371/journal.pgph.0001091

Dinero, R. E., Conger, R. D., Shaver, P. R., Widaman, K. F., & Larsen-Rife, D. (2008). Influence of family of origin and adult romantic partners on romantic attachment security. *Journal of Family Psychology, 22*(4), 622–632. doi.org/10.1037/a0012506

Dmitrieva, J., Gibson, L., Steinberg, L., Piquero, A., & Fagan, J. (2014). Predictors and consequences of gang membership: Comparing gang members, gang leaders, and non-gang-affiliated adjudicated youth. *Journal of Research on Adolescence, 24*(2), 220–234. doi.org/10.1111/jora.12111

Elkind, D. (1998). *Reinventing childhood: Raising and educating children in a changing world*. Modern Learning Press. https://archive.org/details/reinventingchild00elki

Exner-Cortens, D., Eckenrode, J., & Rothman, E. (2013). Longitudinal associations between teen dating violence victimization and adverse health outcomes. *Pediatrics, 131*(1), 71–78. doi.org/10.1542/peds.2012-1029

Fankhauser, P. (2018). Novel findings on gender differences in self-disclosure: The sharing of personal information in Japanese students' close friendships. *Vienna Journal of East Asian Studies, 10*(1), 1–30. http://dx.doi.org/10.2478/vjeas-2018-0001

Foshee, V. A., Reyes, L. M., Agnew-Brune, C. B., Simon, T. R., Vagi, K. J., Lee, R. D., & Suchindran, C. (2014). The effects of the evidence-based Safe Dates dating abuse prevention program on other youth violence outcomes. *Prevention Science, 15*(6), 907–916. https://doi.org/10.1007/s11121-014-0472-4

Grossman, K., Grossman, K. E., & Kindler, H. (2005). Early care and the roots of attachment and partnership representations: The Bielefeld and Regensburg longitudinal studies. In K. E. Grossmann, K. Grossmann, & E. Waters (Eds.), *Attachment from infancy to adulthood: The major longitudinal studies* (pp. 98–136). Guilford Press. https://www.psychomedia.it/rapaport-...teele05-06.pdf

Giordano, A. L., Schmit, M. K., Clement, K., Potts, E. E., & Graham, A. R. (2022). Pornography use and sexting trends among American adolescents: Data to inform school counseling programming and practice. *Professional School Counseling, 26*(1). doi.org/10.1177/2156759X221137287

Haidt, J. (2024). *The anxious generation: How the great rewiring of childhood is causing an epidemic of mental illness*. Random House. https://doi.org/10.1016/j.jaac.2024.08.004

Halford, W. K. (2011). *Marriage and relationship education: What works and how to provide it*. Guilford Press.

Hamilton, J. L., Dreier, M. J., & Boyd, S. I. (2023). Social media as a bridge and a window: The changing relationship of adolescents with social media and digital platforms. *Current Opinion in Psychology, 52*, 101633. https://doi.org/10.1016/j.copsyc.2023.101633

Hamilton, R. C. (2010). Relational aggression and the impact it has on female adolescents (Publication No. 44) [Doctoral dissertation, The College at Brockport]. College Education Master's Theses. https://api.semanticscholar.org/CorpusID:145327455

Havighurst, R. J. (1973). History of developmental psychology: Socialization and personality development through the life span. In P. B. Baltes & K. W. Schaie (Eds.), *Life-span developmental psychology* (pp. 3–24). Academic Press. https://doi.org/10.1016/B978-0-12-077150-9.50007-1

Hawkley, L. C., & Capitanio, J. P. (2015). Perceived social isolation, evolutionary fitness and health outcomes: A lifespan approach. *Philosophical Transactions of the Royal Society, Series B, biological sciences, 370*(1669), 20140114. doi.org/10.1098/rstb.2014.0114

Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology, 52*(3), 511–524. doi.org/10.1111/1532-7795.1301001

Hébert, M., Blais, M., & Lavoie, F. (2017). Prevalence of teen dating victimization among a representative sample of high school students in Quebec. *International Journal of Clinical and Health Psychology, 17*(3), 225–233. https://doi.org/10.1016/j.ijchp.2017.06.001

Jorgensen-Wells, M. A., James, S. L., & Holmes, E. K. (2021). Attachment development in adolescent romantic relationships: A conceptual model. *Journal of Family Theory & Review, 13*(4), 128–142. dx.doi.org/10.1111/jftr.12409

Kitts, J. A., & Leal, D. F. (2021). What is (n't) a friend? Dimensions of the friendship concept among adolescents. *Social Networks, 66*, 161–170. https://doi.org/10.1016/j.socnet.2021.01.004

Ko, P.-C., Buskens, V., & Wu, C.-I. (2015). The interplay between gender and structure: Dynamics of adolescent friendships in single-gender classes and mixed-gender classes. *Journal of Research on Adolescence, 25(*2), 387–401. psycnet.apa.org/doi/10.1111/jora.12136

Kristof, Nicholas. (2024, March 23). The online degradation of women and girls that we meet with a shrug. *The New York Times*. www.nytimes.com/2024/03/23/o...?smid=em-share

Kwon, K., & Lease, A. M. (2007). Clique membership and social adjustment in children's same-gender cliques: The contribution of the type of clique to children's self-reported adjustment. *Merrill-Palmer Quarterly, 53*(2), 216–242. psycnet.apa.org/doi/10.1353/mpq.2007.0012

Laursen, B., & Hartl, A. C. (2013). Understanding loneliness during adolescence: Developmental changes that increase the risk of perceived social isolation. *Journal of Adolescence, 36*(6), 1261–1268. doi.org/10.1016/j.adolescence.2013.06.003

Lewycka, S., Clark, T., Peiris-John, R., Fenaughty, J., Bullen, P., Denny, S., & Fleming, T. (2018). Downwards trends in adolescent risk-taking behaviors in New Zealand: Exploring driving forces for change. *Journal of Pediatrics and Child Health, 54*(6), 602–608. doi.org/10.1111/jpc.13930

Long, E., Zucca, C., & Sweeting, H. (2021). School climate, peer relationships, and adolescent mental health: A social ecological perspective. *Youth & Society, 53*(8), 1400–1415. doi.org/10.1177/0044118x20970232

Lorijn, S. J., Engels, M. C., Huisman, M., & Veenstra, R. (2022). Long-term effects of acceptance and rejection by parents and peers on educational attainment: A study from pre-adolescence to early adulthood. *Journal of Youth and Adolescence, 51*(3), 540–555. https://doi.org/10.1007/s10964-021-01506-z

Lunde, C., & Joleby, M. (2023). Being under pressure to sext: Adolescents' experiences, reactions, and counter-strategies. *Journal of Research on Adolescence, 33*(1), 188–201. doi.org/10.1111/jora.12797

Manning, M. L. (2002). Havighurst's developmental tasks, young adolescents, and diversity. *The Clearing House, 76*(2), 75–78. doi.org/10.1080/00098650209604953

Marciano, L., Ostroumova, M., Schulz, P. J., & Camerini, A. L. (2022). Digital media use and adolescents' mental health during the Covid-19 pandemic: A systematic review and meta-analysis. *Frontiers in public health, 9,* 793868. https://doi.org/10.3389/fpubh.2021.793868

McFarland, D. A., Moody, J., Diehl, D., Smith, J. A., & Thomas, R. J. (2014). Network ecology and adolescent social structure. *American sociological review, 79*(6), 1088–1121. doi.org/10.1177%2F0003122414554001

Mortimer, J. T. (2010). The benefits and risks of adolescent employment. *The Prevention Researcher, 17*(2), 8–11. www.ncbi.nlm.nih.gov/pmc/articles/PMC2936460/

Patchin, J. W., & Hinduja, S. (2020). It is time to teach safe sexting. *Journal of Adolescent Health, 66*(2), 140–143. https://doi.org/10.1016/j.jadohealth.2019.10.010

Pattiselanno, K., Dijkstra, J. K., Steglich, C., Vollebergh, W., & Veenstra, R. (2015). Structure matters: The role of clique hierarchy in the relationship between adolescent social status and aggression and prosociality. *Journal of youth and adolescence, 44*(12), 2257–2274. https://doi.org/10.1007/s10964-015-0310-4

Piolanti, A., Waller, F., Schmid, I. E., & Foran, H. M. (2023). Long-term adverse outcomes associated with teen dating violence: A systematic review. *Pediatrics, 151*(6). doi.org/10.1542/peds.2022-059654

Ramsey, N., Obeidallah, M., & Abraham, A. (2023). Impact of Covid-19 on adolescent health and use of social media. *Current Opinion in Pediatrics, 35*(3), 362–367. doi.org/10.1097/mop.0000000000001248

Rideout, V. J., & Robb, M. B. (2018). *The Common Sense Census: Media use by tweens and teens*. Common Sense Media. https://www.commonsensemedia.org/sit...inal-web_0.pdf

Rideout, V. J., & Robb, M. B. (2021). *The role of media during the pandemic: Connection, creativity, and learning for tweens and teens*. San Francisco, CA: Common Sense. https://www.commonsensemedia.org/sit...-final-web.pdf

Rousay, V. (2023). *Sexual deepfakes and image-based sxual abuse: Victim-survivor experiences and embodied harms* [Doctoral dissertation, Harvard University]. www.researchgate.net/publica...Embodied_Harms

Rubin, K. H., Bukowski, W. M., & Parker, J. G. (2006). Peer interactions, relationships, and groups. In N. Eisenberg, W. Damon, & R. M. Lerner (Eds.), *Handbook of child psychology: Social, emotional, and personality development* (6th ed., pp. 571–645). John Wiley & Sons. doi.org/10.1002/9780470147658.chpsy0310

Saarikallio, S., & Erkkilä, J. (2007). The role of music in adolescents' mood regulation. *Psychology of Music, 35*(1), 88–109. psycnet.apa.org/doi/10.1177/0305735607068889

Sapolsky, R. (1998, March 22). Open season. *The New Yorker* (p. 57). https://www.newyorker.com/magazine/1.../open-season-2

Smith, L. W., Liu, B., Degenhardt, L., Richters, J., Patton, G., Wand, H., Cross, D., Hocking, J. S., Skinner, S. R., Cooper, S., Lumby, C., Kaldor, J. M., & Guy, R. (2016). Is sexual content in new media linked to sexual risk behaviour in young people? A systematic review and meta-analysis. *Sexual Health, 13*(6), 501–515. https://doi.org/10.1071/sh16037

Sorensen, S. (2007). Adolescent romantic relationships. *Research facts and findings*, 1-4. actforyouth.net/resources/rf...antic_0707.cfm

Stavropoulos, V., Mastrotheodoros, S., Burleigh, T. L., Papadopoulos, N., & Gomez, R. (2018). Avoidant romantic attachment in adolescence: Gender, excessive internet use and romantic relationship engagement effects. *PLoS ONE, 13*(7). https://doi.org/10.1371/journal.pone.0201176

Strasburger, V. C., Zimmerman, H., Temple, J. R., & Madigan, S. (2019). Teenagers, sexting, and the law. *Pediatrics, 143*(5). doi.org/10.1542/peds.2018-3183

Tan, J. S., Hessel, E. T., Loeb, E. L., Schad, M. M., Allen, J. P., & Chango, J. M. (2016). Long-term predictions from early adolescent attachment state of mind to romantic relationship behaviors. *Journal of Research on Adolescence, 26*(4), 1022–1035. doi.org/10.1111/jora.12256

Twenge, J. M. (2020). Increases in depression, self-harm, and suicide among U.S. adolescents after 2012 and links to technology use: Possible mechanisms. *Psychiatric Research and Clinical Practice, 2*(1), 19–25. https://doi.org/10.1176/appi.prcp.20190015

United States Department of Health & Human Services (2023). Surgeon general issues new advisory about effects social media use has on youth mental health. www.hhs.gov/about/news/2023/...al-health.html

Vogels, E. A., Gelles-Watnick. R., & Massarat, N. (2022, August 10). *Teens, social media and technology 2022*. Pew Research Center. https://www.pewresearch.org/internet...chnology-2022/

Wentzel, K. R. (2005). Peer relationships, motivation, and academic performance at school. *Handbook of competence and motivation* (2nd ed., pp. 586–603). psycnet.apa.org/record/2017-17591-031

Wesche, R., Kreager, D. A., Ramirez, N. G., & Gupta, S. (2023). Dating and friendships in adolescence: Variation across same-sex and other-sex romantic partners. *Journal of Research on Adolescence, 33*(4), 1131–1142. doi.org/10.1111/jora.12865

Wincentak, K., Connolly, J., & Card, N. (2017). Teen dating violence: A meta-analytic review of prevalence rates. *Psychology of Violence, 7*(2), 224–241. doi.org/10.1037/a0040194

Zhao, Q., & Li, C. (2022). The roles of clique status hierarchy and aggression norms in victimized adolescents' aggressive behavior. *Journal of youth and adolescence, 51*(12), 2328–2339. https://doi.org/10.1007/s10964-022-01677-3

This page titled 15.10.5: Social Contexts in Adolescence is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

- 10.4: Social Contexts in Adolescence by OpenStax is licensed CC BY 4.0. Original source: https://openstax.org/details/books/lifespan-development.

# 15.10.6: Family and Community Contexts in Adolescence

## Learning Objectives

By the end of this section, you will be able to:

- Describe the impact of various parenting styles on development during adolescence
- Identify sources of parent-adolescent conflict
- Discuss assets and activities related to positive youth development

Fifteen-year-old Michael wakes up twenty minutes early each day so he can help his younger brother get ready for school. While his stepmother is downstairs hurriedly stirring eggs on the stove while getting dressed for work and feeding the dog, Michael reminds his brother to make his bed before he heads downstairs. After breakfast Michael's stepmother looks for the car keys. But Michael is already outside, having taken the keys to warm up the car on this wintry morning. Later that morning, while in school, Michael receives a text from his stepmom: "Thank you for helping us this morning. Pizza for dinner? I love you!" After school, the brothers go to the after-school program offered at the nearby community center. Michael does homework while his brother plays with his friends in the gym. Both are excited to see their stepmother's car pull up shortly after 5 p.m. Time for pizza!

Family life is a central feature in the lives of adolescents, serving as the anchor for their experiences. Caregivers and family structure play an important role in teenager's lives, as does the influence of the broader community.

## The Influence of Parenting Styles

Although adolescence is a time of gradual turning toward the broader society, parents are still obviously an important source of support and guidance in adolescents' lives. Recall the four main clusters of parenting styles: authoritative (high warmth, high structure), indulgent or permissive (high warmth, low structure), authoritarian (low warmth, high structure) and neglectful or uninvolved (low warmth, low structure) (Baumrind, 1971; Maccoby & Martin, 1983).

The authoritative parenting style is associated with many positive outcomes for adolescents, just as it is for younger children (Figure 10.15). These outcomes include a more positive self-concept, more positive orientation toward school and academic competence, and fewer problem behaviors (Dagnew, 2015; Febiyanti & Rachmawati, 2021; Steinberg, et al., 1994). In a follow-up, researchers found these outcomes held steady one year later, explaining that parenting style at that point helped maintain adolescents' positive adjustment (Steinberg et al., 1994). Another study examined the relationships between parenting styles, academic self-concept, academic motivation, and academic achievement among Ethiopian students. The findings showed that the authoritative parenting style had a positive correlation with academic achievement, while authoritarian and permissive styles had negative correlations; there was no significant relationship with the neglectful style. Academic self-concept, intrinsic motivation, and extrinsic motivation were all positively related to academic achievement (Dagnew, 2015). As you might expect, the opposite pattern was found for the neglectful parenting style, and the outcomes for adolescents of authoritarian and permissive styles fell somewhere between.



Figure 10.15 Many families maintain warmth and closeness in adolescence, and this is particularly common in authoritative households. This can be facilitated through shared activities. Contrary to the popular media notion that adolescents and parents are perpetually in conflict, many families get along quite well. (credit: modification of work “Family enjoying view from Dog Mountain” by U.S. Forest Service- Pacific Northwest Region/Flickr, Public Domain)

A wealth of studies sought to replicate and extend Baumrind’s parenting-style theory, focusing on two underlying dimensions that help explain how parenting style is related to adolescent outcomes: warmth (level of responsiveness to the child’s needs) and structure (level of demands and rules for age-appropriate behavior). First, given that a central developmental task for adolescents is to assume control and responsibility for their own behavior, called developing behavioral autonomy, it makes sense that the responsiveness and clearly communicated expectations in authoritative parenting create an ideal environment for this task. Parental authority is respected, even as the teen increases their own sense of behavioral autonomy. Second, the expectations of authoritarian parenting can come across as unwelcome and interfere with growing behavioral autonomy (Bi et al., 2018).

## It Depends: Can Your Parent Be Your Friend?

An intriguing question is whether a caregiver can or even should be considered a “friend” of their child. On one hand, we might say yes. Parents and children/adolescents are in a very close, emotionally significant relationship and spend a lot of time together. From another perspective, we could say no because caregivers and children/adolescents play very different roles, with different responsibilities, concerns, and amount of power.

Baumrind’s research (1971) on parenting styles can help us make sense of this question by focusing on what is in the best interest of the child or adolescent. As you’ve learned, the authoritative parenting style is considered the most conducive to supporting appropriate development of children and adolescents. The winning combination of clear expectations and guidelines for behavior, communicated within a warm and loving relationship, helps developing adolescents understand and internalize the underlying reasons for the expectations. Researchers have found that teens actually prefer to have guidance, because it gives them a sense of security and direction in a rather complex world (Collins & Steinberg, 2006; Elkind, 1998).

The permissive style of parenting includes the warmth and daily involvement of the authoritative style but lacks the necessary guidance. Permissive parents often see themselves as friends of their children and are uncomfortable about or unwilling to set limits, perhaps to avoid disappointing their child or upsetting them. Although this avoids conflict in the moment, the developing teenager is left with little guidance and faces a bewildering number of decisions and scenarios across adolescence without parental guardrails to guide them (Elkind, 1998).

The findings are clear: across a wide range of cultures and family types, adolescents and younger children do well when caregivers give them both warmth and structure. The way caregivers achieve this balance can differ based on their family dynamics and various contextual factors in the child's environment.

## Parent-Teen Conflict

A common notion about adolescence is that a high level of stress or conflict always arises between teens and parents. While hormonal fluctuations can play a small role in the day-to-day moods of developing teens, such temporary irritability can't account for the full nature of the conflict developmental psychologists have studied. Strife between teens and parents does heighten during the adolescent period, but it becomes less frequent as adolescence progresses (Shanahan, et al., 2007). The emotional intensity and stakes tend to increase, however, perhaps accounting for the overall perception that adolescence is a period of high discord (De Goede et al., 2009). Given that psychologists have noted the functional role of conflict, it's reasonable to suspect that this common feature of adolescence might serve a purpose, and that perspective may also help us understand its common sources.

Adolescents undergo dramatic physical, cognitive, and self- and social redefinition. Parent-adolescent conflict could be both a driver of this redefining of roles and qualities, and a consequence of it (Branje et al., 2012; Collins & Sternberg, 2006). Adolescents' new reasoning skills, including hypothetical-deductive reasoning and the ability to think abstractly, often lead to the de-idealization of parents. That is, teens see a mismatch between the values their parents proclaim, the rules they put forward, and the way imperfect parents lead their own imperfect lives. Those same reasoning skills—which parents, teachers, and society at large all encourage—can lead adolescents to imagine an alternative world in which the rules are just a bit different, and not so "unfair." One way parents can avoid this tension and struggle is by simply admitting when they make mistakes and taking steps to involve the adolescent in open family communication regarding major decisions or interpersonal conflicts.

Across adolescence, autonomy and self-determination grow, and the roles teenagers take on change as they are granted more responsibility (Mastrotheodoros et al., 2019). Teens' changing physicality also means that parents and other adults in the community may expect more adultlike behavior from them as they start to look more like grown-ups on the outside, but it is important to remember that on the inside, their frontal lobes are not yet finished developing. When teens make mistakes, both they and their parents might feel disappointment and frustration. Adolescent-parent conflict makes sense, then, when we consider the totality of the psychological and social circumstances in which adolescents find themselves. The negotiation and resolution of this friction can lead to a more egalitarian relationship between parent and child (Branje, 2018). Conflict declines with the parent's gradual release of control as the adolescent learns to make their way in the larger world. Arguments about household chores, curfews, appearance and dress, use of a family car, and spending money all make sense from this developmental perspective. Allowing teens more freedom within a structured environment can reduce conflict and improve family well-being. Adolescent-caregiver relationships are more likely to stay healthy and harmonious when adolescents believe that their caregiver's rules are there for a good reason and are reasonable, and when caregivers and adolescents continue to have open, respectful communication (Smetana et al., 2006).

## Family Structure

Developmental psychologists have long been interested in the role family structure may play in child and adolescent outcomes. Researchers have investigated a variety of such structures, including two-parent families, single-parent families, multigenerational families, and step- or blended families. The differences observed are probably due to the different ways family members function and interact with one another more so than to the family structures themselves. In other words, many different family types can thrive or have difficulties, often based on complicated contextual factors such as family resources. Disparities in resources, such as available income and the ability to monitor children, also factor heavily in producing different outcomes.

Decades of research on family structure and outcomes have shown a consistent pattern: children and adolescents in two-parent households fare better across a range of physical and psychological measures of well-being (Savell, et al., 2023; Langton & Berger, 2011; Parache, et al., 2023). A higher percentage of adolescents in both single-parent and stepfamily households exhibit more negative behavioral conduct (such as acting out) and higher levels of depression and anxiety than adolescents in two-parent households (Parche, et al., 2023).

In a longitudinal study of German families, adolescents in stepfamilies reported particularly low-quality relationships with their parents, compared to teens in single- or two- parent families (Walper & Beckh, 2010). Similarly, in a longitudinal study of families in the United States, disruptive behavior reported by teachers was lowest for children in two-parent families (Savell, et al., 2021). Another study using a large-scale national survey in the United States found adolescents in two-parent families often had better overall physical health than those in all other family structures (Langton & Berger, 2011). This may be because having two caregivers to share the various family roles and responsibilities can reduce caregiver stress.

This pattern was also reported in a recent large-scale national survey of Korean youth (Park & Lee, 2020), with some additional

findings: adolescents from families other than two-parent households showed higher levels of risky behavior such as drinking and smoking, higher levels of suicidal ideation, more stress, and lower perceived level of academic performance. In essence, the scientific literature has been reporting the comparative benefits of the two-parent family for quite some time. But what is it exactly about family structure that causes these observed outcomes?

Recently, scholars have noted that two-parent (sometimes called “intact”) families have enjoyed a type of privilege in both our culture and scientific investigations. They have sought to identify the links between a family’s composition and the well-being of its members.

Socioeconomic status is one such link. Studies of families in the United States (Savell, et al. 2023) and Germany (Parache, et al., 2023) found strong associations between SES and adolescent well-being. Two-parent households typically have more income and other resources (such as time) available for benefiting household members. The financial strain that comes from having fewer resources could contribute additional stress in other family structures. Other factors include the level of parental monitoring and parental ability to protect family members from adverse health conditions that result in accidents and injury (Langton & Berger, 2011). The negative findings for stepfamilies may seem confusing since these families have two parents. However, stepfamilies tend to experience lower income levels, greater potential for within-family conflict, and less stability.

Government policies and programs can be informed by recognizing the role these factors likely play in child and adolescent outcomes. For example, as a society, we may look for ways to support single-parent households financially through tax breaks or other programs in order to increase positive outcomes for children and adolescents living in this common family structure.

## Assets and Activities Supporting Positive Adolescent Development

In considering how to support optimal conditions for adolescent development, researchers at the Search Institute (Pekel et al., 2015) created what is called the developmental assets approach. It identifies twenty internal qualities and twenty external qualities that should be nurtured during youth. The external qualities include those that can be supported through resources like families, educational environments, and the broader community. Examples include positive peer influences, motivation to achieve, family support, and a favorable outlook of one’s future. Research suggests that development of these assets is aligned with behaviors such as having academic success, valuing diversity, helping others, resisting risky behaviors, and having the ability to overcome adversity (Pekel et al., 2015). The goal is to ensure that, as teens mature, they benefit from a community that values and includes them in decision-making, provides a safe environment, and sets clear expectations and boundaries (Roehlkepartain, 2015). A supportive environment allows adolescents to engage in meaningful activities, align with like-minded peers, and contribute to their community.

This approach to applying developmental psychology to improve lives aligns with the positive youth development perspective (Lerner, 2005; Lerner, Dowling & Anderson, 2003; Roth, et al., 1998), which integrates various protective factors and resources to foster healthy development in children and adolescents. Positive youth development focuses on promoting positive outcomes and emphasizes a hopeful environment and opportunities for growth by engaging youth in a variety of enrichment and health promotion programs. According to Lerner and colleagues (2005), positive youth development programs should focus on five “C”s: competence, character, confidence, connections, and compassion (Lerner, et al., 2005), and should set high expectations for achievement and provide continuous support, mirroring high-quality parenting and educational best practices. According to the CDC, these types of programs can strengthen an adolescent’s sense of identity as well as their competence in social, emotional, cognitive, and behavioral domains (CDC, 2022).

Availability of and access to youth activities and programs can vary greatly. Your community’s school system and local library may be good resources for learning more about what offerings are available in your community. Many programs are run through governmental resources including school systems, nonprofit groups, faith-based entities, and recreational organizations.

Community programs may be run through local government sectors (like a public library), or the combined efforts of those with others in the community, such as area businesses in the Chamber of Commerce, or local branches of nonprofit organizations such as Girls Who Code. The 4-H program is an example of a national youth development organization run in association with the extension/outreach divisions of universities with programs that seek to promote activities like service to the community and a healthy lifestyle. A comprehensive evaluation of 4-H (Lerner et al., 2015) identified a number of long-term benefits such as a higher level of engaged citizenship through high school, decreased risk for problem behaviors, higher academic performance, and a greater tendency to endorse and exhibit health-promoting attitudes and behaviors. Involvement in community programs like these can help developing adolescents to explore new interests, learn more about their communities, and consider roles they may want to continue within these contexts (Figure 10.15).



(a)



(b)

Figure 10.16 Youth activities that foster positive development are available through various community groups and organizations. (a) Teens learn about the City of Greenville's video production control room as part of a "Grow Local" initiative that brings high school students to visit various area organizations and businesses in Greenville, North Carolina. (b) This 4-H group helped with trail maintenance and planted a butterfly garden as part of its Outdoor Wildlife Leadership Service project in the Land Between the Lakes National Recreation Area in Kentucky. (credit a: modification of work "Grow Local – City Government" by City of Greenville, North Carolina/Flickr, Public Domain; credit b: modification of work "4H Group at Brandon Spring Group Center" by Land Between the Lakes KY/TN/Flickr, Public Domain)

Many communities have recreational departments that offer youth activities, often including organized sports; classes in art, music, and dance; and various camp-type programs for specific interests. Recreational opportunities are often available through organizations like Girl Scouts and Scouting America, which encourage youth to try new things, help others, improve self-confidence, and build strong ethical standards—and in the case of Girl Scouts, develop financial literacy (Girl Scout Research Institute, 2020; Modi et al., 2012). Recent studies highlight the positive impact of scouting on youth development, such as higher levels of civic engagement and social responsibility (Kim et al., 2016; Polson et al., 2013) and improved mental health and resilience (Wang et al., 2021).

Organized sports offer another important context for positive youth development, with programs offered through school systems, local government recreational programs, and other sports organizations. The benefits of participation in sports include better mental health outcomes (reduced anxiety and depression), increased leadership and team-building skills including cooperation and other prosocial behaviors, and positive effects on physical health and overall physical development. According to the Project Play study, regular participation in a team sport among teenagers between ages thirteen and seventeen years in the United States was at 36 percent in 2022. However, these programs are often less accessible to those in low SES households due to factors such as affordability and transportation (Aspen Institute Project Play, 2023). And although high schools in the United States have increased their awareness and access to adaptive sports programs (Carbone et al., 2021), in recent years, there has also been a decline in the participation and activity levels of youth with disabilities (MacEachern et al., 2021).

### Link to Learning

Is playing sports as beneficial as commonly believed, or are we over-focused on sports? Watch this TED-Ed talk titled *How playing sports benefits your body ...and your brain* to learn more.

Some teens may choose to become involved in faith-based groups. This may entail participating in important stages of religious development during adolescence, such as a bar mitzvah or religion classes (Figure 10.17). Other activities connected to faith groups may be more social in nature, offering teens peer group support. Fifty-one percent of all U.S. teenagers have attended a religious youth group at some point in their lives, while 29 percent currently attend such group meetings regularly (Pew Research Center, 2020). Being curious about their spirituality, the meaning and purpose of life, and their place in the universe is a common characteristic of adolescents, including those who profess no particular religion (Pew Research Center, 2019). A recent study surveyed Singaporean youth and found that individuals with a religion had higher overall positive mental health scores than those without, and that various religions had different benefits: Christianity was linked to higher emotional support; Taoism, Buddhism, and Islam with better coping and support; Hinduism with better interpersonal skills; and Sikhism with both better support and interpersonal skills (Vaingankar et al., 2021).



Figure 10.17

## Link to Learning

Listen to an adolescent girl's explanation of her bat mitzvah experience, including what it meant spiritually, as a milestone toward adulthood, and as part of her development in this stage of life.

Employment during adolescence is another way teens engage with their community. Is working during adolescence beneficial? Before the 1938 Fair Labor Standards Act was passed, children and adolescents routinely entered the workforce, sometimes laboring alongside (and sometimes competing with) their parents. Federal and state laws still allow adolescents to work, but they limit the start and stop times and length of the workday. According to the U.S. Bureau of Labor Statistics, 37 percent of adolescents ages sixteen to nineteen years participated in the workforce in 2024 (2024). This number includes many teens who work as part of their high school's Career, Technical, and Agricultural Education programs that provide an apprenticelike transition between schooling and adult employment.

One of the societal benefits of adolescents working is the many billions of dollars they contribute to the economy, much of it spent on items such as fast food, clothing, and entertainment. Many teens also contribute their earnings to their household's finances. The psychological benefits of teenage employment include a growing sense of pride, financial autonomy, purpose, and self-esteem. Those who work also learn about the value of money (the price of this pair of jeans means I have to work five hours), develop valuable life skills such as time management and a work ethic, and meet others, including adults, in their communities (Mortimer, 2010).

However, there are several potential downsides to teen employment. Parents and teachers worry about the reduced time and energy available for schoolwork. Another concern is having teens work alongside older individuals, which can expose them to negative influences such as underage drinking and smoking, especially in social settings outside the workplace. The balance between work and academic pursuits can also be affected, though SES plays a part as well. Some teens may work because they need to in order to contribute to the household income, contribute to expenses like car insurance, or to start saving to live independently, particularly if they are in an unstable home environment. Other adolescents may work to afford certain material goods (such as purchasing a video game they want, or their first used car, or luxury items like a special pair of sneakers or some bling). Some teens may take jobs to fund special experiences, such as an opportunity for a short study-abroad trip with their school's foreign language program. Still others work to gain valuable experience for college applications, trade programs, or other employment and career goals.

These differences in motivations and resources can dramatically change one's experience of entering the workforce and subsequent job satisfaction. Adolescents, their families, and school counselors should weigh the individual circumstances and aspirations of teens who seek employment to ensure a balanced approach that supports both their academic and personal development.

In all, whether through schools, community resources, or interest-based groups, involvement in activities and programs can help adolescents in developing self-esteem, a sense of purpose, healthy social relationships, and connection to the community, which all together can promote socioemotional well-being.

## References


Aspen Institute, Project Play. (2023). State of play 2022: Our annual report on trends in youth sports. https://projectplay.org/state-of-pla...2/introduction

Baumrind, Diana. (1971). Current patterns of parental authority. *Developmental Psychology, 4*(1), 1–103. doi.org/10.1037/h0030372

Bi, X., Yang, Y., Li, H., Wang, M., Zhang, W., & Deater-Deckard, K. (2018). Parenting styles and parent-adolescent relationships: The mediating roles of behavioral autonomy and parental authority. *Frontiers in Psychology, 9,* 2187. https://doi.org/10.3389/fpsyg.2018.02187

Branje, S. (2018). Development of parent–adolescent relationships: Conflict interactions as a mechanism of change. *Child Development Perspectives, 12*(3), 171–176. doi.org/10.1111/cdep.12278

Branje, S., Laursen, B., & Collins, W. A. (2012). Parent-child communication during adolescence. In A. L. Vangelisti (Ed.), *Routledge Handbook of Family Communication* (pp. 271–286). Routledge. www.researchgate.net/publica...escence_2nd_Ed

Carbone, P. S., Smith, P. J., Lewis, C., & LeBlanc, C. (2021). Promoting the participation of children and adolescents with disabilities in sports, recreation, and physical activity. *Pediatrics*, 148(6), e2021054664. doi.org/10.1542/peds.2021-054664

Centers for Disease Control and Prevention. (2022, November 2). *Positive youth development*. U.S. Department of Health and Human Services. www.cdc.gov/healthyyouth/saf...evelopment.htm

Collins, W. A., Maccoby, E. E., Steinberg, L., Hetherington, E. M., & Bornstein, M. H. (2000). Contemporary research on parenting: The case for nature and nurture. *American Psychologist, 55*(2), 218–232. https://pubmed.ncbi.nlm.nih.gov/10717969/

Collins, W.A., & Steinberg, L. (2006). Adolescent development in interpersonal context. In N. Eisenberg, W. Damon, & R. M. Lerner (Eds.),*Handbook of child psychology: Social, emotional, and personality development* (pp. 1003–1067). John Wiley & Sons.

Dagnew, A. (2015). The relationship among parenting styles, academic self-concept, academic motivation and students' academic achievement in Fasilo Secondary School: Bahir Dar, Ethiopia. *Research in Pedagogy, 8*(2), 98–110. https://files.eric.ed.gov/fulltext/EJ1201997.pdf

De Goede, I. H. A., Branje, S. J. T., & Meeus, W. H. J. (2009). Developmental changes in adolescents' perceptions of relationships with their parents. *Journal of Youth and Adolescence, 38*(1), 75–88. https://doi.org/10.1007/s10964-008-9286-7

Diamant, J., & Sciupac, E. P. (2020). 10 key findings about the religious lives of U.S. teens and their parents. Pew Research Center. https://www.pewresearch.org/short-re...their-parents/

Elkind, D. (1998*). Reinventing childhood:* Raising and eEducating children in a changing world. Modern Learning Press. Rosemont.

Febiyanti, A., & Rachmawati, Y. (2021). Is authoritative parenting the best parenting style? *Advances in Social Science, Education and Humanities Research, 538,* 90–95). Atlantis Press.

Girl Scout Research Institute. (2019). *Today's girls, tomorrow's entrepreneurs: Transforming interest and aptitude into success*. https://www.girlscouts.org/content/d...repreneurs.pdf

Kim, Y.-I., Jang, S. J., & Johnson, B. R. (2016). Tying knots with communities: Youth involvement in scouting and civic engagement in adulthood. *Nonprofit and Voluntary Sector Quarterly, 45*(6), 1113–1129. https://www.econbiz.de/Record/tying-...ng/10011628358

Langton, C. E., & Berger, L. M. (2011). Family structure and adolescent physical health, behavior, and emotional well-being. *Social Service Review, 85*(3), 323–357. doi.org/10.1086/661922

Lerner, R. M., Lerner, J. V., Bowers, E. P., & Geldhof, G. J. (2015). Positive youth development and relational-developmental-systems. In W. F. Overton, P. C. M. Molenaar, & R. M. Lerner (Eds.), *Handbook of child psychology and developmental science: Theory and*

*method (7th ed.,* pp. 607–651). John Wiley & Sons. psycnet.apa.org/doi/10.1002/...18.childpsy116

Lerner, R. M., Almerigi, J. B., Theokas, C., & Lerner, J. V. (2005). Positive youth development a view of the issues. *The Journal of Early Adolescence, 25*(1), 10–16. doi.org/10.1177/0272431604273211

Lerner, R. M., Dowling, E. M., & Anderson, P. M. (2003). Positive youth development: Thriving as the basis of personhood and civil society. *Applied Developmental Science, 7*(3), 172–180. doi.org/10.1207/S1532480XADS0703_8

Maccoby, E. E., & Martin, J. A. (1983). Socialization in the context of the family: Parent-child interaction. In P. H. Mussen, & E. M. Hetherington (Eds.), *Handbook of child psychology: Vol. 4. Socialization, personality, and social development* (pp. 1–101). New York: Wiley. https://www.scirp.org/reference/refe...enceid=1468894

MacEachern, S., Forkert, N. D., Lemay, J.-F., & Dewey, D. (2021). Physical activity participation and barriers for children and adolescents with disabilities. International *Journal of Disability, Development and Education, 69*(1), 204–216. doi.org/10.1080/1034912X.2021.1952939

Mastrotheodoros, S., Van der Graaff, J., Deković, M., Meeus, W. H. J., & Branje, S. (2020). Parent–adolescent conflict across adolescence: Trajectories of informant discrepancies and associations with personality types. *Journal of Youth and Adolescence, 49*(1), 119–135. https://doi.org/10.1007/s10964-019-01054-7

Modi, K., Schoenberg, J., & Tsikalas, K. (2013). Youth organizations and positive development: Lessons learned from a century of Girl Scouting. Berkman Center Research Publication No. 2013-8. papers.ssrn.com/sol3/papers....act_id=2199124

Mortimer, J. T. (2010). The benefits and risks of adolescent employment. *The Prevention Researcher, 17*(2), 8. https://pubmed.ncbi.nlm.nih.gov/20835367/

Morton, M., & Montgomery, P. (2011). Youth empowerment programs for improving self-efficacy and self-esteem of adolescents. *Campbell Systematic Reviews, 7*(1), 1–80. doi.org/10.4073/csr.2011.5

Parache, L. G., Vogel, M., Meigen, C., Wireland, K., & Poulain, T. (2023). Family structure, socioeconomic status, and mental health in childhood. *European Child & Adolescent Psychiatry, 33,* 2377–2386. https://doi.org/10.1007/s00787-023-02329-y

Park, H., & Lee.,K.-S. (2020). The association of family structure with health behavior, mental health, and perceived academic achievement among adolescents: A 2018 Korean nationally representative survey. *BMC Public Health, 16*(1), 510. https://doi.org/10.1186/s12889-020-08655-z

Pekel, K., Roehlkepartain, E. C., Syvertsen, A. K., & Scales, P. C. (2015). Don't forget the families: The missing piece in America's efforts to help all children succeed

(Summary of key findings). Minneapolis, MN: *Search Institute*. https://pub.search-institute.org/fil...10-13-2015.pdf

Polson, E. C., Kim, Y.-I., Jang, S. J., Johnson, B. R., & Smith, B. (2013). Being prepared and staying connected: Scouting's influence on social capital and community involvement. *Social Science Quarterly, 94*(3), 758–776. doi.org/10.1111/ssqu.12002

Roehlkepartain, E. C. (2015). 25 Years of Developmental Assets: Personal reflections (and a little data). *Search Institute*, 1–6. https://pub.search-institute.org/fil...-of-assets.pdf

Roth, J. L., Brooks-Gunn, J., Murray, L., & Foster, W. (1998). Promoting healthy adolescence: Synthesis of Youth Development Program Evaluations. *Journal of Research on Adolescence, 8*, 423–459. dx.doi.org/10.1207/s15327795jra0804_2

Savell, S. M., Saini, R., Ramos, M., Wilson, M. N., Lemery-Chalfant, K., & Shaw, D. S. (2023). Family processes and structure: Longitudinal influences on adolescent disruptive and internalizing behaviors. *Family Relations, 72*(1), 361–382. doi.org/10.1111/fare.12728

Shanahan, L., McHale, S. M., Osgood, D. W., & Crouter, A. C. (2007). Conflict frequency with mothers and fathers from middle childhood to late adolescence: Within- and between-families comparisons. *Developmental psychology, 43*(3), 539–550. doi.org/10.1037/0012-1649.43.3.539

Smetana, J. G., Metzger, A., Gettman, D. C., & Campione-Barr, N. (2006). Disclosure and secrecy in adolescent–parent relationships. *Child Development*, *77*(1), 201–217. doi.org/10.1111/j.1467-8624.2006.00865.x

Steinberg, L., Lamborn, S. D., Darling, N., Mounts, N. S., & Dornbusch, S. M. (1994). Over-time changes in adjustment and competence among adolescents from authoritative, authoritarian, indulgent, and neglectful families. *Child Development, 65*(3), 754–770. doi.org/10.1111/j.1467-8624.1994.tb00781.x

United States Bureau of Labor Statistics. (2024, August). *Civilian labor force participation rate*. [Data set]. www.bls.gov/charts/employmen...ation-rate.htm

Vaingankar, J. A., Choudhary, N., Chong, S. A., Kumar, F. D. S., Abdin, E., Shafie, S., ... & Subramaniam, M. (2021). Religious affiliation in relation to positive mental health and mental disorders in a multi-ethnic Asian population. *International Journal of Environmental Research and Public Health, 18*(7), 3368. https://doi.org/10.3390/ijerph18073368

Walper, S., & Beckh, K. (2010). Adolescents' development in high-conflict and separated families: Evidence from a German longitudinal study. In A. Clarke-Stewart & J. Dunn (Eds.), *Families count: Effects on child and adolescent development* (pp. 238–270). Cambridge University Press.

Wang, J., Chase, P. A., & Burkhard, B. M. (2021). Promoting positive youth development through scouting. *Handbook of positive youth development: Advancing research, policy, and practice in global contexts,* 501–514. https://doi.org/10.1007/978-3-030-70262-5_33

This page titled 15.10.6: Family and Community Contexts in Adolescence is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

- 10.5: Family and Community Contexts in Adolescence by OpenStax is licensed CC BY 4.0. Original source: https://openstax.org/details/books/lifespan-development.

# 15.10.7: Key Terms

**age of consent**
: minimum age at which an individual can legally make decisions to engage in sexual behavior

**body image**
: our mental image or representation of our body

**clique**
: close group of three to a dozen or so friends

**crowd**
: large social grouping of many dozens or more members in the social milieu of adolescents

**cultural heritage**
: adaptations to the natural and social world that have shared meaning and are passed from generation to generation

**de-idealization**
: tendency of adolescents to see a mismatch between the values their parents proclaim, the rules they put forward, and the way imperfect parents lead their own imperfect lives

**friendship**
: intimate, emotionally close relationship between two individuals

**gender intensification hypothesis**
: prediction that conforming to gender roles is of heightened relevance during adolescence

**gender nonconforming behavior**
: behavior that does not match society's expectations for the individual's assigned gender

**heteronormativity**
: idea that heterosexuality is the norm or preferred sexual orientation and that opposite-sex people are best suited for sexual and marital relationships

**identity**
: individual's complete sense of who they are, including their traits, capabilities, interests, values, and social roles

**identity achievement**
: realization and commitment to a coherent understanding of oneself and our relationship with society after exploring various identities

**identity diffusion**
: identity status in which the individual has low commitment and does not actively seek an identity; most closely aligns with Erikson's role confusion

**identity foreclosure**
: identity status in which an individual has shown an early commitment to an identity without any prior exploration

**identity moratorium**
: stage in which individuals are actively exploring various identities but not declaring an identity to be fully formed

**identity versus role confusion**
: fifth stage of Erikson's psychosocial development, which involves forming a stable and whole identity by first exploring various roles and identities

**possible selves**
: various identities toward which adolescents may work in the future

**relational aggression**
: practice of including or excluding others or otherwise threatening a sense of belonging such as by spreading gossip

**rite of passage**
: socially or culturally explicit markers to recognize the transitioning adolescent's progress and achievement of adult status in one or more dimensions

**romantic relationship**
: bond psychologically distinct from mere liking and including components of affection, intimacy, exclusivity, and interdependence

**stereotype threat**
: phenomenon where individuals experience anxiety or fear of confirming negative stereotypes about their social group, which can impair their performance in academic or other achievement-related tasks

This page titled 15.10.7: Key Terms is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

# 15.10.8: Summary

## 10.1 Theories of Adolescent Socioemotional Development

- Adolescence is a time that many societies set aside in some way as children transition to adult status and roles. In some countries, teens delay transitional events such as leaving home, whereas in other nations, teens play crucial roles in supporting their families' basic needs and improving their economic situation.
- Key socioemotional developmental tasks for adolescents include figuring out who they are, developing close relationships with peers, and beginning to become independent of their parents while navigating their sociocultural surroundings.
- Teen rites of passage mark important milestones along the course of the adolescent transition and vary across cultures.
- The exploration of and commitment to an identity is a prominent psychological achievement of adolescence in which teens explore their identity, consider their past experiences, and explore societal expectations and personal aspirations to establish their values and discover who they are.

## 10.2 Emotional and Self-Development in Adolescence

- Adolescence is a crucial time for developing emotional intelligence (EI), an ability that includes self-awareness, self-regulation, motivation, empathy, and social skills. High EI in adolescents correlates with better academic performance, life satisfaction, and coping skills.
- Brain development during adolescence supports self-regulation, allowing teens to manage and control their behavior and emotions and to develop task persistence, delay gratification, and manage frustration.
- During adolescence, the self-concept grows to encompass abstract traits like “trustworthy” and “hardworking.” Positive self-concept in teens is linked to higher self-esteem, better mental health, and more successful social relationships.
- Self-concept is the cognitive understanding of our self, while self-esteem is the motivational and emotional piece. Self-esteem is influenced by parental support, peer relationships, physical activity levels, and body image. It tends to increase across adolescence.
- All adolescents are susceptible to developing an unhealthy body image, influenced by the timing of puberty and cultural beauty standards. The development of a positive body image is a critical goal.

## 10.3 Identity and Culture: Race/Ethnicity, Gender, and Sexuality in Adolescence

- Our ethnicity is our cultural heritage, while race is a socially constructed concept that often includes cultural heritage.
- For many adolescents, developing a positive ethnoracial identity is vital for healthy growth and leads to higher self-esteem, better academic performance, and improved coping skills, especially in the face of discrimination.
- In Poston's model, biracial adolescents initially feel compelled to choose one ethnic identity, which may lead to guilt and reexamination of their other heritage. Ultimately, they achieve a greater appreciation and integration of multiple ethnic identities, enhancing their sense of belonging and connection. Biracial individuals often engage in code-switching, adapting their behavior and speech to fit different cultural environments.
- The gender intensification hypothesis suggests that early adolescence brings increased social pressure to adopt traditional gender roles.
- Heterosexual identity development is influenced by biology, culture, religion, gender norms, and social attitudes, which help adolescents form a clear sexual identity in which their thoughts, feelings, and behaviors align.
- A growing number of adolescents identify as sexual minorities (LGBTQ+). Developing a sexual-minority identity is a complex series of milestones rather than stages. The milestones include recognizing same-sex attraction, engaging in same-sex activities, and coming out, and their timing is influenced by factors such as race, ethnicity, and gender.

## 10.4 Social Contexts in Adolescence

- Peers, cliques, and crowds play a crucial role in teen social development by providing a sense of belonging and identity. They help adolescents navigate social hierarchies, form personal values, and build interpersonal relationships.
- Romantic relationships allow for exploration of psychological intimacy, sexuality, and further refinement of our attachment

history. Educating teens about healthy relationship behaviors, including respect, communication, and boundaries, is crucial to prevent abusive dynamics.
- The average adolescent spends as much as one-third of their day interacting with various forms of media. Parents play a crucial role in teaching responsible technology use to make the most of its potential benefits and to keep teens safe.
- Formal schooling plays a crucial role in teen development by providing structured learning environments that foster cognitive, social, and emotional growth. Through interactions with peers and teachers, teens develop academic and communication skills, as well as a sense of identity. Moreover, formal education equips adolescents with knowledge and skills necessary for future academic and career success.

## 10.5 Family and Community Contexts in Adolescence

- Effective conflict management in teen-parent relationships often hinges on the parenting style. Understanding and adapting parenting practices—such as authoritative or authoritarian—to balance parental guidance and teen independence can significantly enhance the quality of teen-parent relationships during adolescence.
- The positive youth development subfield of developmental psychology aims to promote healthy psychological functioning in all children and adolescents. Participation in various youth programs and activities can provide structured environments where teens can develop leadership skills, build self-esteem, and foster a sense of community.

This page titled 15.10.8: Summary is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

- 10.7: Summary by OpenStax is licensed CC BY 4.0. Original source: https://openstax.org/details/books/lifespan-development.

# 15.10.9: Review Questions

1.
Carlos is thinking about a career in aviation. During the summer between his second and third years of high school, he completes an internship at an airport nearby. What identity status would you say he is working toward?

a. foreclosure
b. achievement
c. diffusion/confusion
d. moratorium

2 .
The theories described in the chapter see adolescence as a _____ .

a. tumultuous but exciting time of life
b. brief life stage
c. life stage about which we know little
d. time for cementing our political beliefs

3.
Fourteen-year-old Samantha is confident she will be a practicing psychotherapist one day. Which of Marcia's proposed identity statuses is she in?

a. moratorium
b. foreclosure
c. achievement
d. diffusion/confusion

4 .
Which statement is most accurate with regard to rites of passage that are experienced during the adolescent years?

a. They denote that a person has reached adulthood.
b. They are found only in cultures from developed nations.
c. There is considerable variation between different cultures.
d. They are universal to virtually all cultures.

5.
Which statement is typical for an adolescent and not a child?

a. I am fair, responsible, and trustworthy.
b. I like trains, sports, and any type of fruit.
c. I like to dance, swim, and play cards.
d. I am a good person.

6 .
How does the level of self-esteem typically change across the adolescent period?

a. low at first, quick rise, and then a leveling off near the end
b. medium level, then a dip, then a rapid rise
c. gradual increase with age
d. decline from middle-childhood level

7.
Which best describes self-regulation in adolescents?

a. The ability to act impulsively and follow immediate desires without considering consequences.
b. The tendency to avoid all forms of external assistance in any situation, regardless of complexity.
c. The capacity to rely entirely on parental guidance for behavioral control and decision-making.

d. The skill to manage behavior and emotions to achieve better outcomes, influenced by brain developments and social factors.

8 .
When thirteen-year-old Taylor points out someone's body size, their parent frequently responds, "Everyone is unique and beautiful in their own way!" What is Taylor's parent acknowledging?

a. self-love
b. body diversity
c. emotional intelligence
d. somatic dimorphism

9.
Fifteen-year old Tar'darius is angry at his teacher because he feels she spoke to him rudely in front of his classmates. He wants to snap back at her, but he keeps quiet. "Talk to her after class and don't make it worse," he tells himself. After class he expresses his feelings firmly but respectfully, and the teacher apologizes profusely for having embarrassed him. Tar'darius feels better and goes about the rest of his day. This adolescent has shown a high level of _____.

a. identity foreclosure
b. self-esteem
c. emotional intelligence
d. working memory regulation

10 .
LGBTQ+ youth who are developing their sexual identity often accomplish relevant tasks at different points in time. What approach to identity development explains this?

a. milestone approach
b. stage approach
c. life course approach
d. differentiated aspect

11.
Julia is in middle school and wonders why her physical education class is segregated by sex this year, unlike in elementary school. She also wonders why her female classmates giggle at her when she sometimes spends time talking to and playing with boys in her class at recess. Which concept best explains such segregation?

a. identity foreclosure
b. gender conforming
c. colorblind approach
d. gender intensification hypothesis

12 .
For Black youth, entry into adolescence typically marks the beginning of the _____ phase of racial identity development, during which a negative trigger related to race is experienced.

a. conflict
b. encounter
c. discovery
d. rejection

13.
Code-switching, or changing certain aspects of one's presentation or behavior, is often seen in people who are bi- or multi-racial. The research suggests that this approach to one's various racial identities can be _____.

a. denigrating
b. counter-productive
c. instinctive
d. exhausting

14 .
What has the trend been between 2015 and 2021 in adolescent media use?

a. increased screen time
b. stable amount of screen time
c. decreased screen time
d. increased print material exposure

15.
Kevin texts his boyfriend at least once a day, and most of these texts are, “Do you still love me” and “Is everything okay between us.” What attachment style might Kevin be exhibiting?

a. anxious-preoccupied
b. avoidant
c. disorganized
d. secure

16 .
What is a significant risk factor for teen dating violence?

a. high academic performance
b. supportive and communicative family relationships
c. prior experience with other forms of violence or abuse
d. active participation in school extracurricular activities

17.
Suppose you noticed a table of a half-dozen or so football players in a school cafeteria. What is the term for this grouping of friends?

a. clique
b. crowd
c. focus group
d. social network

18 .
Which factor is correlated with absenteeism during high school?

a. student’s height and weight
b. externalizing and internalizing behaviors
c. being an only child
d. involvement in extracurricular activities

19.
What style of parenting is associated with the most positive outcomes for teens?

a. authoritarian style
b. authoritative style
c. uninvolved style
d. permissive style

20 .
What approach to understanding adolescent needs focuses on identifying their strengths?

a. milestone approach
b. developmental assets
c. stage theory
d. discontinuity model

21.
Marta has always wanted to follow in her mother’s footsteps and become a civil rights attorney, even though her mother never

pushed this direction. She feels her mother does good for the world, and has a meaningful career. Now that she's approaching the end of high school, her interest in that occupation has dwindled, and she thinks her mother must have a rather boring and monotonous job. This is an example of the _____ of parents that sometimes happens in adolescents.

a. interpersonal strife
b. uninvolvement
c. de-idealization
d. misprioritizing

This page titled 15.10.9: Review Questions is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

- 10.8: Review Questions by OpenStax is licensed CC BY 4.0. Original source: https://openstax.org/details/books/lifespan-development.

# 15.10.10: Check Your Understanding Questions

22 .
What are some major developmental tasks during adolescence? Provide an example of each.
23 .
Given the theory of identity status forwarded by Marcia (1980), what questions might you ask to determine an adolescent's current identity status?
24 .
What is one way authoritative parents help develop emotional intelligence in their teens?
25 .
How do cultural ideals and media exposure influence the development of body image among adolescents, and how do these influences differ across ethnic groups?
26 .
What term describes the ability to change our perspective and behavior to match the demands of our current cultural environment, and why is it particularly challenging for people of color?
27 .
Explain how factors such as race, ethnicity, and gender can influence the timing and pacing of achieving sexual minority identity milestones.
28 .
Explain one possible reason that teenagers' interest in music is greater than during childhood.
29 .
Identify the different attachment styles that might be seen in adolescent relationships.
30 .
What are the benefits and pitfalls of cliques in teen social development?
31 .
Identify three factors that contribute to dropping out of high school.
32 .
Describe at least two contexts of education or trends in academic achievement across adolescence.
33 .
Name the five "Cs" that comprise the core competencies upon which the positive youth development programs are built.
34 .
Provide two reasons for a potential increase in adolescent-parent conflict during the adolescent period.

This page titled 15.10.10: Check Your Understanding Questions is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

# 15.10.11: Personal Application Questions

35 .
Think about a teen movie or show that you watched during your adolescence. Did the portrayal of teenage life resonate with your experiences, or did it seem exaggerated or stereotyped? Reflect on how this movie or show either accurately portrayed the challenges and realities of adolescence or contributed to a false narrative about what it means to be a teenager. Provide specific examples from the movie or show to support your reflection.
36 .
Think about a time during your adolescence when you faced a significant challenge or decision. How did you approach it, and what did this experience teach you about yourself?
37 .
Consider the role of your cultural or familial background in your adolescent development. How did your cultural or familial expectations influence your sense of identity and the choices you made during this period?
38 .
Adolescence is often described as a time of exploration. Looking back, what were some of the ways you explored your interests, values, or beliefs during your teenage years? How did these explorations contribute to the person you are today?
39 .
Reflect on a time during your adolescence when you experienced a strong emotional reaction to a situation. How did you handle your emotions at the time, and how do you think your emotional response shaped your behavior or decisions?
40 .
Think about your current ability to manage stress and emotions. How has your ability to self-regulate evolved since your teenage years? Provide an example of a situation where your emotional intelligence helped you navigate a challenging social or academic scenario.
41 .
During adolescence, how did your self-concept and self-esteem evolve? Were there specific experiences or influences, such as peer interactions, family expectations, or media exposure, that significantly impacted how you viewed yourself?
42 .
Reflect on your body image during adolescence. How did your physical appearance and societal standards of beauty affect your self-esteem? In hindsight, what would you tell your adolescent self about body image and self-worth?
43 .
Reflect on your experiences related to your ethnic or racial identity. How has your understanding of your cultural heritage evolved throughout your adolescence? What role did your community, family, or peers play in shaping your ethnic or racial identity?
44 .
If you identify as biracial or multiracial, think about the challenges and opportunities you have faced in developing a cohesive sense of identity. How have you navigated the process of embracing multiple cultural heritages? How has this shaped your understanding of yourself?
45 .
Consider your journey in understanding and expressing your gender identity. Were there specific moments or experiences during your adolescence that significantly impacted how you view your gender today? How have societal expectations or family beliefs influenced your gender identity?
46 .
Reflect on your sexual identity development. At what point did you become aware of your sexual orientation? How did your environment—such as your school, friends, or media—affect your exploration and understanding of your sexual identity during adolescence
47 .
Reflect on the role your peers have played in your social development during adolescence. How have your friendships, cliques, or crowds influenced your behavior, interests, or self-perception? Can you think of a specific time when peer pressure had a significant impact on your decisions?
48 .
Consider your experiences with romantic relationships during adolescence. How did these relationships affect your emotional development and sense of identity? Were there moments when you had to navigate challenges, and how did you handle them?
49 .
Think about the media you consume regularly during adolescence, whether it's social media, television, or other forms. How has media influenced your view of yourself and the world around you? Have you noticed any changes in your behavior or attitudes based on what you see online?
50 .

Reflect on a time when you felt the need to disconnect from media or social networks. What prompted this decision, and how did it affect your mental health and social interactions? Do you believe there is a healthy balance between media use and real-life connections?

51 .

Reflect on your own experience with family rules or guidelines during adolescence. How did your parents or guardians set expectations for your behavior, and how did you respond to these expectations? Consider how their parenting style influenced your development.

52 .

Think about a time when you had a conflict with your parents or guardians during your teenage years. What was the source of the conflict, and how was it resolved? Reflect on how this conflict may have shaped your relationship with them.

53 .

Consider a community program or youth organization you were involved in during your adolescence. How did this experience contribute to your personal development, particularly in terms of competence, character, confidence, connections, and compassion?

54 .

Reflect on a positive role model or mentor from your adolescence, either within your family or community. How did this person influence your growth, decision-making, or values during this developmental stage?

This page titled 15.10.11: Personal Application Questions is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

# 15.10.12: Essay Questions

55 .
Reflect on your own journey of identity formation through the lens of James Marcia's identity statuses (identity diffusion, foreclosure, moratorium, and identity achievement). Think back to your time in high school and identify which stage you were in at that time. How did your experiences and choices during and after high school influence your movement toward or away from identity achievement? At what point in your life, if ever, did you feel you had fully achieved your identity, and what factors contributed to that sense of achievement?
56 .
Analyze the importance of self-regulation in adolescence. Discuss how the ability to manage emotions and behaviors influences academic performance, peer relationships, and overall well-being during this developmental stage. Reflect on a personal example from your own life where self-regulation played a significant role in either a success or a challenge. How did your ability (or inability) to regulate your emotions and behaviors impact the outcome of that situation?
57 .
Discuss how the development of a positive ethnic identity and sexual identity during adolescence can contribute to overall well-being. How do these aspects of identity work together to protect against the negative effects of discrimination and support a healthy transition into adulthood?
58 .
Discuss the role of peers in shaping social development during adolescence. How do friendships, cliques, and crowds influence an adolescent's identity, behavior, and self-esteem? Provide examples from your own experiences or observations to illustrate the positive and negative impacts that peers can have during this developmental stage.
59 .
Examine the influence of various forms of media on adolescent development. How does media consumption, particularly social media, impact teenagers' mental health, body image, and social interactions? Provide examples to illustrate both the positive and negative effects of media on adolescents.
60 .
Analyze the reasons behind the common conflicts between adolescents and their parents or caregivers. How do changes in autonomy, cognitive development, and emotional intensity contribute to these conflicts? Include an example from your own adolescence where a conflict arose with your parent(s) or caretaker(s), and reflect on how this situation was resolved (or left unresolved).

This page titled 15.10.12: Essay Questions is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

# 15.11: SOCIAL AND EMOTIONAL DEVELOPMENT IN EARLY ADULTHOOD (AGES 18 TO 29)


15.11.1: What Does Psychology Say?

15.11.2: The Development of Self in Early Adulthood

15.11.3: Identity Development in Context in Early Adulthood

15.11.4: Relationships with Friends and Family in Early Adulthood

15.11.5: Contexts- School and Work Settings in Early Adulthood

15.11.6: Key Terms

15.11.7: Summary

15.11.8: Review Questions

15.11.9: Check Your Understanding Questions

15.11.10: Personal Application Questions

15.11.11: Essay Questions



This page titled 15.11: Social and Emotional Development in Early Adulthood (Ages 18 to 29) is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

- 12: Social and Emotional Development in Early Adulthood (Ages 18 to 29) by OpenStax is licensed CC BY 4.0. Original source: https://openstax.org/details/books/lifespan-development.

# 15.11.1: What Does Psychology Say?



Figure 12.1 Emerging and early adulthood is a time of transitions to new roles and contexts. (Credit: Modification of "Graduation 2018" by Urban Promise/Flickr, CC BY 2.0)

Isaac looks across the crowd at his college graduation ceremony and is filled with a mix of emotions. He waves at his mom, grandmother, and brother up in the stands. He's the first person in his family to graduate from college, which has made them all proud. But now they are worried to see him moving to the city on his own for his first job.

Isaac's best friend stands next to him as the ceremony begins. As he prepares to walk across the stage, he takes a deep breath. What awaits him on the other side he isn't certain, but he's worked hard, and with the support of his family and friends he's gotten this far. He can handle what comes next. As he takes his diploma, he exhales, determined and optimistic as he begins the next chapter of his life.

Like many new graduates, Isaac wonders:

- How will he continue to develop his sense of self when encountering new adult roles and contexts?
- What will help him choose his career direction?
- How will relationships with friends and family influence his path into adulthood?
- Will he find romance as he grows into an independent individual?

In this chapter, you will find out what the current research says about all these questions and more.

This page titled 15.11.1: What Does Psychology Say? is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

- 12.0: What Does Psychology Say? by OpenStax is licensed CC BY 4.0. Original source: https://openstax.org/details/books/lifespan-development.

# 15.11.2: The Development of Self in Early Adulthood

**Learning Objectives**

By the end of this section, you will be able to:

- Identify common developmental tasks of emerging and early adulthood
- Explain the role of cultural change in the development of self during emerging and early adulthood
- Describe how personality may evolve and solidify across emerging and early adulthood

*Tell me about yourself.* Chad had been mulling over this question in the few days since his blind date. It's such a simple question, but he had a hard time answering it as he attempted to figure out what, exactly, this prospective partner might find interesting to know about him. Did they want to know that he considers himself friendly, introverted, trustworthy, and hardworking? Or that he's a total foodie, a D&D fan, and someone who hopes to learn to scuba dive someday? Who is he?

In this section, we focus on the development of self and personality in emerging and early adulthood. The self encompasses all our personal characteristics (APA, 2023.) It is the way we see ourselves, represent ourselves, and relate to others. The self is considered a broader and more complex part of our development than our personality or identity (discussed later in this chapter). We'll also examine developmental tasks and life events at this stage and the way they shape our sense of self. Finally, we'll consider the frameworks of Erikson and other theorists who explain why our sense of self changes as we move into adulthood, and how that change relates to our personality traits.

## Developmental Tasks: Growing Independence and Role Change

Between the ages of 18 and 29, U.S. adults may experience several significant life changes, such as leaving the parental home, completing school, entering the workforce, forming a committed romantic relationship, and becoming a parent. Many if not all these events require or result in increasing independence and role change that in turn contribute to the development of self. In preparation for these tasks, developmental psychologist Jeffrey Arnett (2000) suggested that "emerging adulthood" (ages 18–25) is characterized by a period of extensive exploration of new roles and adult commitments. Young adults place more priority on personal growth-oriented opportunities that have the potential to increase their social relationships, status, and vocational success, compared to older adults who place greater priority on their health and prosocial engagement. Regardless of age, it is how attainable we perceive our goals to be that predicts our well-being (Bühler et al., 2019). Scales and colleagues (2015) assert that successful development means more than just completing a developmental task or reaching a personal goal, but also being able to develop with a "thriving orientation," reflected by growth in a young adult's well-being and maturity as they encounter changing roles and contexts. Based on this perspective, Scales and colleagues conducted an extensive review of cross-cultural research and identified eight dimensions of well-being that reflect a "successful young adulthood: physical health, psychological and emotional well-being, life skills, ethical behavior, healthy family and social relationships, educational attainment, constructive educational and occupational engagement, civic engagement" (Scales et al., 2015) (Figure 12.2).

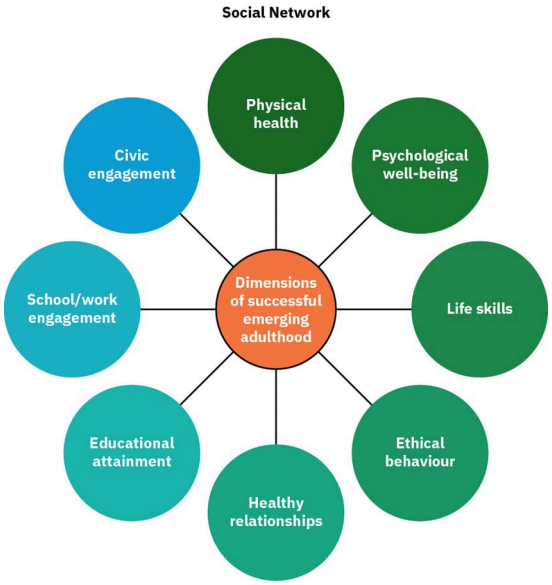


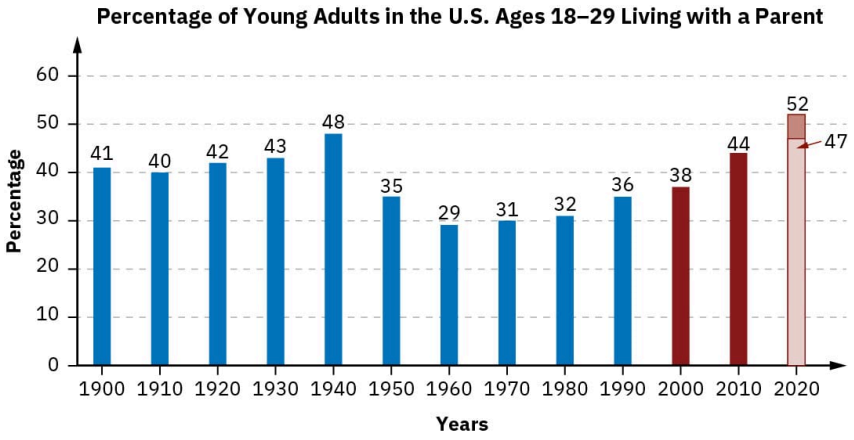

Figure 12.2 The stage of emerging adulthood involves developing through these eight dimensions (Scales et al., 2015). (CC BY 4.0; Rice University & OpenStax)

Scales and colleagues intended this list to be inclusive enough to reflect developmental success in early adulthood for a variety of people, but the way we measure or interpret each dimension is filtered through our own cultural context. For example, young adults from more traditional communities or collectivistic cultures may view the pathway to developing "healthy family relationships" as living in and contributing to their parents' household, whereas other young adults might measure it by their ability to leave the parental home and support themselves. Let's take a closer look at the way cultural changes influence our perspective of developmental success in early adulthood.

## The Social Clock and the Cultural Context of Social Development

Cultural expectations about normative behavior and achievements are often associated with age and create a social clock by which we judge the progress of ourselves and others (Neugarten et al., 1965). Social clock expectations do not necessarily reflect what is real or typical but instead are idealized milestones. For example, in the United States a widespread expectation is that college education should begin immediately after high school graduation and be completed within four years, by age 22. In reality, fewer than half of U.S. college students complete their college education within this timeframe (U.S. Department of Education, 2019).

Social clock milestones are set by a person's culture and generation, as well as their age. Take the developmental task of leaving your parents' home. The number of young U.S. adults who live with their parents has increased somewhat over the last 75 years, and young men are more likely to do so than young women (Hatfield, 2023), but the percentage has peaked during times of national emergency, such as during the Great Depression (48 percent) and the start of the COVID-19 pandemic in 2020 (52 percent) (Fry et al., 2020). (Figure 12.3).

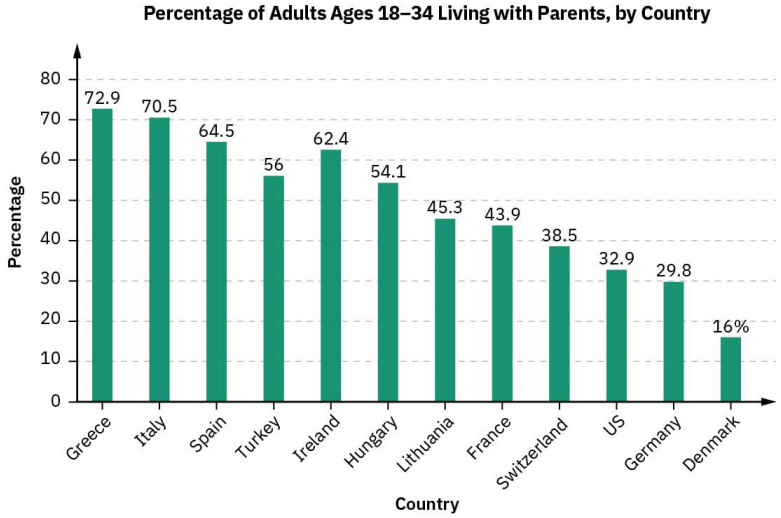



Note: Data for 1900–1990 based on decennial census. Data for 2000–2020 based on annual census averages.

Source: Fry, R., et al. (2020). A majority of young adults in the U.S. live with their parents for the first time since the Great Depression. Pew Research Center.

Figure 12.3 The percentage of young U.S. adults living with their parents has gradually increased over the last 125 years, peaking during national emergencies such as the Great Depression and the start of the COVID-19 pandemic. (CC BY 4.0; Rice University & OpenStax)

Currently one-third of U.S. adults aged 18-34 live with their parents. Compare that number with recent reports from the European Union, where in many countries such as Italy, Greece, and Croatia, two-thirds of young adults live at home with their parents (Figure 12.4).




Source: Hatfield, J. (2023). Young adults in the U.S. are less likely than those in most of Europe to live in their parents' home. Pew Research Center.

Figure 12.4 A much higher percentage of young men and women live with their parents in many European countries than in the United States. (CC BY 4.0; Rice University & OpenStax)

If we measure success in young adulthood by the person's well-being in their changing roles and contexts, what happens when a young adult or others perceive them to be on or off time with their social clock? In many cultures, most developmental tasks of young adulthood are considered positive (such as graduation) (Shanahan & Busseri, 2019), and not completing them may be seen negatively.

Self-evaluation based on completion of developmental tasks in young adulthood appears to be cross-cultural. In both the culture of Turkey and the culture of Switzerland, young adults report greater life satisfaction when they achieve these goals. What differs across cultures are the developmental priorities: Life satisfaction of Turkish young adults is positively affected by on-time achievement of traditional family tasks such as marriage and parenthood, whereas Swiss young adults were more focused on individual achievements such as education and independent living (Pekel-Uludağlı & Akbaş, 2019; Krings et al., 2008). These differing priorities are echoed by interviews with diverse young adults in the United States. Those from immigrant families and

ethnic and racial minorities are more likely to view the transition to adulthood as preparation for "the roles and responsibilities of interdependence," such as living within or contributing to an intergenerational family household or business, than to prioritize individuality and independence (Swartz et al., 2017, p. 280).

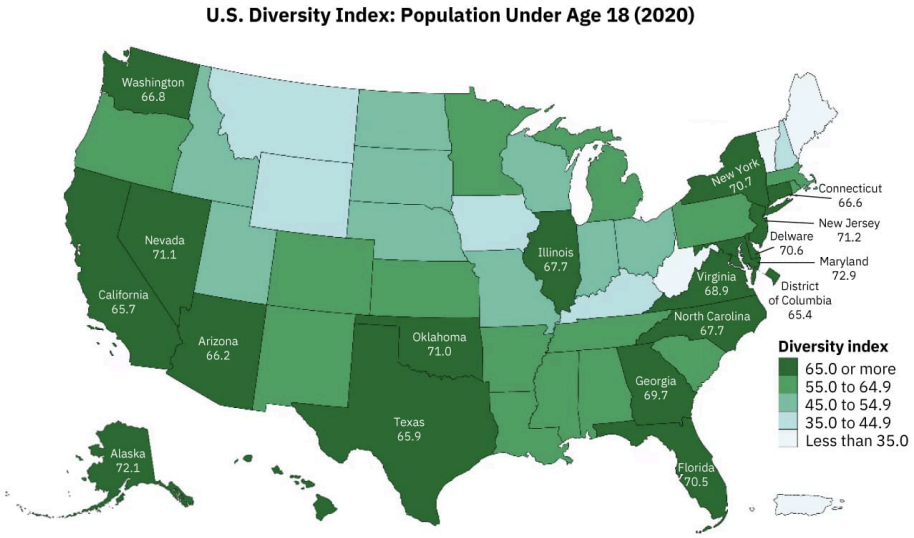
Overall, today's young adults appear to care about the traditional goals prescribed by their social clocks such as career and marriage, but they also pursue personal priorities like independence, maturity, and confidence. Those in the United States report that normative milestones like graduating and starting a career matter to them but are not prerequisites to adult maturity, and thus they can be flexible about when they complete them (Swartz et al., 2017). Based on hundreds of interviews around the country, Swartz and colleagues (2017) concluded that today's young adults "felt fairly comfortable with the uncertainty and ambiguity – social status-wise – of the transition to adulthood. They took it as almost natural and inevitable, nearly desiring and celebrating the lack of certainty for its flexibility, freedom, and openness" (p. 4).

This generational shift in young adults' perspective on the social clock is likely an adaptation to the rapid pace of cultural change. In addition to staying longer in their parents' home, they are also prolonging their education, marrying later, having children later, changing jobs more frequently, and even remaining dependent on their parent's healthcare plan longer than previous generations (Vespa, 2017; Centers for Medicare and Medicaid Services, 2023). What accounts for these changes? Young adults are responding to the changing circumstances of the world around them that have sometimes created more opportunities but also set up more potential obstacles (Swartz et al., 2017). That said, many young adults still might feel some stress or anxiety if those in their close friend or social group seem to be achieving developmental tasks before they do. Feeling "off time" from your social group - particularly if you are behind their schedule - can create some invisible pressure to adhere to the social clock.

## Opportunities and Obstacles

Today's young adults can search for educational and employment opportunities, dating partners, and new homes without getting out of bed. They can learn, work, and maintain personal connections online. Access to education, information, and social connection has increased, and the methods by which young adults interact with their world have changed.

Young U.S. adults are also living in an increasingly diverse nation. According to the U.S. Census Diversity Index, in 2010 the chance that two randomly chosen individuals would be from different racial or ethnic groups was just over half, at 54.9 percent (U.S. Census Bureau, 2020) (Figure 12.5). By 2020 it was 61.6 percent, given greater diversity among younger than older age groups (Menchaca et al., 2023; U.S. Census Bureau, 2020). This growing diversity is reflected in the increasing variety of experiences in emerging adulthood, and it disrupts the assumptions of a one-size-fits-all social clock. However, sometimes a young person's possible pathways are limited by economic, social, and cultural constraints, which we must also consider when navigating the shifting cultural landscape.




Source: Menchaca et al. (2023). Examining the racial and ethnic diversity of adults and children. U.S. Census Bureau.

Figure 12.5 Diversity is more prevalent in younger age groups in the U.S. (credit: modification of work "Figure 2. 2020 Diversity Index: Population Under the Age of 18" by U.S. Census Bureau/United States Census Bureau, Public Domain)

Economic conditions can impede young adults' progress on developmental goals like continuing their education and living

independently. Over the last 40 years, the United States and other nations have increasingly evolved into knowledge economies in which financial success depends largely on technological skill and innovation, scientific knowledge and progress, and intellectual breakthroughs (Berkes & Gaetani, 2023). The industries that accomplish these tasks rely on a more highly educated workforce. Not surprisingly, then, 74 percent of the high school class of 2023 reported they wanted to go to college (Bauer-Wolf, 2023). However, only 66 percent expect to attend, and in many states like Arizona, Idaho, and Utah, the percentage that enroll is 50 percent or lower (NCHEMS, 2018). Many cite cost as a major barrier. Even when adjusting for inflation, the average cost of attending a 4-year college has increased 180 percent in the last 40 years (McGurran & Hahn, 2023). Higher education isn't the only avenue to independence with financial barriers: With sky-rocketing home prices, interest rates, and utility costs, a recent report concluded that housing hasn't been so unaffordable in the United States since 1984 (Bahney, 2023).

Robbins and Wilner (2001) coined the term *quarter-life crisis* to describe feelings of helplessness, panic, indecision, and apprehension that may accompany the expectations of emerging adulthood. In a meta-analysis of research published over the last ten years, Hasyim and colleagues (2024) identified both individual and environmental factors that may influence whether a young adult experiences these feelings (Figure 12.6). Inflexibly committing to goals without space for reflection can make young people feel trapped and anxious. This anxiety can be lowered by perceived social support and spirituality. However, when young adults perceived their family or community as exerting too much influence, pressure, or judgment, it increased the likelihood of negative experiences during the early adult transition, particularly for adults from families with collectivistic cultural values.



Figure 12.6 The complexities of social support and social pressure can be challenging for young adults to navigate. (Credit: modification of "Varsity students hanging out" by zoey/nappy, Public Domain)

Faced with so many challenges and choices, however, young adults are particularly good at adaptive decision-making. They can efficiently review and integrate information in task-specific ways (Lindow & Lang, 2022). Perhaps that is why, contrary to the looming threat of the quarter-life crisis, reported life satisfaction typically increases for most over the course of young adulthood (Switek & Easterlin, 2018). Even when he used the term *crisis* within his own work, Erikson did not mean "impending catastrophe" but rather "a necessary turning point" (Erikson, 1968, p. 16). And consistent with the research, relationships with others are important to developmental success during that turning point in time.

## Life Hacks: Thriving During the Quarter-Life Crisis

Looking back, young adults who have been through the "quarter-life crisis" provide the following advice (Dabis & Yates, 2014):

- Change your environment. Even a temporary change in surroundings like a visit home or a short vacation can provide space to reset and reflect.
- Practice self-awareness. Workplace psychologists call this process "taking stock" (Panchal & Jackson, 2007). Take time to review your situation. Pay attention when something doesn't feel right and consider how to leverage your strengths.

- Be decisive. Have confidence in your feelings and follow through with your decisions. Practicing self-assurance doesn't mean staying committed to bad situations, but rather following your gut. And sometimes that means changing what you are doing.
- Stay positive. Tell yourself it will be okay. Let go of your own negative thoughts, challenge the negative voices of others, and reject toxic environments.
- Practice resilience. Few things in life go as planned. Get comfortable with a little trial and error. Be prepared to "tweak" and "adapt" as you go.
- Think about your finances. While money doesn't buy happiness, it does provide stability. Spend carefully, save what you can, and think long-term.
- Find support. Friends, family, coworkers, and community members in whom you can confide and with whom you can share feelings and find acceptance are a bedrock in times of change and uncertainty.

## The Role of Intimacy

Many classic theories about the development of self in early adulthood focus on the value of establishing committed and meaningful relationships with others. We begin this section with Erikson's early adult challenge of intimacy vs. isolation and the perspectives of other thinkers such as psychologists George Valliant and Daniel Levinson and writer Gail Sheehy.

### Theory of Psychosocial Development

Erikson's theory of psychosocial development in early adulthood is called intimacy vs. isolation, reflecting the challenge of establishing close and trusting relationships with others. While these relationships might include romantic or sexual ones, Erikson was clear that psychological intimacy can be achieved in any relationship in which you demonstrate "the ability to fuse your identity with someone else's without the fear that you are going to lose something yourself" (Evans, 1967, p. 48), and that trusting partnerships can be found in the context of "friendship, combat, leadership, love, and inspiration" (Erikson, 1959, p. 101) (Figure 12.7).



Figure 12.7 Strong bonds between adults can develop in contexts that require sacrifice, commitment, and trust. (Credit: Modification of "Virginia National Guard" by The National Guard/Flickr CC BY 2.0)

Erikson asserted that intimacy, whether with a close friend, fellow soldier, or romantic partner, requires a commitment that builds trust, but also vulnerability and willingness to sacrifice and compromise. Those unwilling to experience it are likely to become psychologically and socially isolated. On the surface this developmental challenge can appear to undermine the need for increasing independence and self-sufficiency that characterizes many of the developmental tasks discussed earlier. However, research on early adulthood is clear: Social connectedness is key to a successful early adult transition. Indeed, early adulthood is associated with increasing feelings of family obligation, and those who report feeling needed and useful to their friends and family are more likely to also report receiving greater support and experiencing higher well-being during the early-adult transition

(Fuligni & Pederson, 2002; Fuligni et al., 2022) (Figure 12.8).



Figure 12.8 Young adults who feel needed and useful to their friends and family experience higher well-being. (Credit: Modification of "Baking Duo" by Disabled and Here, CC BY 4.0)

## Related Theories of Early Adult Development

Based on his 60-year longitudinal study of more than 500 men as they embarked on adulthood, psychologist George Valliant (1977, 1993, 2002) affirmed Erikson's developmental framework and the early adult challenge of intimacy vs. isolation, in particular as it applied to men in the cohort Valliant studied. But Valliant added two new elements: First, he inserted a transitional stage at the end of early adulthood that he called "career consolidation," a time to reconcile the early-adulthood tasks of intimacy and career exploration and a bridge to the generative priorities of middle adulthood.

Second, Valliant documented that adults cope with the stress and anxieties of developmental tasks by using defense mechanisms, which vary in their effectiveness and maturity. In the context of intimacy vs. isolation, Valliant identified "affiliation" as one of the most mature and healthy coping mechanisms. Affiliation allows us to reduce the anxiety of developmental tasks by confiding in others and being willing to ask for and receive their help and support in solving problems. On the other hand, Valliant described "help-rejecting complaining" as an immature defense mechanism that keeps others at a distance at the expense of healthy development. Adults employing this response to anxiety will complain about their problems and yet reject offers to help, judging the suggestions as useless or "not good enough" (Di Giuseppe & Perry, 2021).

Psychologist Daniel Levinson also saw developmental value in establishing connections with others in early adulthood. Calling the developmental stages "eras," Levinson's Seasons of Life theory of adult development describes a transitional period of exploration between ages 17 and 22. During this time, young adults modify their relationships with friends and family to develop the independence needed to progress into the era of early adulthood. Levinson's early adulthood era is characterized by pursuing life goals, such as leaving the parent's home, as well as starting a career and marriage. Levinson suggests that the path to achieving these goals can be facilitated by a close mentoring relationship with a role model who can guide and support the young adult's emerging independence and maturity, particularly in the workplace.

Like Valliant's, Levinson's theory was originally based on a longitudinal study of adult men. With his collaborator and wife Judy, however, Levinson later conducted a smaller-scale study on a cohort of career women born between 1936 and 1947, to examine the validity of his theory as applied to women. After her husband's death, Judy Levinson published the results of this work in *The Seasons of a Woman's Life* (1996). While the study found many similarities in men's and women's transitions and eras of early adulthood, it found women faced greater obstacles in reconciling education, career, and family responsibilities. They also met with greater gender discrimination in their career development, and they found it more difficult to establish effective mentoring relationships in the workplace because available mentors were usually men. As a result, many of the women studied described their husbands as their primary source of career mentoring and support, exhibiting a more direct link between the developmental tasks of intimacy and career development than their men counterparts did.

While Daniel Levinson was framing his theory of adult development in men, writer Gail Sheehy was researching the lives of men *and* women in their 20's, 30s, and 40's to explore the reality of adult development in the 20th century. In the book *Passages* (1976), based on her work, Sheehy colorfully mapped out the decades of adulthood:

- "Tryout Twenties": Age 18-30 is a "provisional adulthood" where there is room to explore options during a "prolonged adolescence," when young people are still defined by others' expectations.
- "Turbulent Thirties": Age 30-40 is the first experience of true adulthood, in which individuals take on real adult roles and responsibility and challenge the idealistic aspirations of early adulthood.
- "Flourishing Forties:" Age 40-50 begins a "second adulthood," fueled by a midlife crisis during which adults take stock of the goals and achievements of their "first adulthood" and attempt to realign their priorities to confidently and optimistically pursue meaningful goals in the second half of life.

The book was wildly popular for Sheehy's engaging and relatable insights and was eventually named by the Library of Congress as one of the most influential books of its time. Twenty years later, Sheehy published the follow-up *New Passages* (1995), in which she more carefully examined the latter half of adulthood from her own perspective as an older adult. In this sequel, Sheehy noted that societal and cultural changes had created noticeable cohort differences in the developmental experience of adults from different generations, and that earlier conceptions of the stages of adulthood were outdated. She rejected the one-size-fits-all description of adult development that she and others had earlier endorsed, instead drawing attention to the way longer lifespans create increased opportunities for modern adults to "customize our own life cycle" in a way not possible decades earlier.

## Personality Traits: Evidence for Stability and Change

While the development of self in adulthood is, in part, an adaptation to the developmental tasks encountered at this stage of life, our personality is also inextricably tied to our sense of self. The Five-Factor Model (FFM) is the most widely accepted framework psychologists use for describing individual differences in personality. With it they can measure where individuals fall on a continuum of five traits: Openness to experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism (OCEAN). According to the originators of this model, these traits reflect biologically based tendencies that interact with environmental influences such as culture to predict how we will respond to life changes such as the challenges of early adulthood. All this interaction culminates in our evolving sense of self.

The Five-Factor model views our individual personality traits as relatively stable predispositions more likely to drive development rather than to develop themselves (Roberts & Davis, 2016). For example, during early adulthood, a person high in extraversion might explore careers that require regularly working with large groups of people. In this example, personality is influencing the developmental task of career exploration. Exploring careers well-suited to our individual personality traits in early adulthood is advisable, especially because research shows that the level of a given individual personality trait tends to remain stable over time relative to its level in others, a phenomenon known as rank-order stability. That is, a person who demonstrates high levels of extraversion isn't likely to become very introverted over time. In fact, rank-order stability increases during early adulthood (Ferguson, 2010).

However, even if a person's ranking on a personality trait isn't likely to change substantially with age, that doesn't mean it cannot respond to life events with small but adaptive changes. A mean-level change describes the extent to which the level of a personality trait can fluctuate over the lifespan. This fluctuation may occur in response to cultural changes, historical events, and role changes. For example, the developmental tasks of emerging adulthood may explain why research finds mean level changes such as an increase in emotional stability and conscientiousness during early adulthood (Roberts & Davis, 2016). According to the social investment theory of personality development, as young people begin to commit to adult roles, including romantic relationships and school and work responsibilities, their personality responds with small but measurable increases in agreeableness, conscientious, and openness and decreases in neuroticism (Roberts et al., 2006, 2016; Wagner et al., 2015; Schwaba et al., 2018; Schwaba et al., 2019). They may react to the responsibilities of school and work with an increase in the goal-oriented organization found in the trait of conscientiousness. This association has been supported cross-culturally (Bleidorn et al., 2013). The increase or decrease of certain traits with age to effectively adapt to the demands of development is known as the maturity principle of personality development.

Young adults may also draw on stable support systems, both internal and external, to facilitate their development. Personality has a remarkable ability to both direct the trajectory of developmental tasks in early adulthood and adapt to changing roles and responsibilities. It is like a sturdy rubber band that can support our sense of self while also stretching to meet our changing needs.

Link to Learning

Where do you rank on the Big 5 personality traits? Take this Big Five Personality Test self-assessment to learn more about your level of openness, conscientiousness, extraversion, agreeableness, and neuroticism. Consider how your level of each trait might have enabled or adapted to the developmental tasks or roles relevant to your life right now.

## References


American Psychological Association (2023, November 15). Self. In *APA dictionary of psychology*. Retrieved 8/12/2024, from https://dictionary.apa.org/self

Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, *55*(5), 469–480. doi.org/10.1037/0003-066X.55.5.469

Bahney, A. (2023, August 24). *Home affordability is the worst it has been since 1984*. CNN Business. https://www.cnn.com/2023/08/24/homes...984/index.html

Bauer-Wolf, J. (2023, May 22). *About 75 percent of students want to attend college—but far fewer expect to actually go*. Higher Ed Dive. https://www.highereddive.com/news/yo...her-ed/650803/

Berkes, E., & Gaetani, R. (2023). Income segregation and the rise of the knowledge economy. *American Economic Journal: Applied Economics*, *15*(2): 69–102. doi.org/10.1257/app.20210074

Bleidorn, W., Klimstra, T. A., Denissen, J. J. A., Rentfrow, P. J., Potter, J., & Gosling, S. D. (2013). Personality maturation around the world: A cross-cultural examination of social-investment theory. *Psychological Science*, *24*(12), 2530–2540. doi.org/10.1177/0956797613498396

Bühler, J. L., Weidmann, R., Nikitin, J., & Grob, A. (2019). A closer look at life goals across adulthood: Applying a developmental perspective to content, dynamics, and outcomes of goal importance and goal attainability. *European Journal of Personality*, *33*(3), 359–384. doi.org/10.1002/per.2194

Centers for Medicare and Medicaid Services. (2023). *Young adults and the Affordable Care Act: Protecting young adults and eliminating burdens on families and businesses*. U.S. Department of Health and Human Services. https://www.cms.gov/cciio/resources/...ild_fact_sheet

Dabis, H., & Yates, J. (2014). Successful navigation of the stormy seas: What factors lead to a successful transition from the quarterlife crisis? *Coaching Psychologist*, *10*(1), 17–24. doi.org/10.53841/bpstcp.2014.10.1.17

Di Giuseppe, M., & Perry, J. C. (2021). The hierarchy of defense mechanisms: Assessing defensive functioning with the Defense Mechanisms Rating Scales Q-sort. *Frontiers in Psychology*, *12*, 718440. https://doi.org/10.3389/fpsyg.2021.718440

Erikson, E. H. (1968). *Identity: Youth and crisis*. Norton

Evans, R. I. (1967). *Dialogue with Erik Erikson*. Harper.

Ferguson, C. J. (2010). A meta-analysis of normal and disordered personality across the life span. *Journal of Personality and Social Psychology, 98*(4), 659–667. doi.org/10.1037/a0018770

Fry, R., Passel, J. S., & Cohn, D. (2020, September 4). *A majority of young adults in the U.S. live with their parents for the first time since the Great Depression*. Pew Research Center. https://www.pewresearch.org/short-re...at-depression/

Fuligni, A. J., & Pedersen, S. (2002). Family obligation and the transition to young adulthood. *Developmental Psychology*, *38*(5), 856–868. doi.org/10.1037/0012-1649.38.5.856

Fuligni, A. J., Smola, X. A., & Al Salek, S. (2022). Feeling needed and useful during the transition to young adulthood. *Journal of Research on Adolescence, 32*(3), 1259–1266. doi.org/10.1111/jora.12680

Hasyim, F. F., Setyowibowo, H., & Purba, F. D. (2024). Factors contributing to quarter life crisis on early adulthood: A systematic literature review. *Psychology Research and Behavior Management*, *17*, 1–12. https://doi.org/10.2147/PRBM.S438866

Hatfield, J. (2023, May 3). *Young adults in the U.S. are less likely than those in most of Europe to live in their parents' homes*. Pew Research. https://www.pewresearch.org/short-re...their-parents/

Krings, F., Bangerter, A., Gomez, V., & Grob, A. (2008). Cohort differences in personal goals and life satisfaction in young adulthood: Evidence for historical shifts in developmental tasks. *Journal of Adult Development, 15*(2), 93–105. https://doi.org/10.1007/s10804-008-9039-6

Levinson, D. J. (1996). *The seasons of a woman's life*. Ballantine.

Lindow, S., & Lang, A. (2022). A lifespan perspective on decision-making: A cross-sectional comparison of middle childhood, young adulthood, and older adulthood. *Journal of Behavioral Decision Making*, *35*(3), 1–17. doi.org/10.1002/bdm.2268

McGurran, B., & Hahn, A. (2023, May 9). *College tuition inflation: Compare the cost of college over time*. Forbes Advisor. https://www.forbes.com/advisor/stude...ion-inflation/

Menchaca, A., Pratt, B., Jensen, E., & Jones, N. (2023, May 22). *Examining the racial and ethnic diversity of adults and children*. U.S. Census Bureau. https://www.census.gov/newsroom/blog...-children.html

Neugarten, B. L., Moore, J. W., Lowe, J. C. (1965). Age norms, age constraints, and adult socialization. *American Journal of Sociology*, 70, 710–717. doi.org/10.1086/223965

Panchal, S., & Jackson, E. (2007). 'Turning 30' transitions: Generation Y hits quarter-life. *The Coaching Psychologist, 3*(2), 46–51. doi.org/10.53841/bpstcp.2007.3.2.46

Pekel-Uludağlı, N., & Akbaş, G. (2019). Young adults' perceptions of social clock and adulthood roles in the Turkish population. *Journal of Adult Development*, *26*(1), 105–115. https://doi.org/10.1007/s10804-018-9298-9

Robbins, A., & Wilner, A. (2001). *Quarterlife crisis: The unique challenges of life in your twenties*. TarcherPerigee.

Roberts, B. W., & Davis, J. P. (2016). Young adulthood is the crucible of personality development. *Emerging Adulthood*, *4*(5), 318–326. doi.org/10.1177/2167696816653052

Roberts B. W., Walton K., Bogg T., Caspi A. (2006). De-investment in work and non-normative personality trait change in young adulthood. *European Journal of Personality*, *20*(6), 461–474. doi.org/10.1002/per.607

Roberts B. W., Walton K., & Viechtbauer W. (2006). Personality changes in adulthood: Reply to Costa & McCrae (2006). *Psychological Bulletin*, *132*(1), 29–32. doi.org/10.1037/0033-2909.132.1.29

Scales, P. C., Benson, P. L., Oesterle, S., Hill, K. G., Hawkins, J. D., & Pashak, T. J. (2015). The dimensions of successful young adult development: A conceptual and measurement framework. *Applied Developmental Science*, *20*(3), 150–174. doi.org/10.1080/10888691.2015.1082429

Schwaba, T., Luhmann, M., Denissen, J. J. A., Chung, J. M., & Bleidorn, W. (2018). Openness to experience and culture-openness transactions across the lifespan. *Journal of Personality and Social Psychology, 115*(1), 118–136. doi.org/10.1037/pspp0000150

Schwaba, T., Robins, R. W., Grijalva, E., & Bleidorn, W. (2019). Does openness to experience matter in love and work? Domain, facet, and developmental evidence from a 24-year longitudinal study. *Journal of Personality, 87*(5), 1074–1092. doi.org/10.1111/jopy.12458

Shanahan, E., & Busseri, M. A. (2019). A systematic review of the relationship between perceived life script event age and valence across the life span [Supplemental material]. *Psychology and Aging*, *34*(5), 698–708. https://doi.org/10.1037/pag0000362.supp

Sheehy, G. (1976). *Passages: Predictable crises of adult life*. Ballantine Books.

Sheehy, G. (1995). *New passages: Mapping your life across time*. Random House.

Swartz, T. T., Hartmann, D., & Rumbaut, R. G. (2017). *Crossings to adulthood: How diverse young Americans understand and*

*navigate their lives*. Brill.

Switek, M., & Easterlin, R.A. (2018). Life transitions and life satisfaction during young adulthood. *Journal of Happiness Studies, 19*, 297–314. https://doi.org/10.1007/s10902-016-9817-y

The National Center for Higher Education Management Systems. (2018). *College participation rates: College-going rates of high school graduates—directly from high school* [Data set]. NCHEMS. http://www.higheredinfo.org/dbrowser...&submeasure=63

U.S. Census Bureau. (2020). *Annual estimates of the resident population by sex, age, race, and Hispanic origin for the United States: April 1, 2010 to July 1, 2019* (NC-EST2019-ASR6H) [Data set]. https://www.census.gov/newsroom/pres...-detailed.html

U.S. Department of Education, National Center for Education Statistics. (2019). *Baccalaureate and Beyond (B&B:16/17): A First Look at the Employment and Educational Experiences of College Graduates, 1 Year Later* (NCES 2019-106; Table 2) [Data set]. https://nces.ed.gov/fastfacts/display.asp?id=569

Vaillant, G. E. (1993). *Wisdom of the ego*. Harvard University Press.

Vaillant, G. E. (2002). *Aging well: Surprising guideposts to a happier life from the landmark Harvard study*. Little, Brown Spark.

Vespa, J. (2017). *The changing economics and demographics of young adulthood: 1975–2016*. U.S. Census Bureau. https://www.census.gov/content/dam/C...mo/p20-579.pdf

Wagner, J., Becker, M., Lüdtke, O., & Trautwein, U. (2015). The first partnership experience and personality development: A propensity score matching study in young adulthood. *Social Psychological and Personality Science, 6*(4), 455–463. doi.org/10.1177/1948550614566092

This page titled 15.11.2: The Development of Self in Early Adulthood is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

- 12.1: The Development of Self in Early Adulthood by OpenStax is licensed CC BY 4.0. Original source: https://openstax.org/details/books/lifespan-development.

# 15.11.3: Identity Development in Context in Early Adulthood

## Learning Objectives

By the end of this section, you will be able to:

- Apply Marcia's framework to identity development in early adulthood
- Explain the concept of intersectionality as it relates to identity development
- Describe the continuing development of ethnoracial identity, gender and sexual identity, and religious identity in early adulthood

Growing up in a predominantly White community in Tennessee, Logan Eggleston had gotten used to just ignoring racist comments. She dominated as a player on both her high school basketball and volleyball teams and finished high school a year early. It wasn't until she became a college volleyball player at the University of Texas that Logan learned to embrace her identity and voice as a Black female student athlete. With the support and mentorship of her racially diverse team, Logan became the president of the Student Athlete Advisory Committee. In that role, she helped lead a student movement to have campus buildings renamed and statues replaced if they honored past racist leaders. She also worked with the UT athletic department and community members to create organizations that give back to diverse and underserved communities in Austin. In 2023, Logan was named the NCAA Woman of the Year for her achievements in academics, athletics, leadership, and community service (Kumar, 2022).

Logan's experience reflects the significance that early adult transitions have on continued identity development after adolescence. Much like personality, our identity continues to evolve over time to adapt to changing roles and contexts.

## Applying Marcia's Identity Framework

In much the same way that personality traits may mature in the context of the development of self, early adulthood appears to be an important time for *identity consolidation* (McLean & Syed, 2015, p. 67), a concept consistent with Marcia's developmental identity typology. Rather than use Erikson's stage of identity vs. confusion, Marcia (1966) incorporated the processes Erikson described as prerequisite to identity attainment--exploration and commitment--to identify four possible statuses of identity development. These statuses (introduced in Chapter 10 Social and Emotional Development in Adolescence (Ages 12 to 18)) are moratorium, foreclosure, diffusion, and achievement.

Consistent with Erikson's theory regarding the necessity of both exploration and commitment to identity attainment, those in the identity achieved status were considered farthest along in their identity development. Those in moratorium were on the right path, whereas those who were diffused or foreclosed were considered developmentally ill-equipped for the tasks of early adulthood (Marcia, 1967).

But even for those who enter adulthood having achieved a healthy sense of identity, part of the challenge of identity is to be able to integrate the various types of identity in a way that makes sense to the person's sense of self. For example, how can someone reconcile career ambition by taking a job in a city far away from home, while also valuing ties to family? How might someone reconcile taking frequent flights while staying true to environmentalist principles? According to Marcia (2002), the developmental tasks of early adulthood, such as completing higher education, leaving the parental home or hometown, finding love, and pursuing a career, can cause a disruption to identity. Adults must therefore periodically reflect on and reformulate their values and goals to regain equilibrium and the status of identity achievement. This ongoing process of role change and reflection can create cycles in which young adults experience moratorium-achievement-moratorium-achievement as they consider how new roles, responsibilities, and contexts may redefine their existing identity (Stephen et al., 1992; McLean & Syed, 2015).

Given that the roles and contexts encountered in early adulthood may vary among individuals and even historically, it is not surprising that research attempting to track universal trajectories of identity development across early adulthood yields inconsistent results (Luyckx et al., 2013; Mannerström et al., 2017). For example, the number of adults with diffused identity status increases during economic recessions, when efforts to complete developmental tasks such as buying a home and finding employment may be hampered by broader economic conditions (Fadjukoff et al., 2010). And while finding employment in early adulthood does not predict consistent changes to a young adult's overall identity status, becoming a parent does predict an

increase in overall identity commitment. Researchers suggest that, instead of trying to generalize patterns of general identity development, analyzing why and when adults experience changes to identity process and status within specific identity domains provides a clearer and more nuanced understanding of this part of young adulthood (Mannerström et al., 2019).

## Identity in Context

The value of considering the interactions of a person's identity domains is reflected in the *intersectional* approach to psychology. Civil rights advocate Kimberle Crenshaw (1991) coined the term intersectionality as a framework for understanding the way people simultaneously experience multiple aspects of their identity and their associated privileges or discrimination. For example, a Korean American woman's life experience is different from a Biracial American woman's, producing racial variations in the experience of womanhood.

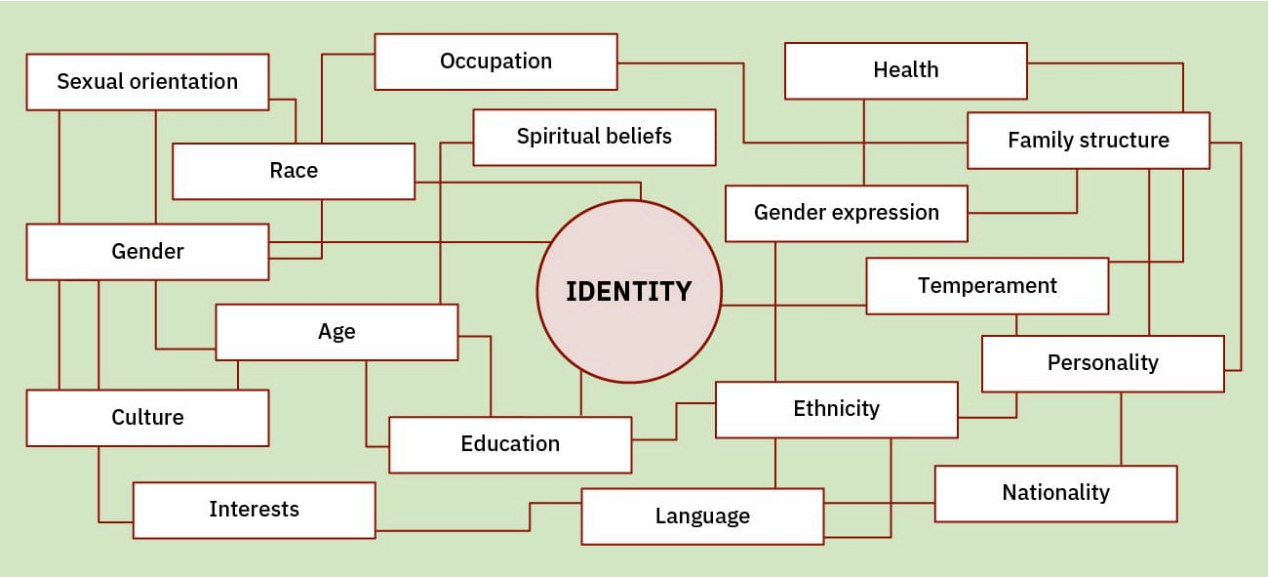



Figure 12.9 Identity is made up of many aspects of a person's background, experiences, traumas, and choices. Some aspects are permanent, while others change over time. (CC BY 4.0; Rice University & OpenStax)

Recognizing intersectional identity especially matters when one or more of a person's identity domains are marginalized. Goffman (1963) asserts that people with stigmatized identities may feel burdened with the additional work of impression management, as they constantly try to offset negative stereotypes during their daily interactions. This attempt to manage other's expectations across changing social contexts can inhibit a person's perceived freedom of choice in their personal development and hamper their identity development (Erikson, 1968). When considered in context, identity development is just as much about who you *do* want to be (and be perceived as) as who you *do not* want to be (or be seen as) (MClean et al., 2021; Marcus & Nurius, 1986). As you read this section, consider how the domains of ethnicity and race, gender and sexuality, and religion, intersect to create varied developmental experiences for people as they begin adulthood in a variety of social contexts.

**Link to Learning**

Watch this TED Talk about intersectionality and its application to current events and social issues by legal scholar Kimberle Crenshaw.

## Ethnoracial Identity

As ethnic and racial diversity within the United States increase, young adults are more likely to encounter individuals different from themselves (Menchaca et al., 2023) (Figure 12.10). Aspects of the self, such as personality and identity, help us to understand and integrate these diverse social encounters into our personal narrative or life story (McAdams, 1995). An individual's ethnoracial identity is an umbrella term used to capture both racial and ethnic aspects of our identity. Personality psychologist Robert M. Sellers asserts that, within our developing life experiences, we often find opportunities for aspects of our ethnoracial identity to change. Some of these aspects are identity salience, meaning the relevance of our identity within a given situation, identity

centrality, or the importance of our identity to our overall sense of self, and identity regard, which expresses how positively or negatively we feel about our identity (Sellers et al., 1998; Quinn & Chaudoir, 2009; Yip et al., 2019).



Figure 12.10 As ethnoracial diversity within the United States increases, young adults are more likely to encounter individuals different from themselves. (Credit: Modification of "Engineering competition puts college students to the test" by U.S. Army DEVCOM/Flickr CC BY 2.0)

Ethnoracial identity is more salient for ethnic and racial minorities, who are more likely than their White counterparts to report instances of differential treatment based on their ethnoracial identity. Consequently, in emerging adulthood, those who identify with minority ethnic or racial groups are more likely to be in the identity moratorium and identity achieved statuses regarding their ethnoracial identity than White young adults, who are less likely to have explored or achieved this aspect of their identity (Syed & Juang, 2014). Compared to middle-aged and older adults, young adults in general are less likely to have explored or achieved their ethnoracial identity; they show more transition in this identity status than older adults (Maehler, 2022).

## Intersections and Contexts: Exploring Black Girl Magic in First-Generation College Women

In 2021, *Boston Globe* columnist Jenee Osterheldt wrote: “Black women are not mythical. Nor superhuman. Our magic is in our realness, our love, and the way we rally around one another” (Osterheldt, 2021). But what happens to that magic when Black women who are first-generation college students enter predominately White college institutions?

According to researchers Qua’Asia Williams, Brittany Williams, and Lamesha Brown, the resulting experience can be one of “hyper-invisibility” in an environment where they may not have family or community connections. To make the experience of these women more visible, the researchers conducted in-depth, semi-structured interviews to learn and share their stories.

Having grown up in Black communities, many of the women described experiencing an increased salience of their Black identity, both within their predominately White educational institution and back home, which caused some to code-switch (alternate between different conversational or communication styles) as they moved back and forth between the two environments. Biology major Dontavia reports: “It’s just I always have to change how I speak, so much to where I feel like I speak different, because when I go home my friends tell me I sound different. They tell me I’m talking different. To the point where it’s like I’ve become comfortable with doing it, because I’m so used to it.”

In addition to experiencing racist microaggressions, these women also intently felt the impact of their identity as first-generation college students. They recounted the risks of navigating typical college experiences, such as seeking out financial aid or internships, without the family network support that benefited many of their peers.

> The researchers noted that the self-protective coping mechanisms employed by these women to combat and resist oppression requires a hypervigilance that increases their risk for anxiety and physical health problems. Williams and colleagues advocated for better campus support services to meet the needs of first-generation Black college women and concluded that, in the meantime, their persistence and resilience is "at its core, an example of Black Girl Magic" (Williams et al., 2022).

## Gender and Sexual Identity

Cultural norms often blur gender identity and sexual identity, though they differ, and assume that these identities are dichotomous (meaning someone is either male or female, straight or gay). The development of gender and sexual identities is also often misunderstood as a linear process from confusion to achievement with no room to pause, question, and revisit identity as young adults encounter new roles and environments (Morgan, 2016). For many, leaving home in early adulthood prompts continued exploration of the intersection of ethnic, gender, and sexual identity. As Tai, a 21-year-old transgender man, explains: "I got to college and met other trans people who were – actually had reasonably happy lives, successful lives, and from there, that kind of clicked. So I think there was early understanding, then a period of repression, and then acceptance in college" (Hereth et al., 2020).

Adults must often grapple with ways to flexibly explore their gender and sexual identity within a cultural context that assumes these aspects of ourselves are predetermined and don't warrant ongoing exploration. As a result, those who are straight are less likely to have explored this aspect of their identity than those who are LGBTQ+, because heterosexuality conforms to heteronormative cultural expectations (Morgan, 2016).

The development of gender and sexual identity can intersect with ethnoracial identity to produce a wide variety of developmental experiences (Figure 12.11). Scholars argue this intersection has not been adequately addressed in identity research, especially for those who occupy minority identities such as LGBTQ+ persons and ethnoracial minorities (Cerezo et al., 2020). Compared to past generations, modern LGBTQ+ young adults are more likely to have explored their sexual identity earlier in life and come out at a younger age, but they still may experience marginalization and discrimination as they approach social clock milestones of adulthood such as marriage and parenthood (Russell & Fish, 2019; Morgan, 2016).



Figure 12.11 Identity development is particularly complex for young adults in minority or marginalized ethnoracial groups and those identifying with minority gender or sexuality identities. (Credit: Modification of "two woman lying on bed" by canweallgo/Unsplash CC0).

Black and Latino sexual minorities report achieving milestones in the development of their sexual identity, such as self-realization of same-sex attraction, earlier than White sexual minorities (Bishop et al., 2020). A 2015 study of LGBTQ+ Latina women found that family support was the most important predictor of their decision to come out to others outside their family (Pastrana, 2015). These findings were replicated in a 2020 study of Black and Latina LGBTQ+ women, who reported that worries about how their gender and sexual identity would affect their relationship with their family and their family's social standing reduced their comfort in coming out to others Cerezo et al., 2020).

## Religious Identity

The most common religious affiliation in the United States is Christianity. However, the percentage of those reporting a Christian religious identity has dropped from 90 percent in the early 1970s to 63 percent in 2021. This change has been driven, in part, by adults who were raised in Christian families but no longer identify with the religion by the end of young adulthood. The number of U.S. adults raised as unaffiliated with a particular religion also increased (from 5 percent fifty years ago to 29 percent today). The percentage of adults identifying with non-Christian religions has remained relatively unchanged during this time (Pew Research Center, 2022).

So, what drives changes in religious or spiritual identity with age? During childhood and adolescence many follow the spiritual beliefs and practices of their families (Mahoney, 2021). The transition to adulthood brings new roles, social connections, and contexts that may prompt more intentional reflection on spiritual beliefs and whether they answer questions about life purpose and direction (Gale et al., 2023). When asked why they no longer identify with their family religion, many young people reported feeling out of place in a religion that did not align with their other values or priorities (Hardy & Longo, 2021). This mismatch may accompany the development of a person's worldview as they spend more time outside the parents' home and influence and encounter new people and perspectives.

While overall religiosity—level of interest, belief, and practice of worship—does not change for most people as they progress into early adulthood, young adults engage in a more explorative and information-seeking approach to their religious identity than adolescents do (Gurba et al., 2022). About 15 percent of adults experience a decline in religiosity during early adulthood, 10 percent an increase, and 10 percent an initial decline followed by a return to their religious beliefs during the early adulthood-middle adulthood transition.

## References


Bishop, M. D., Fish, J. N., Hammack, P. L., & Russell, S. T. (2020). Sexual identity development milestones in three generations of sexual minority people: A national probability sample [Supplemental material]. *Developmental Psychology*, *56*(11), 2177–2193. https://doi.org/10.1037/dev0001105.supp

Cerezo, A., Cummings, M., Holmes, M., & Williams, C. (2020). Identity as resistance: Identity formation at the intersection of race, gender identity, and sexual orientation. *Psychology of Women Quarterly*, *44*(1), 67–83. doi.org/10.1177/0361684319875977

Crenshaw, K. (1991). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stanford Law Review*, *43*(6), 1241–1299. doi.org/10.2307/1229039

Erikson, E. H. (1959). *Identity and the life cycle*. Norton. psycnet.apa.org/record/1959-15012-000

Erikson, E. H. (1968). *Identity: Youth and crisis*. Norton. psycnet.apa.org/record/1968-35041-000

Fadjukoff, P., Kokko, K., & Pulkkinen, L. (2010). Changing economic conditions and identity formation in adulthood. *European Psychologist, 15*(4), 293–303. doi.org/10.1027/1016-9040/a000061

Gale, M., Hendricks, J. J., Dollahite, D. C., & Marks, L. D. (2023). Perspectives on lifespan religious and spiritual development from scholars across the lifespan. *Religions, 14*(3), 362. https://doi.org/10.3390/rel14030362

Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity*. Penguin Books.

Gurba, E., Czyżowska, D., Topolewska-Siedzik, E., & Cieciuch, J. (2022). The importance of identity style for the level of religiosity in different developmental periods. *Religions, 13*(2), 157. https://doi.org/10.3390/rel13020157

Hardy, S. A., & Longo, G. S. (2021). Developmental perspectives on youth religious non-affiliation. In J. L. Heft & J. E. Stets (Eds.), *Empty churches: Non-affiliation in America* (pp. 135–171). Oxford Academic. doi.org/10.1093/oso/9780197529317.003.0006

Hereth, J., Pardee, D. J., & Reisner, S. L. (2020). Gender identity and sexual orientation development among young adult transgender men sexually active with cisgender men: "I had completely ignored my sexuality . . . that's for a different time to figure out." *Culture, Health & Sexuality*, *22*(1), 31–47. doi.org/10.1080/13691058.2019.1636290

Kumar, A. (2022, December 7). *Inside Logan Eggleston's quest for an NCAA volleyball title for Texas, an even loftier title for*

*herself: POTUS*. ESPN College Sports. https://www.espn.com/college-sports/...ggleston-title

Lee, B. H. J., Pearce, L. D., & Schorpp, K. M. (2018). Religious pathways from adolescence to adulthood. *Journal for the Scientific Study of Religion*, *56*(3), 678–689. doi.org/10.1111/jssr.12367

Luyckx, K., Klimstra, T. A., Duriez, B., Van Petegem, S., & Beyers, W. (2013). Personal identity processes from adolescence through the late 20s: Age trends, functionality, and depressive symptoms. *Social Development, 22*(4), 701–721. doi.org/10.1111/sode.12027

Maehler, D. B. (2022). Determinants of ethnic identity development in adulthood: A longitudinal study. *British Journal of Developmental Psychology*, *40*(1), 46–72. doi.org/10.1111/bjdp.12384

Mahoney, A. (2021). *The science of children's religious and spiritual development*. Cambridge University Press. http://dx.doi.org/10.1017/9781108874342

Mannerström, R., Hautamäki, A., & Leikas, S. (2017). Identity status among young adults: Validation of the Dimensions of Identity Development Scale (DIDS) in a Finnish sample. *Nordic Psychology, 69*(3), 195–213. doi.org/10.1080/19012276.2016.1245156

Mannerström, R., Muotka, J., & Salmela-Aro, K. (2019). Associations between identity processes and success in developmental tasks during the transition from emerging to young adulthood. *Journal of Youth Studies*, *22*(9), 1289–1307. doi.org/10.1080/13676261.2019.1571179

Marcia, J. E. (1966). Development and validation of ego-identity status. *Journal of Personality and Social Psychology, 3*(5), 551–558. doi.org/10.1037/h0023281

Marcia, J. E. (1967). Ego identity status: Relationship to change in self-esteem, "general maladjustment," and authoritarianism. *Journal of Personality, 35*(1), 119–133. doi.org/10.1111/j.1467-6494.1967.tb01419.x

Marcia, J. E. (2002). Identity and psychosocial development in adulthood. *Identity: An International Journal of Theory and Research, 2*(1), 7–28. doi.org/10.1207/S1532706XID0201_02

Markus, H., & Nurius, P. (1986). Possible selves. *American Psychologist*, *41*(9), 954–969.

McAdams, D. P. (1995). What do we know when we know a person? *Journal of Personality, 63*(3), 365–396. doi.org/10.1111/j.1467-6494.1995.tb00500.x

McLean, K. C. & Syed, M. (Eds.). (2015). *The oxford handbook of identity development*. Oxford University Press. doi.org/10.1093/oxfordhb/978...36564.001.0001

Menchaca, A., Pratt, B., Jensen, E., & Jones, N. (2023, May 22). *Examining the racial and ethnic diversity of adults and children*. U.S. Census Bureau. https://www.census.gov/newsroom/blog...-children.html

Morgan, E. M. (2016). Contemporary issues in sexual orientation and identity development in emerging adulthood. In J. J. Arnett (Ed.), *The Oxford handbook of emerging adulthood* (pp. 262–279). Oxford University Press. doi.org/10.1177/2167696812469187

Osterheldt, J. (2021, December 1). *What we mean by Black girl magic*. Boston Globe. https://www.bostonglobe.com/2021/12/...ck-girl-magic/

Pastrana A. (2015). Being out to others: The relative importance of family support, identity and religion for LGBT Latina/os. *Latino Studies*, *13*, 88–112. https://doi.org/10.1057/lst.2014.69

Pew Research Center. (2022, September 13). How U.S. religious composition has changed in recent decades. https://www.pewresearch.org/religion...ecent-decades/

Quinn, D. M., & Chaudoir, S. R. (2009). Living with a concealable stigmatized identity: The impact of anticipated stigma, centrality, salience, and cultural stigma on psychological distress and health. *Journal of Personality and Social Psychology*, *97*(4), 634–651. doi.org/10.1037/a0015815

Russell, S. T., & Fish, J. N. (2019). Sexual minority youth, social change, and health: A developmental collision. *Research in Human Development*, *16*(1), 5–20. doi.org/10.1080/15427609.2018.1537772

Sellers, R. M., Smith, M. A., Shelton, J. N., Rowley, S. A. J., & Chavous, T. M. (1998). Multidimensional model of racial identity: A reconceptualization of African American racial identity. *Personality and Social Psychology Review, 2*(1), 18–39. doi.org/10.1207/s15327957pspr0201

Stephen, J., Fraser, E., & Marcia, J. E. (1992). Moratorium-achievement (Mama) cycles in lifespan identity development: Value orientations and reasoning systems correlates. *Journal of Adolescence, 15*(3), 283–300. doi.org/10.1016/0140-1971(92)90031-Y

Syed, M., & Juang, L. P. (2014). Ethnic identity, identity coherence, and psychological functioning: Testing basic assumptions of the developmental model. *Cultural Diversity & Ethnic Minority Psychology*, *20*(2), 176–190. doi.org/10.1037/a0035330

Williams, Q., Williams, B. M., & Brown, L. C. (2022). Exploring Black girl magic: Identity development of Black first-gen college women. *Journal of Diversity in Higher Education*, *15*(4), 466–479. doi.org/10.1037/dhe0000294

Yip, T., Wang, Y., Mootoo, C., & Mirpuri, S. (2019). Moderating the association between discrimination and adjustment: A meta-analysis of ethnic/racial identity. *Developmental Psychology, 55*(6), 1274–1298. doi.org/10.1037/dev0000708

This page titled 15.11.3: Identity Development in Context in Early Adulthood is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

- 12.2: Identity Development in Context in Early Adulthood by OpenStax is licensed CC BY 4.0. Original source: https://openstax.org/details/books/lifespan-development.

# 15.11.4: Relationships with Friends and Family in Early Adulthood

**Learning Objectives**

By the end of this section, you will be able to:

- Explain the role of social contexts for the developing individual in early adulthood
- Describe the role of friendships across early adulthood
- Discuss the major changes in family relations across early adulthood

When she began college ten years ago, Emily decided to stay at home and attend part-time as a commuter to save money. Now graduated with a computer science degree and working full time as a software developer, Emily is 28 and still living at home. She has a supportive group of friends she can talk to about her career and personal life, and she is looking to buy a condo with the money she has saved over the last ten years with the support of her family.

Emily's story illustrates the complex interaction of our dependence on others with the early adulthood tasks associated with personal development and independence. In this section we examine more specifically some of the interpersonal relationships important to the development of young adults, including friends and family.

## The Significance of Social Context

According to self-determination theory, our success and well-being are maximized when we balance our needs for *autonomy*, *competence*, and *relatedness* (Ryan and Deci, 2000). These aspects of developmental well-being are interrelated and can influence each other in complex ways. For example, a new job might bring financial independence, which increases your autonomy, and opportunities for professional development that increase your competence. But it might also require you to relocate or spend less time with friends and family, which decreases your relatedness. So just as we must revisit and recalibrate aspects of the self to fit the developmental tasks of early adulthood, so too must we renegotiate our relationships with friends and family in the context of our goals and emerging independence.

However, the cultural context of these relationships has changed. Today's emerging adults are more likely than in the past to experience developmental transitions unrelated to family: They are deferring marriage and children in favor of personal development goals such as obtaining higher education, starting careers, and leaving home. Evidence suggests that friends might be more influential supports during these transitions than family (Fiori et al., 2020). At the same time, a greater number of young adults today live at home with their parents or receive financial support from them. A recent poll found that 65 percent of parents have provided financial support to their young adult children within the last year, averaging $718 a month (Rawson et al., 2024).

## The Role of Friends

Summarizing his review of the research on friendship development, Jeffrey Arnett concluded that "friendships change over the course of emerging adulthood, and such changes are more closely linked to life transitions (e.g., transition to college, starting a career, changing romantic status, transition to parenthood) than to age-related developmental changes. Perhaps changes in friendships also reflect changing needs in terms of support for developmental tasks" (Arnett, 2015, p. 224).

"Change" here can refer to changes in the number of friends we have, who they are, and the qualities, functions, and outcomes of our friendships. Arnett's conclusion is consistent with Selman's classic theory of friendship development (1980), which asserts that friendships in emerging adulthood evolve to autonomous interdependence. In this stage, friends appreciate and respect each other's individuality and identity but also rely on each other for the support needed to achieve their own goals. For example, when asked about personal goals such as academic success or physical fitness, college students indicated they would rather spend time with friends who help them to achieve those goals than friends who actually share the characteristics they hope to acquire (Slotter & Gardner, 2011; Aron et al., 2022). In other words, friendships in early adulthood.

Research finds that young adult friendships can promote and create interconnections among the three elements of self-determined behavior-- relatedness, autonomy, and competence (Figure 12.12). Young adults who perceive that their friends will be there to help them when they need it have higher self-esteem (Langheit & Poulin, 2024). Stronger friendship attachments in emerging adulthood are also positively associated with progress on developmental tasks, such as identity exploration, taking on responsibility for others, and becoming more independent (Schnyders et al., 2018). Self-determination also predicts positive well-being, and close and supportive friendships in early adulthood reduce feelings of loneliness and increase happiness (Demir et al., 2015; Nicolaisen & Thorsen, 2017).



Figure 12.12 Relatedness, autonomy, and competence are all positively affected by strong friendships in early adulthood. (Credit: Modification of "two woman lying on bed" by Disabled and Here, CC BY 4.0)

Friendships become deeper in early adulthood, characterized by increasing intimacy and trust, and they often provide more social support than family during times of change (Arnett, 2007; Lee & Goldstein, 2016; Miething et al., 2017; Schnyders et al., 2018). Friends confide in and seek advice from each other about their dating and sex lives, which they might not be comfortable discussing with family members (Carlson, 2014; Tagliabue et al., 2018; Astle et al., 2022). Friendship networks also expand in young adulthood (Wrzus et al., 2013). For example, many first-year college students rely more on their friends from home during their first semester, but research finds that making new friends within the new roles and settings of early adulthood increases a sense of belonging and promotes long-term well-being (Paul & Brier, 2001; Strayhorn, 2018; Patel & Ploughman, 2024).

High-quality and supportive relationships with friends during early adulthood are predictive of psychological and physical health, regardless of race or ethnicity (Szkody et al., 2021). However, the social networks of those who are White and educated include a larger proportion of friends than among those who are Black or have less education (Ajrouch et al., 2024). People of color are more likely to have kin-friends, meaning family members such as cousins who function in friendship roles. Friendships tend to form within the settings of our daily routines such as school, work, and community, and the college experience in particular may expand the proportion of friends (compared to family) in a person's social network (Ballard, 2019; Plummer et al., 2016). (Figure 12.13).



Figure 12.13 High-quality and supportive relationships with friends during early adulthood are predictive of psychological and physical health. (Credit: Modification of "three women and two men standing and smiling" by canweallgo/Unsplash CC0)

However, college students from low socioeconomic backgrounds often feel like outsiders in a college setting and are unsure how to get involved in campus activities where they might form supportive new friendships (Rubin, 2012; Peteet et al., 2015). In fact, having friends with higher perceived socioeconomic status actually increased feelings of incompetence in low-socioeconomic students (MacInnis et al., 2019). In contrast, young adults who form close friendships with someone of a different racial or ethnic identity report that, while the depth and intimacy of these friendships took longer to build than with adults of their own identity, the resulting closeness increased their understanding of diverse perspectives. Young adults are more likely than middle-aged adults to have a close friendship with someone of a different racial or ethnic identity, and being a person of color and having a higher education increases the likelihood of having a cross-ethnic friendship (Plummer et al., 2016).

## The Role of Family

The transition into adult responsibilities and independence can be challenging. In fact, since 2016, the Swedish government has offered programs to support mental health, employment, engaged citizenship, and other important needs during emerging adulthood (The European Commission, 2024). However, in the United States, families remain the primary support for the young adult transition, providing on average 10 percent of their income to their young adult children (Wightman et al., 2012). While some young adults report feeling guilty about their reliance on this financial support, most are comfortable if the assistance is framed as temporary and supporting a longer-term goal of adult independence. In this section we explore the way young adults and their families navigate this balance in their relationship as children launch into adulthood.

### It Depends: How Grandparents Inform Our Lives

While grandparents' impact on the lives of younger grandchildren has been well-documented, less is known about their continuing role during the transitions of early adulthood. Abigail Stephan, a researcher in Clemson University's Institute for Engaged Aging, surveyed young adults to learn more about the quality of their relationships with their grandparents and the continued influence of those relationships on the decisions young adults make about their lives.

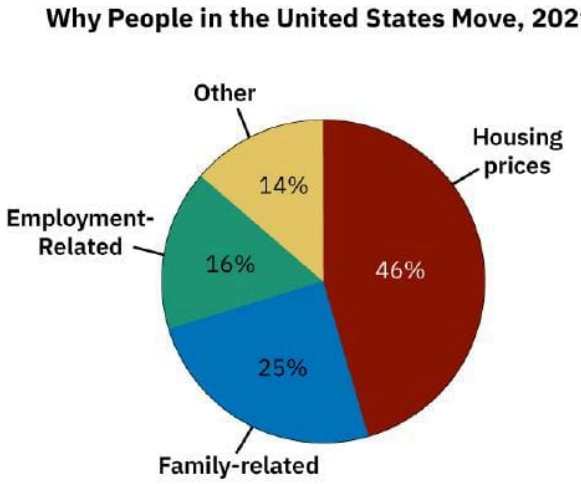
Participants often felt closer to some grandparents than to others. The past role of a grandparent as a childhood caregiver did not predict these differences. Instead, they were sometimes the result of larger family dynamics or individual personalities, but respondents also tended to feel closest to grandparents who had lived nearby during their childhood. Young adults reported that as they got older they began to "take more ownership" of those relationships, rather than relying on their parents or grandparents to manage them.

Young adults whose relationships with their grandparents were positive said they now take more initiative to stay in touch via text, phone calls, and visits, especially if they moved for jobs or college. However, for some young adults, this meant making the decision to end contentious relationships with grandparents they perceived as negatively affecting family well-being and cohesion. Still others said adulthood had given them the perspective to realize that grandparents are imperfect individuals who serve as examples of both flawed and admirable behavior and values.

Overall, Dr. Stephan concluded that, "Despite variation in the structure and substance of grandparent relationships held by participants—a level of diversity that is expected both within and across family systems—the acknowledgement of their grandparents' influence was interspersed throughout the interviews...All participants were conscious of the impact their grandparents have on their values and subsequent decisions regarding careers, life partners, child-rearing, and perspectives on functioning in the world" (Stephan, 2024).

## Leaving Home

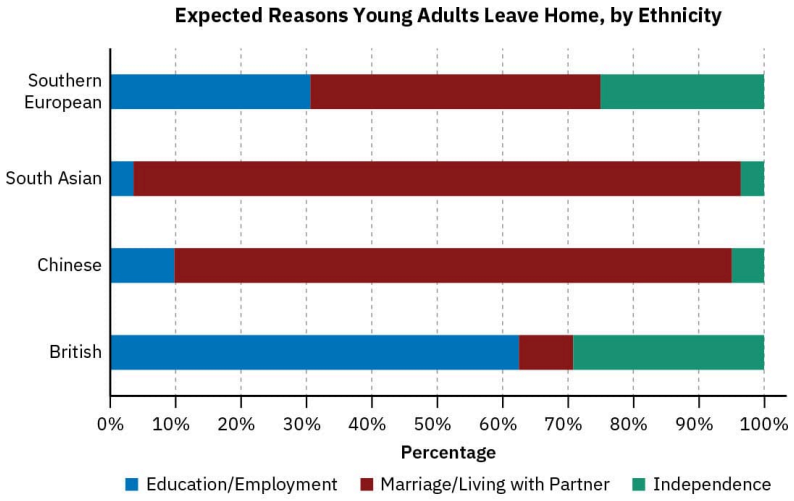
In the United States a person can expect to move almost 12 times during their lifetime. Adults between 20 and 29 move the most, because many of the developmental tasks of young adulthood, such as job changes and the achievement of financial independence, require relocating (Mariotti, 2022) (Figure 12.14).




Source: Mariotti, T. (2024). Moving statistics: industry trends and data.
Data from CPS Migration/ Geographic Mobility Census data. U.S. Census.

Figure 12.14 Many developmental tasks of early adulthood are related to the top reasons that people in the United States move. Source: Mariotti, 2022. (CC BY 4.0; Rice University & OpenStax)

For many young adults, the decision about whether, when, and why to move from their parents' home is affected by culture, education, financial considerations, and responsibilities. Culture and ethnicity can influence the decision, as can the parent-child relationship. Among immigrants in Canada, for example, Chinese families, Southern European families (including Italian and Greek), and South Asian families (including Indian and Pakistani) cited marriage or cohabiting with a romantic partner as the most expected/acceptable reason for their young adult child to leave the family home. Among South Asian families, adult sons are often expected to continue living in the parental home after marriage as part of a multi-generational household, which is more common in families with collectivistic values (Mitchell & Wister, 2015). British immigrant families cited educational and employment opportunities as the most expected reasons for adult children to leave their parents' home (Figure 12.15).




Source: Mitchell, B., et al. (2015). Midlife Challenge or Welcome Departure? Cultural and Family-Related Expectations of Empty Nest Transitions. *The International Journal of Aging and Human Development. 81*(4):260-280.

Figure 12.15 Parents' expectations about the reasons their young adult child will leave home vary by ethnicity. Source: Mitchell & Wister, 2015. (CC BY 4.0; Rice University & OpenStax)

In the United States, ethnicity, age, income, and gender are all predictors of the likelihood that a young adult will live at home (Srygley, 2023). White young adults are the least likely group to do so, likely explained in part by cultural norms that prioritize individuality and independence. However, race and ethnicity are also tied to socioeconomic status and educational opportunities, and young adults who live with their parents are more likely to have low income, difficulty paying bills, and little to no savings. They are also less likely to be college educated. In the preceding image, we saw that young men are also more likely to live with their parents than young women, most likely because young women are more likely to be married and college educated, developmental milestones that provide reasons and means for living independently.

When young adults do move from their parents' home, they usually don't go far. Sixty percent live within 10 miles of their childhood home and 80 percent within 100 miles, though the distance varies by race/ethnicity and parental income (Hendren et al., 2022; Sprung-Keyser et al., 2022). These group differences are again most likely influenced by differing cultural priorities placed on staying near and being engaged with family, pursuing higher education, and career goals.

For example, among the low-income regions of Appalachia, White young adults leave their hometown at much lower rates than the national average (Hendren et al., 2022). Proximity between adult children and their parents is associated with increased contact (Deane et al., 2016). This contact helps promote what family sociologist Vernon Bengtson called intergenerational solidarity (Bengtson & Schrader, 1982), a closeness among family generations promoted by frequent interaction, expressions of affection, alignment of values and beliefs, provision of help, proximity, and shared family norms and traditions.

## After Leaving Home

The effect of a child moving out varies among cultures, as well as among individual families (Figure 12.16). For example, U.S. children and their parents typically report a decrease in conflict once the young adult moves out (Morgan et al., 2010; Fang et al., 2021), while Portuguese parents report experiencing greater agitation following the move (Mendonça & Fontaine, 2013). These differing emotional reactions are tied to different cultural values. White and U.S.-born young adults are more likely to view the role of family as supporting the aspirations and advancement of young adult children. However, ethnic minority young adults and those from immigrant families are more likely to feel a "generational interdependence" in which help flows in all directions among siblings, parents, grandparents, and adult children (Swartz et al., 2017, p. 27).



Figure 12.16 Household changes and family responses can vary greatly when an adult child moves out of the family home. (Credit: Modification of "tim + friends moving the temporary couch" by jencu/Flickr CC BY 2.0)

Most U.S. parents describe their relationship with their young adult children as “very good” or “excellent,” staying in contact by phone or text at least several times a week (Minkin et al., 2024). They are satisfied with their level of involvement in the lives of their young adult children and continue to provide emotional support, especially from mothers to daughters. Young adult children continue to seek guidance from their parents, especially on career, health, and finances, and the most common source of disagreement is the young adult’s financial decisions. Perhaps most transformative is that many parents feel they now truly know each other beyond their roles as parent and child (Minkin et al., 2024).

U.S.-born young adults, in particular, desire equitable relationships with their parents – like that of close friends (Figure 12.17). In fact, many young adults describe a parent as their best friend. Jake, an attorney from Chicago, says he talks to his family 2 to 3 times per week and solves his problems “by committee” (Swartz et al., 2017, p. 34). Rather than comparing their relationships to friendships, young adults from immigrant families describe their parents as more “directive” and focus on “family sociability and solidarity” generated by family gatherings, traditions, and celebrations.



Figure 12.17 Most parents are satisfied with their level of involvement in the lives of their young adult children and continue to provide emotional support, especially from mothers to daughters. (Credit: Modification of "Hispanic-family" by eskypowell/nappy, Public Domain)

Some parents may be tempted to make life easier for their young adult children by hovering over their day-to-day activities and decisions (even from afar). But young adults who perceive their parents as controlling or manipulative are more likely to feel

anxious and indecisive when making choices and commitments (Luyckx et al., 2007; Luebbe et al., 2018). Young adults and their parents must make space in their relationship for the value of trial-and-error. Even at this stage of life, the family can still serve as a secure base that provides young adults with the confidence and security to explore new people, places, and roles as they step into the adult world.

## References


Ajrouch, K. J., Hu, R. X., Webster, N. J., & Antonucci, T. C. (2024). Friendship trajectories and health across the lifespan. *Developmental Psychology*, *60*(1), 94–107. doi.org/10.1037/dev0001589

Arnett, J. J. (2007). Socialization in emerging adulthood: From the family to the wider world, from socialization to self-socialization. In J. E. Grusec & P. D. Hastings (Eds.), *Handbook of socialization: Theory and research* (pp. 208–231). The Guilford Press. psycnet.apa.org/record/2015-05080-004

Arnett, J. J. (2015). *The Oxford handbook of emerging adulthood*. Oxford University Press. doi.org/10.1093/oxfordhb/978...95574.001.0001

Aron, A., Lewandowski, G., Branand, B., Mashek, D., & Aron, E. (2022). Self-expansion motivation and inclusion of others in self: An updated review. *Journal of Social and Personal Relationships*, *39*(12), 3821–3852. doi.org/10.1177/02654075221110630

Astle, S. M., Shigeto, A., Anders, K. M., Rodriguez, K. K., & Rajesh, P. (2022). Emerging adult men's reports of sexual messages and desired support from parents, friends/peers, and online media in making sexual decisions during college. *Sexuality Research & Social Policy*, *19*, 1598–1610. https://doi.org/10.1007/s13178-022-00696-w

Ballard, J. (2019, July 30). *Millennials are the loneliest generation*. YouGov. https://today.yougov.com/society/art...ds-poll-survey

Bengtson, V. L., & Schrader, S. S. (1982). Parents-child relations. In D. J. Mangen & W. A. Peterson (Eds.), *Research instruments in social gerontology* (pp. 114–128). University of Minnesota Press.

Carlson C. L. (2014). Seeking self-sufficiency: Why emerging adult college students receive and implement parental advice. *Emerging Adulthood, 2*(4), 257–269. doi.org/10.1177/2167696814551785

Deane, G., Spitze, G., Ward, R. A., & Zhuo, Y. A. (2016). Close to you? How parent–adult child contact is influenced by family patterns. *Journals of Gerontology Series B, 71*(2), 344–357. doi.org/10.1093/geronb/gbv036

Demir, M., Orthel-Clark, H., Özdemir, M., & Özdemir, S. B. (2015). Friendship and happiness among young adults. In M. Demir (Ed.), *Friendship and happiness: Across the life-span and cultures* (pp. 117–135). Springer. psycnet.apa.org/record/2015-19322-007

Fang, S., Galambos, N. L. & Johnson, M. D. (2021). Parent–child contact, closeness, and conflict across the transition to adulthood. *Journal of Marriage and Family*, *83*(4), 1176–1193. doi.org/10.1111/jomf.12760

Fiori, K. L., Windsor, T. D., & Huxhold, O. (2020). The increasing importance of friendship in late life: Understanding the role of sociohistorical context in social development. *Gerontology*, *66*(3), 286–294. doi.org/10.1159/000505547

Hendren, N., Porter, S. R., & Sprung-Keyser, B. (2022, July 25). *There's no place like (close to) home*. U.S. Census Bureau. https://www.census.gov/library/stori...like-home.html

Langheit, S., & Poulin, F. (2024). Links between best-friendship quality and well-being from early emerging adulthood to early established adulthood. *Emerging Adulthood, 12*(4), 539–552. doi.org/10.1177/21676968241248877

Lee, CY. S., & Goldstein, S. E. (2016). Loneliness, stress, and social support in young adulthood: Does the source of support matter? *Journal of Youth and Adolescence, 45*, 568–580. https://doi.org/10.1007/s10964-015-0395-9

Luebbe, A. M., Mancini, K. J., Kiel, E. J., Spangler, B. R., Semlak, J. L., & Fussner, L. M. (2018). Dimensionality of helicopter parenting and relations to emotional, decision-making, and academic functioning in emerging adults. *Assessment, 25*(7), 841–857. doi.org/10.1177/1073191116665907

Luyckx, K., Schwartz, S. J., Berzonsky, M. D., Soenens, B., Vansteenkiste, M., Smits, I., & Goossens, L. (2008). Capturing ruminative exploration: Extending the four-dimensional model of identity formation in late adolescence. *Journal of Research in Personality*,

*42*(1), 58–82

MacInnis, C. C., Nguyen, P., Buliga, E., & Boyce, M. A. (2019). Cross-socioeconomic class friendships can exacerbate imposturous feelings among lower-SES students. *Journal of College Student Development*, *60*(5), 595–611. https://doi.org/10.1353/csd.2019.0056

Mariotti, T. (2022, July 28). *Moving statistics: Industry trends and data* (2024). Ruby Home Luxury Real Estate. www.rubyhome.com/blog/moving...20the%20states

Mendonça, M., & Fontaine, A. M. (2013). Late nest leaving in Portugal: Its effects on individuation and parent–child relationships. *Emerging Adulthood, 1*(3), 233–244. doi.org/10.1177/2167696813481773

Miething, A., Almquist, Y. B., Edling, C., Rydgren, J., & Rostila, M. (2017). Friendship trust and psychological well-being from late adolescence to early adulthood: A structural equation modelling approach. *Scandinavian Journal of Public Health*, *45*(3), 244–252. doi.org/10.1177/1403494816680784

Minkin, R., Parker, K., Menasce Horowitz, J., & Aragão, C. (2024, January 25). *Parents' relationship with their young adult children*. Pew Research Center. https://www.pewresearch.org/social-t...%20(44%25%20vs

Mitchell, B. A., & Wister, A. V. (2015). Midlife challenge or welcome departure? Cultural and family-related expectations of empty nest transitions. *The International Journal of Aging & Human Development*, *81*(4), 260–280. doi.org/10.1177/0091415015622790

Morgan, E. M., Thorne, A., & Zurbriggen, E. L. (2010). A longitudinal study of conversations with parents about sex and dating during college. *Developmental Psychology, 46*(1), 139–150. doi.org/10.1037/a0016931

Nicolaisen, M., & Thorsen, K. (2017). What are friends for? Friendships and loneliness over the lifespan—from 18 to 79 years. *The International Journal of Aging and Human Development, 84*(2), 126–158. doi.org/10.1177/0091415016655166

Patel, A., & Ploughman, S. (2024, January 19). *The increasing importance of a best friend at work*. Gallup. https://www.gallup.com/workplace/397...iend-work.aspx

Paul, E. L., & Brier, S. (2001). Friendsickness in the transition to college: Precollege predictors and college adjustment correlates. *Journal of Counseling and Development*, *79*(1), 77–89. doi.org/10.1002/j.1556-6676.2001.tb01946.x

Peteet, B. J., Montgomery, L., & Weekes, J. C. (2015). Predictors of imposter phenomenon among talented ethnic minority undergraduate students. *Journal of Negro Education*, *84*(2), 175–186. doi.org/10.7709/jnegroeducation.84.2.0175

Plummer, D. L., Stone, R. T., Powell, L., & Allison, J. (2016). Patterns of adult cross-racial friendships: A context for understanding contemporary race relations. *Cultural Diversity & Ethnic Minority Psychology*, *22*(4), 479–494. doi.org/10.1037/cdp0000079

Rawson, C., Flanagan, G. L., & Frankel, R. S. (2024, June 6). *Study reveals more than half of American parents in these 36 states shell out to support their adult children*. USA Today. https://www.usatoday.com/money/bluep...dult-children/

Rubin, M. (2012). Social class differences in social integration among students in higher education: A meta-analysis and recommendations for future research. *Journal of Diversity in Higher Education*, *5*(1), 22–38. doi.org/10.1037/a0026162

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*(1), 68–78. doi.org/10.1037/0003-066X.55.1.68

Schnyders, C. M., Rainey, S. & McGlothlin, J. (2018). Parent and peer attachment as predictors of emerging adulthood characteristics. *Adultspan Journal, 17*(2), 71–80. https://doi-org.pitt.idm.oclc.org/10.1002/adsp.12061

Selman, R. L. (1980). *The growth of interpersonal understanding*. Academic Press. https://archive.org/details/growthof...r0000selm_y3t8

Slotter, E. B., & Gardner, W. L. (2011). Can you help me become the "me" I want to be? The role of goal pursuit in friendship formation. *Self and Identity*, *10*(2), 231–247. doi.org/10.1080/15298868.2010.482767

Sprung-Keyser, B., Hendren, N., & Porter, S. (2022). *The radius of economic opportunity: Evidence from migration and local labor markets*. U.S. Census Bureau Center for Economic Studies. https://www2.census.gov/ces/wp/2022/CES-WP-22-27.pdf

Srygley, S. (2023). *In the nest: Did the pandemic push young adults to live with their parents?* Population Reference Bureau. https://www.prb.org/wp-content/uploa...ember-2023.pdf

Stephan, A. T. (2024). How grandparents inform our lives: A mixed methods investigation of intergenerational influence on young adults. *Journal of Adult Development, 31*, 40–52. https://doi.org/10.1007/s10804-023-09446-7

Strayhorn, T. L. (2018). *College students' sense of belonging: A key to educational success for all students (2nd ed.).* Routledge. doi.org/10.4324/9781315297293

Swartz, T. T., Hartmann, D., & Rumbaut, R. G. (2017). *Crossings to adulthood: How diverse young Americans understand and navigate their lives*. Brill. https://doi.org/10.1163/9789004345874

Szkody, E., Moussa Rogers, M., & McKinney, C. (2021). Positive health benefits of social support: Examining racial differences. *Translational Issues in Psychological Science, 7*(4), 419–434. doi.org/10.1037/tps0000252

The European Commission. (2024, March 4). Youth Policy Governance. https://national-policies.eacea.ec.e...icy-governance

Wightman, P., Schoeni, R., & Robinson, K. (2012). *Familial financial assistance to young adults* [Working paper]. National Poverty Center, University of Michigan. npc.umich.edu/publications/w...cation_id/239/

Wrzus, C., Hänel, M., Wagner, J., & Neyer, F. J. (2013). Social network changes and life events across the lifespan: A meta-analysis. *Psychological Bulletin, 139*(1), 53–80, doi.org/10.1037/a0028601

This page titled 15.11.4: Relationships with Friends and Family in Early Adulthood is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

- 12.3: Relationships with Friends and Family in Early Adulthood by OpenStax is licensed CC BY 4.0. Original source: https://openstax.org/details/books/lifespan-development.

# 15.11.5: Contexts- School and Work Settings in Early Adulthood

**Learning Objectives**

By the end of this section, you will be able to:

- Describe the education and work decisions facing young adults after high school and the contexts that influence them
- Discuss the ways college pathways vary for young adults
- Describe work and career exploration during young adulthood
- Describe the early adult experience of finding work-life balance

Six years after graduating college, Sam finds his job as a design engineer very satisfying. He can apply his degree in mechanical engineering, works from home three days a week, and has the autonomy to implement creative ideas. However, his pathway to the job was challenging. His first job out of college, as a quality assurance engineer, required him to work from 8am to 5pm five days a week on the floor of a manufacturing plant. It was a noisy environment with low pay, but drawing on his community service experience volunteering for Habitat for Humanity, Sam impressed his supervisors with his adaptability, teamwork, and communication skills. Sam appreciates how far he has come during his early adult career and still looks for opportunities for continuing education and professional development to keep the doors open for future career mobility.

Sam's story illustrates how the education and work trajectories of young adults can be both challenging and rewarding. In this section we will consider the influences on and outcomes of decisions regarding continuing education and employment.

## Trajectories

Developmental scientists often refer to life's developmental *trajectories* (Elder et al., 2015). A trajectory is a predicted pathway of development, and it is usually determined by our behaviors within our context. For example, if your community and family are able to support a college education—standards that define your *context*—and you earn good grades in high school and choose to go to college in early adulthood—which defines your *behavior*--this interaction increases the likelihood that you will complete a college degree and earn a higher income, establishing your *trajectory*.

As the social clock of emerging and early adulthood has become more elongated and flexible in modern society, there is now space for many more possible developmental trajectories during this stage of life (Setterson & Ray, 2010; Eliason et al., 2015, p. 207) (Figure 12.18). Young adults perceive that personal accountability, independent decision-making, and financial independence are what make someone an adult, and the contexts from which they step into the adult world create a variety of ways to achieve these priorities (Sharon, 2016).



Figure 12.18 Many vocational and educational pathways are available to fit the varied needs and interests of emerging adults. (Credit: Modification of "Presenting to a colleague" by CreateHERStock/nappy, Public Domain)

## Post-High School Pathways

College enrollment rates are higher for the most recent cohorts of young adults than for previous generations, but since 2010 enrollment has remained relatively steady, with about 40 percent of 18- to 24-year-olds enrolling in a 2- or 4-year institution (National Center for Education Statistics, 2024). That means that for more than half of young adults, college is not the pathway. Other pathways include starting a family, undertaking vocational training, accepting full-time employment, enlisting in military service, and signing on for volunteer work or political activism (Figure 12.19).



Figure 12.19 Vocational training can provide specific instruction and hands-on practice to prepare for careers in a variety of trades and technical fields. (Credit: Modification of "U.S. Navy Sailor welds pipe aboard aircraft carrier" by Official U.S. Navy Page/Flickr CC BY 2.0)

Many young adults credit community service opportunities with sparking their interest in a particular field and providing a purpose-driven career pathway; however, most volunteerism and civic engagement among young adults occurs in sporadic episodes (Motulsky et al., 2020). Most young adults express interest in community service but do not regularly participate, citing a lack of time given the increasing responsibilities of early adulthood (Swartz et al., 2017; Wray-Lake et al., 2020). Female and Black young adults are most likely to volunteer their time for community service, but overall community service participation rates decline following high school. Political engagement and election participation increase, however, particularly among Black young

adults (Wray-Lake et al., 2020). (Figure 12.20).



(a) (b)

Figure 12.20 Community service opportunities can help young adults develop valuable professional skills such as communication and teamwork. Volunteering may also spark interest in related vocational paths such as (a) environmental science or (b) culinary arts. (Credit (a): Modification of "JR volunteers" by Virginia State Parks/Flickr CC BY 2.0; (b): Modification of "Fulbright MENA Re-Entry Workshop Community Service - DC Central Kitchen" by Exchanges Photos/Flickr Public Domain)

## The Influence of Context

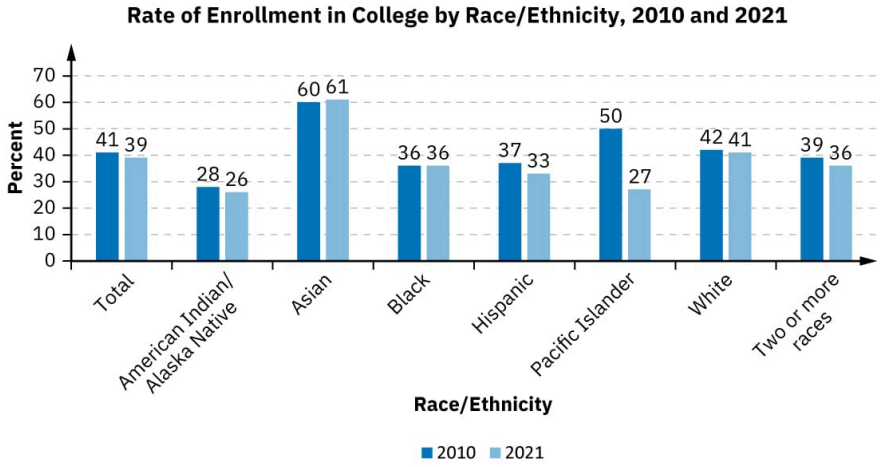
Many factors interact to influence the educational and vocational pathways young adults choose after high school, including family and community background, socioeconomic status, gender, and race. Those from rural areas often face hard choices, because they are less likely to find many education and employment opportunities close to home (Fenton et al., 2023). Half of all first-year college students at public institutions come from within 50 miles of campus, but *education deserts*, communities with no nearby college or university, are more common in rural areas (Stolzenberg et al., 2020; Hillman & Weichman, 2016).

Young adults from families with low socioeconomic status (SES) see the greatest earnings benefits from a college degree. But parents and community members who did not attend college may be less likely to see college as a realistic or valuable choice, and rural young adults are less likely to be encouraged by their families and teachers to prepare for or pursue a college education (Healy, 2017; Byun et al., 2012). Many young adults in rural communities choose instead to seek employment in local jobs that are more familiar, accessible, and close to family, rather than investing time and money in an advanced education or professional relocation that may not yield worthwhile occupational results (Corbett, 2016). Many also cite obligations to family or family property that keep them attached to their hometown (Wilson et al., 2017; Massey, 2020).

Young adults who remain in their hometown communities are more likely to experience earlier transitions to other adult roles such as full-time employment, marriage, and parenthood (Fenton, 2023). While these early transitions are predictive of decreased substance use, increased financial independence, and life satisfaction for these young adults, early marriage and parenthood decrease the likelihood of college attendance or degree completion and predict a lower household income (Maggs et al., 2012; Monaghan, 2020). Economic pressures have also made it difficult for many rural areas to provide living conditions of sufficient quality for young adults to stay or to return home after college (Motulsky et al., 2020). School closures, decreased property values, poverty, unemployment, low wages, and a scarcity of health care providers have resulted in a declining rural population in the United States, driven in part by the exodus of young people from those areas and toward urban or suburban areas that offer more opportunities (Economic Research Service, 2017; Massey, 2020). Those who do leave rural hometowns to advance their education or career are more likely to come from White families with higher SES and higher levels of education (Brand & Xie, 2010; Brooks & Redlin, 2009; Carr & Kefalas, 2011).

Race and ethnicity also predict different decisions regarding employment and education (Figure 12.21). Family care priorities, financial obstacles, and discrimination can dissuade young Black and Hispanic adults with high occupational aspirations from relocating to pursue those goals (Brooks & Redlin, 2009). Black young adults are also more likely to feel disconnected from settings that might provide developmental pathways, such as school, the workplace, and the military (Fenton et al, 2023), in part because they are more likely than White young adults to face interpersonal and institutional discrimination there (Hope et al.,

2015). However, Black young adults are more likely than their White socioeconomic peers to complete a college degree (Karlson, 2019).




Note: Race categories exclude persons of Hispanic ethnicity.

Source: U.S. Department of Commerce, Census Bureau. (2023). Current population survey. Digest of Education Statistics 2023. Table 302.60

Figure 12.21 Race and ethnicity can predict decisions about employment and education. (CC BY 4.0; Rice University & OpenStax)

The intersection of race and gender identity also produces variation in trajectories for young adults. Partly because young men anticipate better prospects for stable well-paying jobs without a college education in stereotypically masculine vocations such as plumbing or construction, fewer men attend college than women. This gender gap is narrower among Black young adults (37 percent of men attend college vs. 44 percent of women) than among White (40 percent of men, 50 percent of women) and Hispanic young adults (33 percent of men, 44 percent of women) (Fry, 2023). White and minority young adults enlist in the military at comparable rates, but women are much less likely to do so than men (Barosso, 2019). White and Hispanic young adults are more likely to marry earlier than Black or Asian young adults, but Black women are more likely than White women to work, be the primary breadwinner in their household, and have caregiving responsibilities (Payne, 2019; Weller, 2019).

The transition into adulthood can be particularly challenging for young adults with disabilities. Interviews with young people with a range of disabilities, their caregivers, and service providers reveal several barriers to participating in typical adult life (Stewart et al., 2014; ALSO, 2023):

- **Pace**: Life for emerging adults is influenced not only by a social clock, but also by busy schedules and fast-paced interactions that can leave little room for those who need a flexible pace to accomplish their goals.
- **Complexity and Literacy**: Changing procedures and jargon-filled instructions can be confusing for those trying to accomplish even everyday tasks, such as reading a recipe or putting gas in the car.
- **Stigma**: In a culture that values independence in early adulthood, it can be difficult for a young adult with disabilities to ask for help and support. It is especially challenging to overcome “either-or” thinking that assumes someone either can do everything by themselves or needs constant supervision, with no gray area in between.

Many families are understandably reluctant to give their young adults more autonomy within such an uncertain landscape. Young adults with disabilities were often more willing than their families to pave their own way, despite the lack of clear directions or guaranteed outcomes, and providing opportunities for young adults with disabilities to exercise more independence can also reduce stigma within the community. The success of these young people requires early, careful, and customized planning that promotes collaboration among available disability services and the family, and that accommodates the strengths and limitations of the young adult within their desired future (Stewart et al., 2014). An individualized and holistic approach can help facilitate the development of life skills, opportunities, and support that will improve a young adult’s quality of life in domains such as independent living, employment, education, social life, and community involvement (ALSO, 2023).

## College Considerations

College is not the only or best path for everyone, and for those who choose it, it not a one-size-fits-all experience. For first-generation college-students, the transition to college life can be a culture shock. While many such students begin college with

pride and determination, the environment can feel uncomfortable or overwhelming as they navigate unfamiliar social networks and intimidating institutional policies and procedures (Motulsky et al., 2020). After high school, some students choose to do a gap year, to gain valuable personal and professional development before beginning college, through participation in immersive experiences such as community service work. Other students combine military service and college education by joining the Reserve Officers Training Corps (ROTC) (Figure 12.22). In exchange for an 8-year service commitment following graduation, the ROTC offers scholarships to adults interested in gaining military service training while enrolled as full-time college students (U.S. Army, n.d.). Next we look at pathways through college and outcomes for those who enroll.



Figure 12.22 Some students combine military service and college education by joining the Reserve Officers Training Corps (ROTC). (Credit: Modification of "Cadets with the Junior Reserve Officers' Training Corps run through a confidence course" by Pvt. Brianne Patterson, United States Army, Public Domain)

Link to Learning

A gap year can provide an emerging adult with time for reflection and exploration that is useful when choosing long-term education and vocational goals. Visit the Gap Year Association to learn about options for gap year activities and even find a gap year consultant.

## Pathways

Statistics show significant differences in how and when young adults complete their undergraduate degrees (Monaghan, 2020). These differences often result from socioeconomic inequities that can present delays and interruptions for students with lower SES. Often driven by the need to find affordable, local, and part-time enrollment options, they are more likely to begin their college education as part-time students at a community college, a pathway associated with a lower likelihood of degree completion than full-time enrollment at a 4-year institution. Students with lower SES are also more likely to be employed full-time, get married, and become parents during emerging adulthood, which often necessitates part-time enrollment and lowers degree completion rates, especially for women.

Research on college enrollment patterns identified two primary groups of students, labeled rapid completers (38 percent) and marginal college goers (43 percent). Rapid completers enrolled and completed their degree before age 25. They were more likely to come from college-educated families with high SES. They also had the highest employment rates (part time during college and full time after graduation), with a median annual income of $94,000 during adulthood. Marginal college-goers attended part time and for short spells, with a 6 percent degree-completion rate during early adulthood. They were more likely to be employed full time and married during their college enrollment (Monaghan, 2020). Working part-time is associated with achieving better college outcomes, including greater campus engagement, leadership and skill development, and social networking, especially for first-generation students (Pike et al., 2008; Salisbury et al., 2012; Nuñez & Sansone, 2016). However, working more than 20 hours a week is associated with a lower GPA and lower college completion rate (Davis, 2023).

## Outcomes

Young adults who enroll in college usually do so to get better job opportunities, including higher-earning and purpose-driven careers (Eagen et al., 2013; Johnson, 2023). If higher earnings are the goal, data suggest that completing an internship or study abroad experience during college is predictive of higher earnings in the workplace (Wolniak & Engberg, 2019). And while most graduates believe their education was a good investment, if they had to do it over, more than half say they would choose a different major to be better positioned to pursue their passions and better job opportunities (Johnson, 2023). Switching majors (as 30 percent of students do) can increase a student's likelihood of graduating, especially when done within three years of starting and with the help of campus career resources (National Center for Education Statistics, 2017; Crawford Ciglar, 2020).

The benefits of choosing the "right" major continue after college: Adult job satisfaction and commitment have been found to be predicted by perceived alignment between college major and field of employment (Wolniak & Pascarella, 2005; Wolniack & Engberg, 2019), regardless of income. However, even if a graduate enters the workforce in a career exactly matching their major, chances are they won't stay in that specific field over the course of their career (Roberts Wesleyan College, 2020; Fox, 2022).

# Career Exploration

It is estimated that the average adult will change careers (not just jobs) 5 to 7 times in their life (Roberts Wesleyan College, 2020). In 2022 alone, 61 percent of young adults in the workforce who had quit their job within the last year said they wanted to change their field of work or occupation (Fox, 2022). In fact, some of the most satisfying jobs for emerging adults might not even exist yet. When most of today's working adults were young, there was no such thing as social media, let alone a job as a social media manager. As technology continues to evolve, so will occupations in this and many other fields.

## Career Preparation and Readiness

According to career expert Vicki Salemi, the key to professional readiness is to develop "transferable skills," including communication, problem-solving, and collaboration, and to emphasize those skills on your resume and in interviews (Fox, 2022). Employers say they prefer applicants with "active and applied learning experiences," which apprenticeships or internships can provide (Flaherty, 2021). Two-thirds of employers also say they want adaptable employees with good communication skills, which can be developed as a result of teamwork opportunities in military service or study-abroad experiences. If you are looking for a career that provides opportunity to learn new skills, face new challenges, and serve a purpose to others, completing community-service or civic engagement experiences is the best predictor of those outcomes. Such experiences also develop problem-solving skills, teamwork, and work ethic, among the top abilities employers seek (Gray, 2024).

## Career Goals

A cross-cultural meta-analysis of the priorities influencing the career goals of young people found that they were influenced by extrinsic factors (such as the potential income or accessibility of the job), intrinsic motivations (such as personal interest or opportunities for professional development), and interpersonal influences (such as social responsibility or family influence). Those coming from families with more collectivistic cultural values, such as in India and South Korea, were more likely to be influenced by extrinsic factors and interpersonal influences. U.S. job seekers, on the other hand, were more likely to be guided by intrinsic motivations (Akosah-Twumasi et al., 2018).

Developing a vocational identity in early adulthood requires exploring the way our career goals relate to aspects of our self, such as interests, values, and abilities. Engaging in this exploration is predictive of job motivation, performance, and flexibility (Colquitt et al., 2000; Rowald, 2007; Kim et al., 2023). Research on college students shows a general increase in exploration and commitment during emerging adulthood (Kim et al., 2023), facilitated by aspects of personality such as conscientiousness, openness, internal locus of control, and self-efficacy (Lee et al., 2023). Young adults who are more satisfied with their career trajectories credit supportive mentorship from family, educators, and work colleagues, as well as their own proactive and strategic career exploration during school and in early job experiences (Swartz et al., 2017) (Figure 12.23).



Figure 12.23 For young adults, mentorship can be an important part of developing satisfaction with their career choices. (Credit: Modification of "Women In Tech - 77" by WOCInTech Chat/Flickr CC BY 2.0)

Like other social developments, a young adult's career trajectory reflects the interaction of context and behavior. According to Donald Super's lifespan theory of career development, our career trajectory starts as early as childhood and evolves throughout adulthood as it interacts with other developmental roles and tasks (Super, 1990). In adolescence and emerging adulthood, the focus is *exploration*. However, in early to middle adulthood, the priority shifts to *establishment,* which includes committing to and advancing within a career in ways that consider the relative value of other roles such as family, peers, school, and the community.

For some young adults, the career establishment process may focus more on taking on more responsibility and advancing within successful or "good" jobs or careers. Young adults describe "good" jobs as full-time and stable positions that are personally rewarding, allow autonomy and responsibility at work, present opportunities to serve or mentor others, and offer generous employee compensation and benefits (such as work from home, health care, and vacation time). Those who find themselves in "bad" jobs may be more focused on changing jobs or careers, because their work offers insufficient compensation and benefits, inadequate training, little feeling of accomplishment or empowerment, and unsafe, unfair, or degrading conditions (Swartz et al., 2017).

As with other trajectories, the context from which people emerge into adulthood has a big influence on the likelihood of finding themselves in a good or bad job. Those in good jobs were more likely to come from privileged socioeconomic backgrounds, which provided support for advanced education and professional development experiences like study abroad or unpaid internships and safety nets to buffer them against setbacks. However, young adults also report behaviors that may have increased the likelihood of success in career establishment. For example, those in good jobs often approached their career with a more developmental and strategic mindset, using entry-level jobs to develop skills, expertise, and professional connections that helped them advance to more satisfying and challenging positions.

Young adults in bad jobs are more likely to develop a learned helplessness, which undermines a sense of direction or agency in their career development (Swartz et al., 2017). Often overwhelmed by the responsibilities of full-time job, education, and family, these adults dream of better work but are often unsure how to realize those dreams and lack available tools, support, or mentorship to guide them.

**Link to Learning**

Overwhelmed by the task of choosing a career direction? Explore this advice for organizing your career exploration and decision-making process from career development facilitator Dawn Rosenberg McCay.

## Work-Life Balance

As young adults take on more responsibilities, they must balance obligations at work or school with other priorities. Finding this

balance does not require giving equal attention to everything or "doing it all." Rather, work-life balance is the arrangement that allows a person to spend the desired amount of time on each of the activities that matter to them, such as work, leisure, education, and caregiving (Dang et al., 2024). The amount of time allocated to various life activities may be unequal and change according to needs. Writer McAlary describes the value of seeing adult life balance as a scale that can tilt toward the activities that most need our attention, including as our priorities change over time (McAlary, 2017). College students report typically spending the most time per week (approximately 30 hours) on educational activities like attending class and studying. And while frequently exhibiting signs of burnout and exhaustion, young adults, including those who are caregivers for aging parents or younger siblings, report achieving a moderate level of balance between work and other priorities (Dang et al., 2024). Young adults with an internal locus of control are more likely to use active, problem-focused coping strategies to manage a broad range of developmental challenges, which can result in higher self-esteem, feelings of competence, and life satisfaction. (Kurtović et al., 2018; Singh & Choudhry, 2014). Some researchers have noted that more recently young adults are more willing to advocate for their work-life balance, screening jobs for or directly asking their employers to provide increased flexibility such as remote work, flexible hours, and time for self-care (Lee & Diller, 2023).

### Life Hacks: Developing Work-Life Balance Early in Your Career

The American Psychological Association offers these active coping strategies for developing and maintaining work-life balance during early adulthood (DeAngelis, 2017):

- **Plan your tasks at home and at work in advance.** That includes daily, weekly, and even long-term career planning.
- **Communicate**. Talk with your family, friends, romantic partners, and work colleagues. Don't expect others to intuitively know what you need and want. Ask for and offer help.
- **Set boundaries**. Know when to (politely) say no so that you are able to give adequate time to the tasks already on your plate and take care of your priorities and needs.
- **Don't give 110 percent**. It's too early to get burned out! Give yourself (and others) the grace to sometimes fail or be "good enough."

Life balance in early adulthood relates not only to whether a person is able to satisfactorily divide their time among adult responsibilities, but also to the way they prioritize the sequence of developmental challenges. So far in this chapter, we have addressed the early adulthood challenges to develop the self, identity, relationships with friends and family, and education and vocational pathways. In the last section, we will discuss how young adults' romantic relationships grow within the context of these other changes.

## References

Advocates for Life Skills & Opportunity. (2023, May 25). *The importance of life skills for young adults with disabilities*. https://alsoweb.org/nonprofit-blog/t...-disabilities/

Akosah-Twumasi, P., Emeto, T. I., Lindsay, D., Tsey, K., & Malau-Aduli, B. S. (2018). A systematic review of factors that influence youths career choices—the role of culture. *Frontiers in Education, 3*, https://doi.org/10.3389/feduc.2018.00058

Brand, J. E., & Xie, Y. (2010). Who benefits most from college?: Evidence for negative selection in heterogeneous economic returns to higher education. American Sociological Review, 75(2), 273–302. doi.org/10.1177/0003122410363

Brooks, W. T., & Redlin, M. (2009). Occupational aspirations, rural to urban migration, and intersectionality: A comparison of White, Black, and Hispanic male and female group chances for leaving rural counties. *Southern Rural Sociology, 24*(1), 130–152. https://egrove.olemiss.edu/jrss/vol24/iss1/8

Byun, S., Meece, J. L., Irvin, M. J., & Hutchins, B. C. (2012). The role of social capital in educational aspirations of rural youth. *Rural Sociology, 77*(3), 355–379. doi.org/10.1111/j.1549-0831.2012.00086.x

Carr, P. J., & Kefalas, M. J. (2011). Straight from the heartland: Coming of age in Ellis, Iowa. In M. C. Waters, P. J. Carr, & M. J. Kefalas (Eds.), *Coming of age in America: The transition to adulthood in the twenty-first century* (pp. 28–58). University of California Press.

Colquitt, J. A., LePine, J. A., & Noe, R. A. (2000). Toward an integrative theory of training motivation: A meta-analytic path analysis of 20 years of research. *Journal of Applied Psychology*, *85*(5), 678–707. doi.org/10.1037/0021-9010.85.5.678

Corbett, M. (2016). Rural futures: Development, aspirations, mobilities, place, and education. *Peabody Journal of Education, 91*(2), 270–282. doi.org/10.1080/0161956X.2016.1151750

Crawford Ciglar, C. (2020, November 5). *Normalizing the norm of changing college majors*. University of Tulsa. https://utulsa.edu/news/normalizing-...llege%20career

Dang, S., Looijmans, A., Lamura, G., & Hagedoorn, M. (2024). Perceived life balance among young adult students: A comparison between caregivers and non-caregivers. *BMC Psychology, 12*(18). https://doi.org/10.1186/s40359-023-01500-z

Davis, A. M. D. (2023). Is working in college worth it? How hours on the job affect postsecondary outcomes. *Educational Evaluation and Policy Analysis, 0*(0). doi.org/10.3102/01623737231210243

DeAngelis, T. (2017, December). Homing in on work-life balance. *Monitor on Psychology, American Psychological Association, 48*(11), 32. https://www.apa.org/monitor/2017/12/cover-juggling

Economic Research Service. (2017). *Rural education at a glance, 2017 edition* (Economic Information Bulletin 171). U.S. Department of Agriculture. www.ers.usda.gov/webdocs/pub...71.pdf?v=42830

Elder, G. H., Jr., Shanahan, M. J., & Jennings, J. A. (2015). Human development in time and place. In M. H. Bornstein, T. Leventhal, & R. M. Lerner (Eds.), *Handbook of child psychology and developmental science: Ecological settings and processes* (7th ed., pp. 6–54). Wiley. doi.org/10.1002/9781118963418.childpsy402

Eliason, S. R., Mortimer, J. T., & Vuolo, M. (2015). The transition to adulthood: Life course structures and subjective perceptions. *Social Psychology Quarterly*, *78*(3), 205–227. doi.org/10.1177/0190272515582002

Fenton, M. P., Forthun, L. F., & Lynne, S. D. (2023). Pathways to adulthood in rural America: A latent profile and latent transition analysis of adult social roles. *Journal of Youth & Adolescence*, *52*, 1170–1190. https://doi.org/10.1007/s10964-023-01755-0

Flaherty, C. (2021, April 5). *What employers want*. Inside Higher Ed. https://www.insidehighered.com/news/...e-preparedness

Fox, M. (2022, March 9). *Half of Americans who quit their job last year made a career change. Here are 5 steps to take to do the same*. CNBC. www.cnbc.com/2022/03/09/53-p...-the-same.html

Fry, R. (2023, December 18). *Fewer young men are in college, especially at 4-year schools*. Pew Research Center. https://www.pewresearch.org/short-re...0Bureau%20data

Gray, K. (2024, January 16). *The key attributes employers are looking for on graduates' resumes*. National Association of Colleges and Employers. https://www.naceweb.org/talent-acqui...duates-resumes

Healy, J. (2017, June 23). Out of high school, into real life. *The New York Times*. www.nytimes.com/2017/06/23/u...real-life.html

Hillman, N., & Weichman, T. (2016). *Education deserts: The continued significance of "place" in the twenty-first century*. American Council on Education, Center for Policy Research and Strategy. https://www.acenet.edu/Documents/Edu...st-Century.pdf

Hope, E. C., Hoggard, L. S., & Thomas, A. (2015). Emerging into adulthood in the face of racial discrimination: Physiological, psychological, and sociopolitical consequences for African American youth. *Translational Issues in Psychological Science*, *1*(4), 342–351. doi.org/10.1037/tps0000041

Johnson, R. (2023, March 20). *New survey finds most college grads would change their majors*. Best Colleges. https://www.bestcolleges.com/blog/co...majors-survey/

Karlson, K. B. (2019). College as equalizer? Testing the selectivity hypothesis. *Social Science Research, 80*, 216–229. https://doi.org/10.1016/j.ssresearch.2018.12.001

Kim, Y., Lee, Y., & Yang, E. (2023). Vocational identity of emerging adults: The inter-relationships of vocational identity dimensions. *Journal of Adult Development*, *30*, 347–358. https://doi.org/10.1007/s10804-023-09438-7

Kurtović, A., Vuković, I., & Gajić, M. (2018). The effect of locus of control on university students' mental health: Possible mediation through self-esteem and coping. *Journal of Psychology*, *152*(6), 341–357. doi.org/10.1080/00223980.2018.1463962

Lee, M., & Diller, N. (2023, September 27). *Zillenials, notorious for work-life balance demands, search for something widely desired*. USA Today. https://www.usatoday.com/story/money...e/70896325007/

Lee, S. D., Aquino, A., Kuncel, N. R., & Hansen, J. C. (2023). Personality predictors of career exploration: A meta-analysis. *The Career Development Quarterly*, *71*(1), 41–55. doi.org/10.1002/cdq.12315

Maggs, J. L., Jager, J., Patrick, M. E., & Schulenberg, J. (2012). Social role patterning in early adulthood in the USA: Adolescent predictors and concurrent wellbeing across four distinct configurations. *Longitudinal and Life Course Studies, 3*(2), 190–210. https://doi.org/10.14301/llcs.v3i2.183

Massey, D. (2020). *The rural youth exodus of U.S. counties: Community level characteristics and trends*. University of Wisconsin-Madison. dpla.wisc.edu/wp-content/upl...lle-Massey.pdf

McAlary, B. (2017). *Destination simple: Everyday rituals for a slower life*. Head of Zeus.

Monaghan, D. B. (2020). College-going trajectories across early adulthood: An inquiry using sequence analysis. The Journal of Higher Education, 91(3), 402–432. doi.org/10.1080/00221546.2019.1647584

Motulsky, S. L., Gammel, J. A., & Rutstein-Riley, A. (2020). Identity and lifelong learning: Becoming through lived experience. Information Age Publishing.

National Center for Education Statistics. (2017). Beginning college students who change their majors within 3 years of enrollment (NCES 2018-434). U.S. Department of Education. https://nces.ed.gov/pubs2018/2018434.pdf

National Center for Education Statistics. (2024, May). College enrollment rates. U.S. Department of Education. https://nces.ed.gov/programs/coe/ind...nrollment-rate

Nuñez, A., & Sansone, V. A. (2016). Earning and learning: Exploring the meaning of work in the experiences of first-generation Latino college students. *The Review of Higher Education 40*(1), 91–116. https://doi.org/10.1353/rhe.2016.0039

Payne, K. K. (2019). Median age at first marriage, 2017. *Family Profiles, FP-19-06*. Bowling Green State University: National Center for Family & Marriage Research. https://doi.org/10.25035/ncfmr/fp-19-06

Roberts Wesleyan College. (2020, March 1). Career change statistics. academicexploration.roberts....ge-statistics/

Rowold, J. (2007). The effect of career exploration on subsequent training performance. *Human Resource Development International*, *10*(1), 43–58. doi.org/10.1080/13678860601170278

Salisbury, M. H., Pascarella, E. T., Padgett, R. D., & Blaich, C. (2012). The effects of work on leadership development among first-year college students. Journal of College Student Development, 53(2), 300–324. https://doi.org/10.1353/csd.2012.0021

Settersten, R. A., Jr., & Ray, B. (2010). What's going on with young people today? The long and twisting path to adulthood. Future Child, 20(1), 19–41. https://doi.org/10.1353/foc.0.0044

Sharon, T. (2016). Constructing adulthood: Markers of adulthood and well-being among emerging adults. *Emerging Adulthood, 4*(3), 161–167. doi.org/10.1177/2167696815579826

Singh, T. K., & Choudhri, N. (2014). Early adulthood: The role of locus of control, meaning of life and subjective well-being. Journal of Psychosocial Research, 9(1), 131–139. www.proquest.com/docview/154...rly%20Journals

Stewart, D., Law, M., Young, N. L., Forhan, M., Healy, H., Burke-Gaffney, J., & Freeman, M. (2014). Complexities during transitions to adulthood for youth with disabilities: person–environment interactions. *Disability and Rehabilitation, 36*(23), 1998–2004. doi.org/10.3109/09638288.2014.885994

Stolzenberg, E. B., Aragon, M. C., Romo, E., Couch, V., McLennan, D., Eagan, M. K., & Kang, N. (2020). *The American freshman: National norms Fall 2019*. Higher Education Research Institute at UCLA. https://www.heri.ucla.edu/monographs...eshman2019.pdf

Super, D.E. (1990). A life-span, life-space approach to career development. In D. Brown, L. Brooks, and associates (Eds.), *Career choice and development: Applying contemporary theories to practice* (2nd ed., pp. 197–261). Jossey-Bass. https://doi.org/10.1016/0001-8791(80)90056-1

Swartz, T. T., Hartmann, D., & Rumbaut, R. G. (2017). Crossings to adulthood: How diverse young Americans understand and navigate their lives. Brill. http://dx.doi.org/10.1163/9789004345874

U.S. Army. (n.d). Army ROTC. https://www.goarmy.com/careers-and-j...cers/rotc.html

Weller, C. E. (2019, December 5). *African Americans face systematic obstacles to getting good jobs*. Center for American Progress. www.americanprogress.org/art...ing-good-jobs/

Wilson, N. N., Sailor, J. L., Calix, S. I., & Carney, W. (2017). Leaving home for African Americans in the emerging adulthood era: A phenomenological study. *The Qualitative Report, 22*(2), 527–541. https://doi.org/10.46743/2160-3715/2017.2517

Wolniak, G. C., & Engberg, M. E. (2019). Do "high-impact" college experiences affect early career outcomes? *Review of Higher Education*, *42*(3), 825–858. https://doi.org/10.1353/rhe.2019.0021

Wolniak, G. C., & Pascarella, E. T. (2005). The effects of college major and job field congruence on job satisfaction. *Journal of Vocational Behavior, 67*(2), 233–251. https://doi.org/10.1016/j.jvb.2004.08.010

Wray-Lake, L., Arruda, E. H., & Schulenberg, J. E. (2020). Civic development across the transition to adulthood in a national U.S. sample: Variations by race/ethnicity, parent education, and gender. *Developmental Psychology, 56*(10), 1948–1967. doi.org/10.1037/dev0001101

This page titled 15.11.5: Contexts- School and Work Settings in Early Adulthood is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

- 12.4: Contexts- School and Work Settings in Early Adulthood by OpenStax is licensed CC BY 4.0. Original source: https://openstax.org/details/books/lifespan-development.

# 15.11.6: Key Terms

**autonomous interdependence**
: according to Selman, adult stage of friendship in which friends appreciate and respect each other's individuality and identity while also relying on each other for the support

**homogamy**
: preference for forming romantic relationships with those who are similar to us

**intergenerational solidarity**
: closeness among family generations promoted by frequent interaction, expressions of affection, alignment of values and beliefs, provision of help, proximity to each other, and shared norms and traditions

**intersectionality**
: framework to understand how people experience multiple aspects of their identity simultaneously

**intimacy vs. isolation**
: according to Erikson's theory of psychosocial development, the early adulthood challenge to establish close and trusting relationships with others

**maturity principle of personality development**
: increase or decrease of certain traits with age to effectively adapt to the demands of development

**mean-level change**
: extent to which the level of a personality trait can fluctuate historically and over the lifespan

**rank-order stability**
: tendency for an individual's levels of personality traits compared to others to remain stable over time

**self**
: totality of all your personal characteristics, including the way you see yourself, represent yourself, and relate to others

**self-determination theory**
: theory that proposes that success and well-being are maximized when we are able to balance our needs for autonomy, competence, and relatedness

**social clock**
: cultural expectations about normative behavior and achievements that are associated with age

**social investment theory of personality development**
: idea that commitment to certain life roles predicts corresponding changes in personality traits to support the demands of these roles

**trajectory**
: predicted pathway of development, usually determined by the interaction of behaviors within context

**work-life balance**
: arrangement that allows a person to spend the desired amount of time on activities that are important to them such as work, leisure, education, and caregiving

This page titled 15.11.6: Key Terms is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

# 15.11.7: Summary

## 12.1 The Development of Self in Early Adulthood

- Achievement of developmental tasks is affected by both individual priorities and cultural context.
- The modern world offers more connection and diversity but also greater economic difficulties, which can create both opportunities and challenges in completing developmental tasks. Feelings of helplessness or indecision known as the quarter-life crisis can be offset by self-reflection and perceived social support.
- A primary challenge of early adulthood is to establish close and trusting relationships with others. According to Erikson, intimacy requires both commitment and willingness to sacrifice and compromise.
- Valliant proposes that affiliation allows us to reduce the anxiety of developmental tasks by confiding in others and being willing to ask for and receive help.
- Levinson's Seasons of Life theory proposes that young adults develop mentoring relationships to support their emerging independence.
- Personality traits can both drive and direct the developmental tasks of early adulthood, while also adapting and responding to changing roles and responsibilities.

## 12.2 Identity Development in Context in Early Adulthood

- Early adulthood prompts reflection about the way identity domains align with each other and the person's changing contexts and priorities.
- Intersectionality refers to how people simultaneously experience multiple aspects of their identity and their associated privileges or discrimination.
- Young adults show more transition in their ethnoracial identity status than older adults. The salience, centrality, and regard for ethnoracial identity may change in response to early adult developmental transitions, especially for ethnic and racial minorities.
- Gender and sexual identity intersect with ethnoracial identity to produce a wide variety of developmental experiences. Compared to past generations, LGBTQ+ young adults are more likely to have explored their sexual identity earlier in life and come out at a younger age, but compared to straight young adults, face greater challenges with regard to traditional expectations of marriage and parenthood.
- Gender, sexual, and ethnoracial identity are related to religious identity development. Christian religious identity has dropped substantially in the last 50 years, in part, because many disaffiliate with the religion by the end of young adulthood. There are also more U.S. adults who were raised unaffiliated with a particular religion.
- Young adults show increased exploration and information-seeking regarding their religious identity as they consider how their beliefs their align with their adult needs, values, and priorities. Overall religiosity does not change for most people as they progress from adolescence into early adulthood.

## 12.3 Relationships with Friends and Family in Early Adulthood

- According to self-determination theory, well-being is maximized when needs for autonomy, competence, and relatedness are met.
- Friends in early adulthood can facilitate self-determination by valuing each other's individuality and identity while also providing support to achieve goals. Selman called this stage of friendship autonomous interdependence.
- U.S. families are the primary support for emerging adults. The decision about whether, when, and why to move out of their parents' home is affected by culture, education, financial considerations, and responsibilities.
- After young adult children have moved out, their relationship with their parents varies individually and cross-culturally. Proximity between adult children and their parents is associated with increased contact and promotes intergenerational solidarity

## 12.4 Contexts: School and Work Settings in Early Adulthood

- Young adults follow a variety of pathways after high school, including starting a family, undertaking vocational training,

accepting full-time employment, enlisting in military service, and signing on for volunteer work or political activism. The choice of pathway is influenced by family and community background, socioeconomic status, gender, and race.
- Young adults who choose college differ in how and when they complete degrees, including taking a gap year before starting, signing up for ROTC, and enrolling full- or part-time.
- The best preparation for likely career changes during adulthood is to develop transferable professional skills, including communication, problem-solving, and collaboration.
- According to Super's lifespan theory of career development, adult career trajectory evolves from exploration in emerging adulthood to establishment in early to middle adulthood (Super, 1990).
- Those who establish themselves in good jobs are more likely to take a strategic approach to career development, using entry-level jobs to develop skills, knowledge, and connections to advance.
- As young adults take on more responsibilities, they need to maintain a balance among the activities that matter to them, such as work, leisure, education, and caregiving.

## 12.5 Finding Love, Intimacy, and Romance in Early Adulthood

- Identity development in adolescence and emerging adulthood predicts subsequent intimacy and romantic partnership quality in early adulthood. High-quality intimate relationships are characterized by frankness and spontaneity, sensitivity and knowing, exclusivity, giving and helping, imposing and taking, common activity, trust and loyalty, and secure attachment.
- Rates of casual sex are fairly low among young adults. A friends-with-benefits relationship can provide a safe, familiar, and convenient context to explore sexual or romantic feelings with another person, but it usually does not result in long-term friendships or romantic relationships.
- About half of young adults are single, and being single by choice can be a source of happiness and well-being.
- Young adults seek homogamy, faithfulness, intelligence, sense of humor, and physical attractiveness in romantic partners, and they meet potential partners in a variety of in-person and online settings.
- Most young adults use technology such as texting and social media to maintain their relationships, which can increase both positive and negative relationship behaviors.
- The experiences and trajectories of young adult romantic experiences differ widely. Most couples are happy, but the extent of commitment varies.
- More young adults are cohabiting than in the past, and by the end of young adulthood most are not married.
- The likelihood of becoming a parent in young adulthood depends on contextual factors that influence a young person's social clock. Adjusting to parenthood can bring a mix of positive and negative experiences.

This page titled 15.11.7: Summary is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

- 12.7: Summary by OpenStax is licensed CC BY 4.0. Original source: https://openstax.org/details/books/lifespan-development.

# 15.11.8: Review Questions

1.
What are the cultural expectations about normative behavior and achievements associated with age, such as starting a career or having a first child, influenced by?

a. rank-order stability
b. mean-level change
c. the maturity principle
d. the social clock

2 .
What theory predicts that when young people commit to certain life roles such as spouse or store assistant manager, corresponding changes in personality traits to support the demands of these roles will occur?

a. the maturity principle
b. social investment theory
c. the quarter-life crisis
d. rank-order stability

3.
What age range was theorized to serve as a "second adulthood" for women by write Gail Sheehy?

a. ages 20 to 30
b. ages 30 to 40
c. ages 40 to 50
d. ages 50 to 60

4 .
Studies using Marcia's identity status have consistently found that identity commitment was most strongly encouraged by which life event?

a. graduating from college
b. becoming a parent
c. getting married
d. starting a career

5.
The relevance of a person's identity in a particular situation is called identity _____.

a. salience
b. regard
c. diffusion
d. moratorium

6 .
What term describes the overlapping experience of different aspects of our identity, such as ethnicity, gender, and sexuality?

a. intersectionality
b. identity confusion
c. identity centrality
d. moratorium-achievement-moratorium-achievement (MAMA) cycle

7.
For British families, what is the most common expected reason for young adults to leave the parental home?

a. employment or education opportunities
b. marriage and plans for parenthood

c. financial independence
d. conflict in the home of origin

8 .
In early adulthood, friendship networks usually

a. expand
b. shrink
c. do not change in size
d. become irrelevant

9.
What is the most common source of disagreement between young adults and their parents?

a. parents' retirement plans, including moving homes
b. parents' religion and their insistence on the child maintaining those beliefs
c. emerging adult's sexual orientation or romantic relationships
d. emerging adult's financial decisions

10 .
Developmental trajectories are determined by the interaction of

a. family and friends
b. friends and neighbors
c. behavior and context
d. attitude and personality

11.
According to Super's lifespan theory of career development, what occurs in early adulthood?

a. Career exploration is followed by career establishment.
b. Career establishment is followed by career exploration.
c. College students should choose a major aligned with their career goals.
d. Intimacy should be developed before vocational identity.

12 .
Life balance is the extent to which a person feels able to _____.

a. maintain their identity within intimate relationships
b. live independently
c. find a job aligned with their education
d. spend the desired amount of time on activities that matter

13.
Research on the relationship between identity and intimacy in modern young adults finds that which of the following is true?

a. Intimacy predicts the development of identity for people of any sex.
b. Identity predicts the development of intimacy for people of any sex.
c. Intimacy predicts the development of identity, but only for men.
d. Identity predicts the development of intimacy, but only for women.

14 .
What contextual factor can make it more likely that a person will get married earlier in young adulthood?

a. high level of education
b. being career-focused
c. living in a rural area
d. being non-heterosexual

15.

Which trend with regard to cohabiting with a romantic partner to whom one is not married is true?

a. More young adults now live with a cohabiting romantic partner than live with a spouse.
b. Cohabitation is far more common among the LGBTQ+ population than among those who identify as heterosexual.
c. Cohabitation becomes less common as people increase in their financial income and socioeconomic status.
d. People who are very religious are more likely to cohabit as a “test for marriage and hedge against divorce” than those who are not.

This page titled 15.11.8: Review Questions is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

- 12.8: Review Questions by OpenStax is licensed CC BY 4.0. Original source: https://openstax.org/details/books/lifespan-development.

# 15.11.9: Check Your Understanding Questions

16 .
Explain the difference between rank-order stability of personality traits and mean-level change in personality traits.
17 .
Describe how writer Gail Sheehy's approach in her second book *New Passages* differed from that in her first book *Passages*.
18 .
Describe two ways in which the experience of identity development may vary according to a person's ethnicity.
19 .
Describe two reasons why the number of adults identifying as Christian has decreased over the last fifty years.
20 .
Identify one potential challenge and one potential benefit of a cross-ethnic friendship.
21 .
Describe what "intergenerational solidarity" means in family relationships.
22 .
Identify two reasons why young adults in rural areas might decide not to attend college.
23 .
Identify one predictor and one outcome each for rapid college completers and marginal college goers.
24 .
Identity one contextual factor and one behavior that predicts a trajectory to a "good job."
25 .
Identify the characteristics of intimate relationships outlined by Sharabany, and describe the positive outcomes of secure attachment in a romantic relationship.
26 .
Contrast the "high-intensity" and "happy independent" relationship typologies identified by Beckmeyer and Jamison.
27 .
Identify three in-person settings where young adults say they have the best chance of meeting a long-term romantic partner. What do these settings have in common, and why do you think young adults feel they have the most potential for finding long-term romantic connections?

This page titled 15.11.9: Check Your Understanding Questions is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

# 15.11.10: Personal Application Questions

28 .
Reflect on a major life change you've experienced during early adulthood, such as leaving home, entering college, or starting a job. How did this event shape your sense of independence and self-identity?
29 .
Think about the cultural expectations of success in your community. How have these expectations influenced your goals in early adulthood, and how do they compare with the developmental tasks identified by psychologists like Arnett?
30 .
Consider how your personality has evolved since entering adulthood. Have you noticed changes in traits like openness, conscientiousness, or emotional stability? Describe any specific events or experiences that may have contributed to these changes.
31 .
Reflect on a time when you had to make a significant life decision (e.g., related to career, relationships, education). How did you navigate the process of exploration and commitment, as described in Marcia's identity framework? Would you say you experienced moratorium, foreclosure, diffusion, or achievement during that period? Explain why.
32 .
Consider the multiple aspects of your identity (ethnicity, gender, sexuality, religion). How have these aspects intersected in different environments (e.g., school, work, social settings), and how has this shaped your overall identity? Can you identify a specific moment where intersectionality impacted your sense of self?
33 .
Think about the development of your ethnoracial identity or the identity of someone you know. Has there been a time when your understanding or regard for this aspect of your identity changed in early adulthood? What factors influenced this change?
34 .
Reflect on your gender or sexual identity and how it has evolved over time. Has your exploration of these identities changed as you have entered new environments or taken on new roles? How does your gender or sexual identity intersect with other aspects of who you are (e.g., cultural, religious identity)?
35 .
Reflect on your current social context. How do your relationships with friends and family help you navigate your emerging independence? Provide an example of how these relationships have supported or challenged your autonomy or personal development.
36 .
Friendships during early adulthood are described as becoming more interdependent. Think about a close friendship you have in your life. In what ways does this friendship help you meet your needs for relatedness, autonomy, and competence? How has this friendship changed over time?
37 .
Consider your relationship with your family as you move or have moved through early adulthood. In what ways has your relationship with your parents or other family members changed since you entered adulthood? How have these changes impacted your personal goals or sense of independence?
38 .
Reflect on a life transition you've experienced, such as starting college, entering the workforce, or moving out of your family home. How did this transition affect your friendships or family relationships? Did you rely more on friends or family for support during this time, and why?
39 .
Reflect on the decisions you have made about your education and work since high school. What factors, such as family, community, or personal interests, have influenced your choices? How have these decisions shaped your current or future career trajectory?
40 .
Consider your educational pathway. If you are attending or have attended college, how did your experience differ from or align with your expectations? If you pursued an alternative pathway, such as vocational training or employment, how has this decision impacted your career and personal development?
41 .
Think about your career exploration in early adulthood. Have you participated in internships, part-time jobs, or volunteer work that influenced your career goals? How did these experiences contribute to your understanding of the career paths available to you, and how have they shaped your aspirations?
42 .

Reflect on how you balance your work, education, and personal life. Do you feel that you have achieved a satisfying work-life balance? If not, what changes could help you better manage your time and responsibilities? How do you prioritize the different aspects of your life, such as work, family, education, and leisure?

43 .

Reflect on your journey of developing your personal identity. How has your sense of self impacted your ability to form close, intimate relationships? Provide an example of a friendship or romantic relationship where your sense of identity influenced your connection with the other person.

44 .

Think about a close intimate relationship you have or have had, whether romantic or platonic. How does this relationship reflect the characteristics of intimacy as described in the text (e.g., trust, loyalty, sensitivity)? What have you learned about yourself through this relationship?

45 .

Consider the process of establishing and maintaining a romantic relationship. Reflect on a relationship (past or present) in which you were trying to navigate compatibility, personal needs, and commitment. What strategies did you use to maintain this relationship, and how successful were they?

46 .

Reflect on your views about starting a family. What factors influence your current thoughts or decisions about family formation, such as cohabitation, marriage, or parenthood? How have societal or cultural expectations shaped your perspective?

This page titled 15.11.10: Personal Application Questions is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

# 15.11.11: Essay Questions

47 .
Reflect on the concept of emerging adulthood and the developmental tasks associated with this stage, as outlined by Jeffrey Arnett. Using your own experience or examples from someone you know, describe how at least two developmental tasks (e.g., entering the workforce, starting a relationship, or leaving home) have contributed to the development of independence and the sense of self during early adulthood.
48 .
Describe the Five-Factor Model of personality (OCEAN) and explain how certain personality traits may evolve during early adulthood. Provide examples from your own life or someone you know of how at least two traits (e.g., openness, conscientiousness) have changed in response to significant life events during early adulthood.
49 .
How can Marcia's four identity statuses (moratorium, foreclosure, diffusion, and achievement) be applied to identity development in early adulthood? Provide specific examples of how young adults may experience each of these statuses across different areas of life, such as career, relationships, or education. You should also reflect on a personal experience (or an observed one) that aligns with one of these statuses.
50 .
Discuss the concept of intersectionality and how it applies to the development of identity in early adulthood. Provide examples of how different aspects of identity (e.g., race, gender, sexuality, and religion) intersect and influence each other. How might these intersections create unique challenges or opportunities for identity exploration? You should also reflect on how intersectionality has impacted your own identity development or that of someone you know.
51 .
Explain the role of social contexts for the developing individual in early adulthood by examining the balance between autonomy and relatedness. Use examples from your own life, or the life of someone you know, to illustrate how friendships or family relationships can support or challenge this balance.
52 .
Analyze how moving out of the parental home affects the parent-child relationship. Compare and contrast the experiences of individuals from different cultural or socioeconomic backgrounds. Provide examples to support your analysis.
53 .
Developmental trajectories are shaped by the interaction between behavior and context. Using examples from your own life, discuss how your behavior (e.g., decisions regarding education, work, or personal development) and the context (e.g., family background, socioeconomic status, or geographic location) have interacted to influence your current developmental trajectory. How do these factors work together to impact your future career or educational outcomes?
54 .
Erikson's theory of psychosocial development states that identity development is crucial before a person can achieve true intimacy in relationships. In your essay, explain how identity and intimacy are interconnected during early adulthood. Use examples from your own experience or observations of others to illustrate how the development of a strong sense of self can impact the ability to form intimate relationships.
55 .
Many young adults face important decisions regarding family formation, including cohabitation, marriage, and parenthood. In your essay, analyze how societal expectations, cultural values, and personal goals influence these decisions. Provide examples to support your discussion, including factors such as socioeconomic status, education, or personal beliefs.

This page titled 15.11.11: Essay Questions is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

# 15.12: EARLY ADULTHOOD


15.12.1: Why It Matters- Early Adulthood

15.12.2: Introduction to Physical Development in Early Adulthood

15.12.3: Developmental Tasks of Early Adulthood

15.12.4: Physical Development in Early Adulthood

15.12.5: Sex and Fertility in Early Adulthood

15.12.6: Introduction to Cognitive Development in Early Adulthood

15.12.7: Cognitive Development in Early Adulthood

15.12.8: Education and Work

15.12.9: Introduction to Theories of Adult Psychosocial Development

15.12.10: Theories of Early Adult Psychosocial Development

15.12.11: Emerging Adulthood

15.12.12: Introduction to Relationships in Early Adulthood

15.12.13: Attraction and Love

15.12.14: Trends in Dating, Cohabitation, and Marriage

15.12.15: Parenting

15.12.16: Putting It Together- Early Adulthood

15.12.17: Discussion- Early Adulthood

15.12.18: Assignment- Emerging Adulthood in the Media

15.12.19: Discussion- Dating and Marriage Interview Assignment

15.12.20: Assignment- My Development Journal



This page titled 15.12: Early Adulthood is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 8: Early Adulthood by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.12.1: Why It Matters- Early Adulthood

## Why learn about development changes during early adulthood?



Figure 1. Age or another key milestone, such as graduation, may signify the transition to adulthood, but becoming an adult is a process that varies widely across cultures and individuals.

When we are children and teens, we eagerly anticipate each and every birthday, waiting for the next big one...when we'll finally be grown up and have all the freedoms and rights enjoyed by those who are older than us. Indeed, there are opportunities to drive, buy a car, vote, go to college, join the military, drink, move out on our own, date, live together, get married, work, have children, buy a house, and more. This can be an awesome time in our lives, as we tend to be physically and cognitively strong and healthy, we dream and make plans for the future, find people to share our experiences, and try out new roles. It can also be challenging, stressful, and scary as we realize that a lot of responsibility comes with such freedom. We have probably all seen the coffee mugs that proclaim, "Adulting is hard," or the t-shirts that announce, "I can't adult today" (typically worn by young adults!).

Development is a process, and we aren't suddenly adults at a certain age. In fact, we may even take longer to grow up these days. In this module, we'll learn about norms, trends, and theories about why certain patterns are forming. It's even been proposed that there is a new stage of development between adolescence and early adulthood, called "emerging adulthood," when young people don't quite feel like they are adults yet and wait longer to join the workforce, move out on their own, get married, and have children. Yet by the end of early adulthood, most of us will have accomplished the important developmental tasks of becoming more autonomous, taking care of ourselves and even others, committing to relationships and jobs/careers, getting married, raising families, and becoming part of our communities. There are, of course, many individual and cultural differences.

Think of your own life. When will you feel like an adult? Or do you already feel like an adult? Why or why not? Did your parents become adults earlier or later in their lives, compared to you?

## Contributors and Attributions

CC licensed content, Original

- Why It Matters: Early Adulthood. **Authored by**: Margaret Clark-Plaskie for Lumen Learning. **Provided by**: Lumen Learning. **License**: *CC BY: Attribution*

CC licensed content, Shared previously

- Graduation. **Authored by**: StockSnap. **Located at**: https://pixabay.com/images/id-2562626/. **License**: *CC0: No Rights Reserved*

This page titled 15.12.1: Why It Matters- Early Adulthood is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 8.1: Why It Matters- Early Adulthood by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.12.2: Introduction to Physical Development in Early Adulthood

## What you'll learn to do: explain developmental tasks and physical changes during early adulthood



In this section, we will see how young adults are often at their peak physically, sexually, and in terms of health and reproduction; yet they are also particularly at risk for injury, violence, substance abuse, sexually transmitted diseases, and more. As you read, consider whether or not you think young adults are in the prime of their lives.

## Contributors and Attributions

CC licensed content, Original

- Introduction to Physical Development in Early Adulthood. **Authored by**: Margaret Clark-Plaskie for Lumen Learning. **Provided by**: Lumen Learning. **License**: *CC BY: Attribution*

CC licensed content, Shared previously

- Yoga. **Authored by**: shushipu. **Located at**: https://pixabay.com/images/id-1994667/. **License**: *CC0: No Rights Reserved*

This page titled 15.12.2: Introduction to Physical Development in Early Adulthood is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 8.2: Introduction to Physical Development in Early Adulthood by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.12.3: Developmental Tasks of Early Adulthood

**Learning Outcomes**

- Summarize the developmental tasks of early adulthood



Figure 1. How old do you think this group of young adults are? What clues can you use to help you estimate their age?

Before we dive into the specific physical changes and experiences of early adulthood, let's consider the key developmental tasks during this time—the ages between 18 and 40. The beginning of early adulthood, ages 18-25, is sometimes considered its own phase, emerging adulthood, but the developmental tasks that are the focus during emerging adulthood persist throughout the early adulthood years. Look at the list below and try to think of someone you know between 18 and 40 who fits each of the descriptions.

## Developmental Tasks of Early Adulthood

Havighurst (1972) describes some of the developmental tasks of young adults. These include:

1. Achieving autonomy: trying to establish oneself as an independent person with a life of one's own
2. Establishing identity: more firmly establishing likes, dislikes, preferences, and philosophies
3. Developing emotional stability: becoming more stable emotionally which is considered a sign of maturing
4. Establishing a career: deciding on and pursuing a career or at least an initial career direction and pursuing an education
5. Finding intimacy: forming first close, long-term relationships
6. Becoming part of a group or community: young adults may, for the first time, become involved with various groups in the community. They may begin voting or volunteering to be part of civic organizations (scouts, church groups, etc.). This is especially true for those who participate in organizations as parents.
7. Establishing a residence and learning how to manage a household: learning how to budget and keep a home maintained.
8. Becoming a parent and rearing children: learning how to manage a household with children.
9. Making marital or relationship adjustments and learning to parent.

**TRY IT**

https://assessments.lumenlearning.co...essments/16623

**Think It Over**

To what extent do you think these early adulthood developmental tasks have changed in the last several years? How might these tasks vary by culture?

## Contributors and Attributions

CC licensed content, Original

- Modification, adaptation, and original content. **Authored by**: Margaret Clark-Plaskie for Lumen Learning. **Provided by**: Lumen Learning. **License**: *CC BY: Attribution*

CC licensed content, Shared previously

- Psyc 200 Lifespan Psychology. **Authored by**: Laura Overstreet. **Located at**: http://opencourselibrary.org/econ-201/. **License**: *CC BY: Attribution*
- Photo of friends. **Authored by**: Adi Rahman. **Provided by**: Pexels. **Located at**: https://www.pexels.com/photo/best-friends-campus-college-college-students-1578852/. **License**: *CC0: No Rights Reserved*

This page titled 15.12.3: Developmental Tasks of Early Adulthood is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 8.3: Developmental Tasks of Early Adulthood by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.12.4: Physical Development in Early Adulthood

**Learning Outcomes**

- Describe physical development and health in early adulthood
- Summarize risky behaviors and causes of death in early adulthood

## The Physiological Peak



Figure 1. Early adulthood is generally a time of peak physical health.

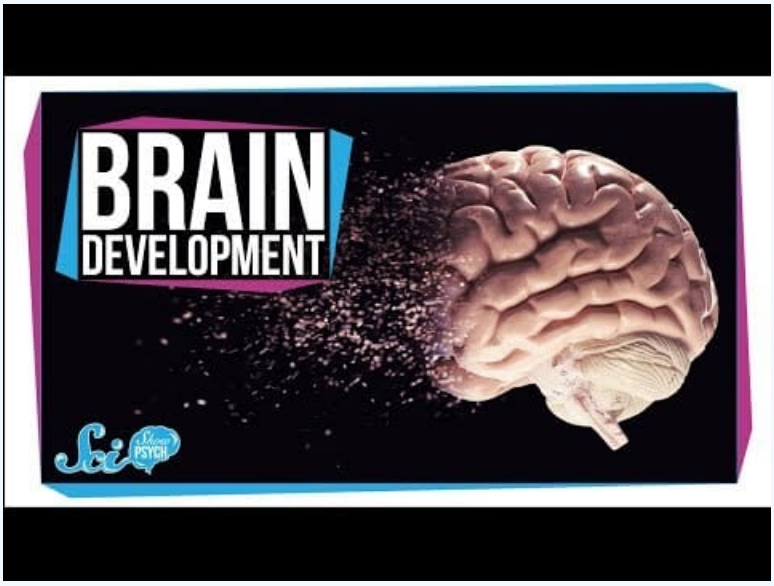
People in their twenties and thirties are considered young adults. If you are in your early twenties, you are probably at the peak of your physiological development. Your body has completed its growth, though your brain is still developing (as explained in the previous module on adolescence). Physically, you are in the "prime of your life" as your reproductive system, motor ability, strength, and lung capacity are operating at their best. However, these systems will start a slow, gradual decline so that by the time you reach your mid to late 30s, you will begin to notice signs of aging. This includes a decline in your immune system, your response time, and in your ability to recover quickly from physical exertion. For example, you may have noticed that it takes you quite some time to stop panting after running to class or taking the stairs. But, remember that both nature and nurture continue to influence development. Getting out of shape is not an inevitable part of aging; it is probably due to the fact that you have become less physically active and have experienced greater stress. The good news is that there are things you can do to combat many of these changes. So keep in mind, as we continue to discuss the lifespan, that some of the changes we associate with aging can be prevented or turned around if we adopt healthier lifestyles.

In fact, research shows that the habits we establish in our twenties are related to certain health conditions in middle age, particularly the risk of heart disease. What are healthy habits that young adults can establish now that will prove beneficial in later life? Healthy habits include maintaining a lean body mass index, moderate alcohol intake, a smoke-free lifestyle, a healthy diet, and regular physical activity. When experts were asked to name one thing they would recommend young adults do to facilitate good health, their specific responses included: weighing self often, learning to cook, reducing sugar intake, developing an active lifestyle, eating vegetables, practicing portion control, establishing an exercise routine (especially a "post-party" routine, if relevant), and finding a job you love.[1]

Being overweight or obese is a real concern in early adulthood. Medical research shows that American men and women with moderate weight gain from early to middle adulthood have significantly increased risks of major chronic disease and mortality (Zheng, et al, 2017).[2] Given the fact that American men and women tend to gain about one to two pounds per year from early to middle adulthood, developing healthy nutrition and exercise habits across adulthood is important (Nichols, 2017).[3]

Watch It

This video explains how the brain continues to develop into adulthood.




A YouTube element has been excluded from this version of the text. You can view it online here: http://pb.libretexts.org/lsdm/?p=306

You can view the transcript for "When Does Your Brain Stop Developing?" here (opens in new window).

## A Healthy, but Risky Time

Early adulthood tends to be a time of relatively good health. For instance, in the United States, adults ages 18-44 have the lowest percentage of physician office visits than any other age group, younger or older. However, early adulthood seems to be a particularly risky time for violent deaths (rates vary by gender, race, and ethnicity). The leading causes of death for both age groups 15-24 and 25-34 in the U.S. are unintentional injury, suicide, and homicide. Cancer and heart disease follow as the fourth and fifth top causes of death among young adults (Centers for Disease Control and Prevention, 2019).

Try It

https://assessments.lumenlearning.co...essments/16624

### Substance Abuse

Rates of violent death are influenced by substance abuse, which peaks during early adulthood. Some young adults use drugs and alcohol as a way of coping with stress from family, personal relationships, or concerns over being on one's own. Others "use" because they have friends who use and in the early 20s, there is still a good deal of pressure to conform. Youth transitioning into adulthood have some of the highest rates of alcohol and substance abuse. For instance, rates of binge drinking (drinking five or more drinks on a single occasion) in 2014 were: 28.5 percent for people ages 18 to 20 and 43.3 percent for people ages 21-25.[4] Recent data from the Centers for Disease Control and Prevention show increases in drug overdose deaths between 2006 and 2016 (with higher rates among males), but with the steepest increases between 2014 and 2016 occurring among males aged 24-34 and females aged 24-34 and 35-44. Rates vary by other factors including race and geography; increased use and abuse of opioids may also play a role.

**Watch It**

To learn more about opioid drugs and the current opioid crisis, please watch the following video:

A link to an interactive elements can be found at the bottom of this page.

You can view the transcript for "The Facts on America's Opioid Epidemic" here (opens in new window).

Drugs impair judgment, reduce inhibitions, and alter mood, all of which can lead to dangerous behavior. Reckless driving, violent altercations, and forced sexual encounters are some examples. College campuses are notorious for binge drinking, which is particularly concerning since alcohol plays a role in over half of all student sexual assaults. Alcohol is involved nearly 90 percent of the time in acquaintance rape (when the perpetrator knows the victim). Over 40 percent of sexual assaults involve alcohol use by the victim and almost 70 percent involve alcohol use by the perpetrator. [5].

**Link to Learning**

After she was the victim of an assault in London, college student Ione Wells published a letter to her attacker in a student newspaper that went viral and sparked the #NotGuilty campaign against sexual violence and victim-blaming. Watch Ione Wells' TED talk "How We Talk About Sexual Assault Online" to learn more [Note: this is a sensitive topic.]

Drug and alcohol use increase the risk of sexually transmitted infections because people are more likely to engage in risky sexual behavior when under the influence. This includes having sex with someone who has had multiple partners, having anal sex without the use of a condom, having multiple partners, or having sex with someone whose history is unknown. Such risky sexual behavior puts individuals at increased risk for both sexually transmitted diseases (STDs) and human immunodeficiency virus (HIV). STDs are especially common among young people. There are about 20 million new cases of STDs each year in the United States and about half of those infections are in people between the ages of 15 and 24. Also, young people are the most likely to be unaware of their HIV infection, with half not knowing they have the virus (Centers for Disease Control and Prevention, 2019).

**Try It**

https://assessments.lumenlearning.co...essments/16625

---


1. Parker-Pope, T. (October 17, 2016). The 8 Health Habits Experts Say You Need in Your 20s. *NY Times*. https://www.nytimes.com/interactive/2016/10/16/well/live/health-tips-for-your-20s.htmlmailto:/Sandboxes/lhrli@ucdavis.edu
2. Zheng, Y., Manson, J.E., Yuan, C., Liang, M.H., Grodstein, F., Stampfer, M.J., Willett, W.C., & Hu, F.B. (2017, July 18). Associations of weight gain from early to middle adulthood with major health outcomes later in life. JAMA, 318(3): 255-272. doi:10.1001/jama.2017.7092 mailto:/Sandboxes/lhrli@ucdavis.edu
3. Nichols, H. (2017, July 18). Weight gain in early adulthood linked to health risks later in life. Medical News Today. mailto:/Sandboxes/lhrli@ucdavis.edu
4. Substance Abuse and Mental Health Services Administration (2018). *SAMHSA*. Retrieved from https://www.samhsa.gov/behavioral-health-equity mailto:/Sandboxes/lhrli@ucdavis.edu
5. Alcohol.org (2018). *Sexual Assaults on College Campuses Involving Alcohol*. Retrieved from 11.4: Physical Development in Early Adulthood#return-footnote-306-5


## Contributors and Attributions


CC licensed content, Original

- Modification, adaptation, and original content. **Authored by**: Margaret Clark-Plaskie for Lumen Learning. **Provided by**: Lumen Learning. **License**: *CC BY: Attribution*

CC licensed content, Shared previously

- Psyc 200 Lifespan Psychology. **Authored by**: Laura Overstreet. **Located at**: http://opencourselibrary.org/econ-201/. **License**:

*CC BY: Attribution*

- Man exercising. **Authored by**: Li Sun. **Provided by**: Pexels. **Located at**: https://www.pexels.com/photo/man-doing-yoga-2294363/. **License**: *CC0: No Rights Reserved*

All rights reserved content

- The Facts on America's Opioid Epidemic. **Provided by**: The New York Times. **Located at**: https://www.youtube.com/watch?v=oHlaz0kQlRE. **License**: *Other*. **License Terms**: Standard YouTube License
- When Does Your Brain Stop Developing?. **Provided by**: SciShow Psych. **Located at**: https://www.youtube.com/watch?v=_KxRAfXEzIQ. **License**: *All Rights Reserved*. **License Terms**: Standard YouTube License

This page titled 15.12.4: Physical Development in Early Adulthood is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 8.4: Physical Development in Early Adulthood by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.12.5: Sex and Fertility in Early Adulthood

**Learning Outcomes**

- Describe sexuality and fertility issues related to early adulthood

## Sexual Responsiveness and Reproduction in Early Adulthood

### Sexual Responsiveness

Men and women tend to reach their peak of sexual responsiveness at different ages. For men, sexual responsiveness tends to peak in the late teens and early twenties. Sexual arousal can easily occur in response to physical stimulation or fantasizing. Sexual responsiveness begins a slow decline in the late twenties and into the thirties although a man may continue to be sexually active throughout adulthood. Over time, a man may require more intense stimulation in order to become aroused. Women often find that they become more sexually responsive throughout their 20s and 30s and may peak in the late 30s or early 40s. This is likely due to greater self-confidence and reduced inhibitions about sexuality.

There are a wide variety of factors that influence sexual relationships during emerging adulthood; this includes beliefs about certain sexual behaviors and marriage. For example, among emerging adults in the United States, it is common for oral sex to not be considered "real sex.. In the 1950s and 1960s, about 75 percent of people between the ages of 20–24 engaged in premarital sex; today, that number is 90 percent. Unintended pregnancy and sexually transmitted infections and diseases (STIs/STDs) are a central issue. As individuals move through emerging adulthood, they are more likely to engage in monogamous sexual relationships and practice safe sex.

### Reproduction

For many couples, early adulthood is the time for having children. However, delaying childbearing until the late 20s or early 30s has become more common in the United States. The mean age of first-time mothers in the United States increased 1.4 years, from 24.9 in 2000 to 26.3 in 2014. This shift can primarily be attributed to a larger number of first births to older women along with fewer births to mothers under age 20 (CDC, 2016).[1]



Figure 1. Approximately every 1 in 10 women has issues with infertility.

Couples delay childbearing for a number of reasons. Women are now more likely to attend college and begin careers before starting families. And both men and women are delaying marriage until they are in their late 20s and early 30s. In 2018, the average age for a first marriage in the United States was 29.8 for men and 27.8 for women.[2]

## Infertility

Infertility affects about 6.7 million women or 11 percent of the reproductive age population (American Society of Reproductive Medicine [ASRM], 2006-2010. Male factors create infertility in about a third of the cases. For men, the most common cause is a lack of sperm production or low sperm production. Female factors cause infertility in another third of cases. For women, one of the most common causes of infertility is ovulation disorder. Other causes of female infertility include blocked fallopian tubes, which can occur when a woman has had **pelvic inflammatory disease (PID)** or **endometriosis**. PID is experienced by 1 out of 7 women in the United States and leads to infertility about 20 percent of the time. One of the major causes of PID is **Chlamydia**, the most commonly diagnosed sexually transmitted infection in young women. Another cause of pelvic inflammatory disease is **gonorrhea**. Both male and female factors contribute to the remainder of cases of infertility and approximately 20 percent are unexplained.

**Watch It**

Watch this video to learn more about the reasons for infertility and the main treatment methods available for conceiving.

A link to an interactive elements can be found at the bottom of this page.

You can view the transcript for “Reasons for infertility” here (opens in new window).

## Fertility Treatment

The majority of infertility cases (85-90 percent) are treated using fertility drugs to increase ovulation or with surgical procedures to repair the reproductive organs or remove scar tissue from the reproductive tract. **In vitro fertilization (IVF)** is used to treat infertility in less than 5 percent of cases. IVF is used when a woman has blocked or deformed fallopian tubes or sometimes when a man has a very low sperm count. This procedure involves removing eggs from the female and fertilizing the eggs outside the woman’s body. The fertilized egg is then reinserted in the woman’s uterus. The average cost of an IVF cycle in the U.S. is $10,000-15,000 and the average live delivery rate for IVF in 2005 was 31.6 percent per retrieval. IVF makes up about 99 percent of artificial reproductive procedures. [ASRM, 2006-2010]

Less common procedures include **gamete intrafallopian tube transfer (GIFT)** which involves implanting both sperm and ova into the fallopian tube and fertilization is allowed to occur naturally. **Zygote intrafallopian tube transfer (ZIFT)** is another procedure in which sperm and ova are fertilized outside of the woman’s body and the fertilized egg or zygote is then implanted in the fallopian tube. This allows the zygote to travel down the fallopian tube and embed in the lining of the uterus naturally.

Insurance coverage for infertility is required in fourteen states, but the amount and type of coverage available vary greatly (ASRM, 2006-2010). The majority of couples seeking treatment for infertility pay much of the cost. Consequently, infertility treatment is much more accessible to couples with higher incomes. However, grants and funding sources may be available for lower-income couples seeking infertility treatment.

## Fertility for Singles and Same-Sex Couples

The journey to parenthood may look different for singles same-sex couples. However, there are several viable options available to them to have their own biological children. Men and women may choose to donate their sperm or eggs to help others reproduce for monetary or humanitarian reasons. Some gay couples may decide to have a surrogate pregnancy. One or both of the men would provide the sperm and choose a carrier. The chosen woman may be the source of the egg and uterus or the woman could be a third party that carries the created embryo.

Reciprocal IVF is used by couples who both possess female reproductive organs. Using in vitro fertilization, eggs are removed from one partner to be used to make embryos that the other partner will hopefully carry in a successful pregnancy.

**Artificial insemination** (**AI**) is the deliberate introduction of sperm into a female’s cervix or uterine cavity for the purpose

of achieving a pregnancy through in vivo fertilization by means other than sexual intercourse. AI is most often used by single women who desire to give birth to their own child, women who are in a lesbian relationship, or women who are in a heterosexual relationship but with a male partner who is infertile or who has a physical impairment which prevents intercourse. The sperm used could be anonymous or from a known donor.

### Try It

https://assessments.lumenlearning.co...essments/16626

### GlossarY

*artificial insemination available at the end of this section.*

*chlamydia available at the end of this section.*

*endometriosis available at the end of this section.*

*gamete intrafallopian tube transfer available at the end of this section.*

*gonorrhea available at the end of this section.*

*in vitro fertilization available at the end of this section.*

*pelvic inflammatory disease available at the end of this section.*

*zygote intrafallopian tube transfer available at the end of this section.*

---


1. T.J. Mathews, M.S. and Brady E. Hamilton, Ph.D. Mean Age of Mothers is on the Rise: United States, 2000–2014. NCHS Data Brief No. 232, January 2016. Retrieved from https://www.cdc.gov/nchs/products/da...iefs/db232.htm. mailto:/Sandboxes/lhrli@ucdavis.edu
2. U.S Census Bureau (2018) Historical Marital Status Tables. Retrieved from https://www.census.gov/data/tables/t...s/marital.html mailto:/Sandboxes/lhrli@ucdavis.edu


## Contributors and Attributions


CC licensed content, Original

- Modification, adaptation, and original content. **Authored by**: Margaret Clark-Plaskie for Lumen Learning. **Provided by**: Lumen Learning. **License**: *CC BY: Attribution*

CC licensed content, Shared previously

- Psyc 200 Lifespan Psychology. **Authored by**: Laura Overstreet. **Located at**: http://opencourselibrary.org/econ-201/. **License**: *CC BY: Attribution*
- Paragraph on sexual relationships during adulthood. **Provided by**: Wikipedia. **Located at**: https://en.Wikipedia.org/wiki/Emerging_adulthood_and_early_adulthood. **License**: *CC BY-SA: Attribution-ShareAlike*
- LGBT parenting. **Provided by**: Wikipedia. **Located at**: https://en.Wikipedia.org/wiki/LGBT_parenting. **License**: *CC BY-SA: Attribution-ShareAlike*
- Artificial Insemination. **Provided by**: Wikipedia. **Located at**: https://en.Wikipedia.org/wiki/Artificial_insemination. **License**: *CC BY: Attribution*
- couple. **Authored by**: Clement Eastwood. **Provided by**: Pexels. **Located at**: https://www.pexels.com/photo/man-wearing-gray-shirt-beside-woman-2937527/. **License**: *CC0: No Rights Reserved*

All rights reserved content

- Reasons for Infertility. **Provided by**: Demystifying Medicine. **Located at**: https://www.youtube.com/watch?v=QLGrmYgow8I. **License**: *Other*. **License Terms**: Standard YouTube License

## Answers

**GlossarY**

the deliberate introduction of sperm into a female's cervix in order to become pregnant by means other than sexual intercourse

**GlossarY**

a sexually transmitted infection caused by the bacterium chlamydia trachomatis

**GlossarY**

a condition in which the layer of tissue that normally covers the inside of the uterus, grows outside of it

**GlossarY**

involves implanting both sperm and ova into the fallopian tube which allows fertilization to occur naturally

**GlossarY**

a sexually transmitted infection (STI) caused by the bacterium neisseria gonorrhoeae

**GlossarY**

this procedure involves removing eggs from the female, fertilizing the eggs outside the woman's body, and then reinserting into the woman's uterus

**GlossarY**

an infection of the upper part of the female reproductive system, namely the uterus, fallopian tubes, and ovaries, and inside of the pelvis

**GlossarY**

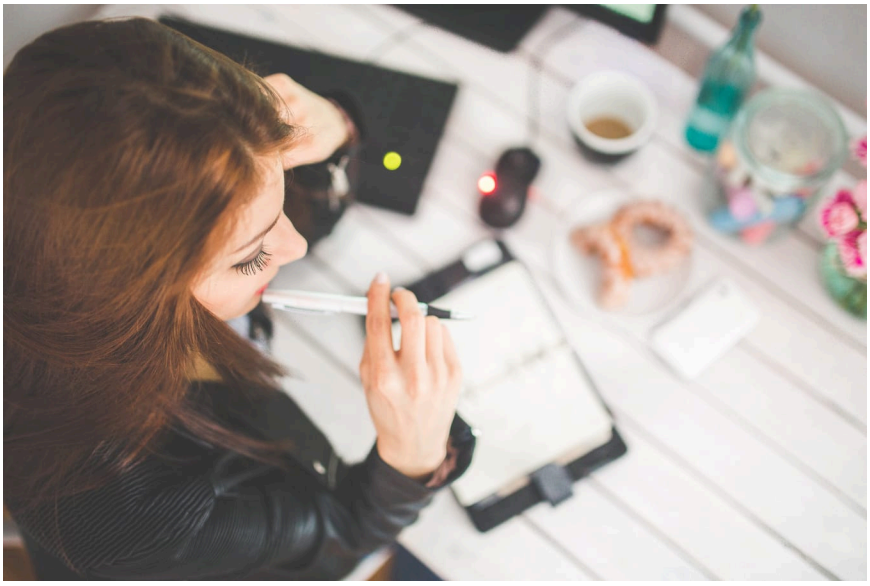
sperm and ova are fertilized outside of the woman's body and the zygote is then implanted in the fallopian tube to allow the zygote to travel and embed in the lining of the uterus naturally

This page titled 15.12.5: Sex and Fertility in Early Adulthood is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 8.5: Sex and Fertility in Early Adulthood by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.12.6: Introduction to Cognitive Development in Early Adulthood

## What you'll learn to do: explain cognitive development in early adulthood



We have learned about cognitive development from infancy through adolescence, ending with Piaget's stage of formal operations. Does that mean that cognitive development stops with adolescence? Couldn't there be different ways of thinking in adulthood that come after (or "post") formal operations?

In this section, we will learn about these types of postformal operational thought and consider research done by William Perry related to types of thought and advanced thinking. We will also look at education in early adulthood, the relationship between education and work, and some tools used by young adults to choose their careers.

## Contributors and Attributions

CC licensed content, Original

- Introduction to Cognitive Development in Early Adulthood. **Authored by**: Margaret Clark-Plaskie for Lumen Learning. **Provided by**: Lumen Learning. **License**: *CC BY: Attribution*

CC licensed content, Shared previously

- Young Woman. **Authored by**: Karolina Grabowska. **Located at**: https://pixabay.com/images/id-791849/. **License**: *CC0: No Rights Reserved*

This page titled 15.12.6: Introduction to Cognitive Development in Early Adulthood is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 8.6: Introduction to Cognitive Development in Early Adulthood by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.12.7: Cognitive Development in Early Adulthood

**Learning Outcomes**

- Distinguish between formal and postformal thought
- Describe cognitive development and dialectical thought during early adulthood

## Beyond Formal Operational Thought: Postformal Thought



Figure 1. As young adults gain more experience, they think increasingly more in the abstract, and are able to understand different perspectives and complexities.

In the adolescence module, we discussed Piaget's formal operational thought. The hallmark of this type of thinking is the ability to think abstractly or to consider possibilities and ideas about circumstances never directly experienced. Thinking abstractly is only one characteristic of adult thought, however. If you compare a 14-year-old with someone in their late 30s, you would probably find that the later considers not only what is possible, but also what is likely. Why the change? The young adult has gained experience and understands why possibilities do not always become realities. This difference in adult and adolescent thought can spark arguments between the generations.

Here is an example. A student in her late 30s relayed such an argument she was having with her 14-year-old son. The son had saved a considerable amount of money and wanted to buy an old car and store it in the garage until he was old enough to drive. He could sit in it, pretend he was driving, clean it up, and show it to his friends. It sounded like a perfect opportunity. The mother, however, had practical objections. The car would just sit for several years while deteriorating. The son would probably change his mind about the type of car he wanted by the time he was old enough to drive and they would be stuck with a car that would not run. She was also concerned that having a car nearby would be too much temptation and the son might decide to sneak it out for a quick ride before he had a permit or license.

Piaget's theory of cognitive development ended with formal operations, but it is possible that other ways of thinking may develop after (or "post") formal operations in adulthood (even if this thinking does not constitute a separate "stage" of development). **Postformal thought** is practical, realistic and more individualistic, but also characterized by understanding the complexities of various perspectives. As a person approaches the late 30s, chances are they make decisions out of necessity or because of prior experience and are less influenced by what others think. Of course, this is particularly true in individualistic cultures such as the United States. Postformal thought is often described as more flexible, logical, willing to accept moral and intellectual complexities, and dialectical than previous stages in development.

Try It

https://assessments.lumenlearning.co...essments/16627

## Perry's Scheme

One of the first theories of cognitive development in early adulthood originated with William Perry (1970)[1], who studied undergraduate students at Harvard University. Perry noted that over the course of students' college years, cognition tended to shift from **dualism** (absolute, black and white, right and wrong type of thinking) to **multiplicity** (recognizing that some problems are solvable and some answers are not yet known) to **relativism** (understanding the importance of the specific context of knowledge—it's all relative to other factors). Similar to Piaget's formal operational thinking in adolescence, this change in thinking in early adulthood is affected by educational experiences.

*Table 1. Stages of Perry's Scheme*

| | Summary of Position in Perry's Scheme | Basic Example |
|---|---|---|
| **Dualism** | The authorities know | *"the tutor knows what is right and wrong"* |
| | The true authorities are right, the others are frauds | *"my tutor doesn't know what is right and wrong but others do"* |
| **Multiplicity** | There are some uncertainties and the authorities are working on them to find the truth | *"my tutors don't know, but somebody out there is trying to find out"* |
| | (a) Everyone has the right to their own opinion<br>(b) The authorities don't want the right answers. They want us to think in a certain way | *"different tutors think different things"*<br>*"there is an answer that the tutors want and we have to find it"* |
| **Relativism** | Everything is relative but not equally valid | *"there are no right and wrong answers, it depends on the situation, b answers might be better than others"* |
| | You have to make your own decisions | *"what is important is not what the tutor thinks but what I think"* |
| | First commitment | *"for this particular topic I think that...."* |
| | Several Commitments | *"for these topics I think that...."* |
| | Believe own values, respect others, be ready to learn | *"I know what I believe in and what I think is valid, others may think d and I'm prepared to reconsider my views"* |

WAtch It

Please watch this brief lecture by Dr. Eric Landrum to better understand the way that thinking can shift during college, according to Perry's scheme. Notice the overall shifts in beliefs over time. Do you recognize your own thinking or the thinking of others you know in this clip?

A link to an interactive elements can be found at the bottom of this page.

You can view the transcript for "Perry's Scheme of Intellectual Development" here (opens in new window).

## Dialectical Thought

In addition to moving toward more practical considerations, thinking in early adulthood may also become more flexible and balanced. Abstract ideas that the adolescent believes in firmly may become standards by which the individual evaluates reality. As Perry's research pointed out, adolescents tend to think in dichotomies or absolute terms; ideas are true or false; good or bad;

right or wrong and there is no middle ground. However, with education and experience, the young adult comes to recognize that there is some right and some wrong in each position. Such thinking is more realistic because very few positions, ideas, situations, or people are completely right or wrong.

Some adults may move even beyond the relativistic or contextual thinking described by Perry; they may be able to bring together important aspects of two opposing viewpoints or positions, synthesize them, and come up with new ideas. This is referred to as **dialectical thought** and is considered one of the most advanced aspects of postformal thinking (Basseches, 1984). There isn't just one theory of postformal thought; there are variations, with emphasis on adults' ability to tolerate ambiguity or to accept contradictions or find new problems, rather than solve problems, etc. (as well as relativism and dialecticism that we just learned about). What they all have in common is the proposition that the way we think may change during adulthood with education and experience.

Try It

https://assessments.lumenlearning.co...essments/16628

GLOSSARY

*dialectical thought available at the end of this section.*

*dualism available at the end of this section.*

*multiplicity available at the end of this section.*

*postformal thought available at the end of this section.*

*relativism available at the end of this section.*

1. Perry, W.G., Jr. (1970). Forms of ethical and intellectual development in the college years: A scheme. New York, NY: Holt, Rinehart, and Winston. mailto:/Sandboxes/lhrli@ucdavis.edu

## Contributors and Attributions

CC licensed content, Original

- Modification, adaptation, and original content. **Authored by**: Margaret Clark-Plaskie. **Provided by**: Lumen Learning. **License**: *CC BY: Attribution*

CC licensed content, Shared previously

- Psyc 200 Lifespan Psychology. **Authored by**: Laura Overstreet. **Located at**: http://opencourselibrary.org/econ-201/. **License**: *CC BY: Attribution*
- Millennials Jam Workshop: Youth and ICTs beyond 2015. **Authored by**: ITU Pictures. **Located at**: https://www.flickr.com/photos/itupictures/9024333319. **License**: *CC BY: Attribution*
- Summary of Perry's research. **Provided by**: Wikipedia. **Located at**: https://en.Wikipedia.org/wiki/William_G._Perry. **License**: *CC BY: Attribution*
- Postformal thought. **Provided by**: Wikipedia. **Located at**: https://en.Wikipedia.org/wiki/Postformal_thought. **License**: *CC BY-SA: Attribution-ShareAlike*

All rights reserved content

- Perry's Scheme of Intellectual Development. **Authored by**: Eric Landrum. **Located at**: https://www.youtube.com/watch?v=XkEJIXvwROs. **License**: *Other*. **License Terms**: Standard YouTube License

## Answers

**GLOSSARY**
the ability to reason from multiple perspectives and synthesize various viewpoints in order to come up with new ideas

**GLOSSARY**
absolute, black and white, right and wrong type of thinking

**GLOSSARY**
recognizing that some problems are solvable and some answers are not yet known

**GLOSSARY**
a more individualistic and realistic type of thinking that occurs after Piaget's last stage of formal operations

**GLOSSARY**
understanding the importance of the specific context of knowledge—it's all relative to other factors

This page titled 15.12.7: Cognitive Development in Early Adulthood is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 8.7: Cognitive Development in Early Adulthood by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.12.8: Education and Work

**Learning Outcomes**

- Describe educational trends in early adulthood
- Explain the relationship between education and work in early adulthood

## Education in Early Adulthood

According to the U.S. Census Bureau (2017), 90 percent of the American population 25 and older have completed high school or higher level of education—compare this to just 24 percent in 1940![1] Each generation tends to earn (and perhaps need) increased levels of formal education. As we can see in the graph, approximately one-third of the American adult population has a bachelor's degree or higher, as compared with less than 5 percent in 1940. Educational attainment rates vary by gender and race. All races combined, women are slightly more likely to have graduated from college than men; that gap widens with graduate and professional degrees. However, wide racial disparities still exist. For example, 23 percent of African-Americans have a college degree and only 16.4 percent of Hispanic Americans have a college degree, compared to 37 percent of non-Hispanic white Americans. The college graduation rates of African-Americans and Hispanic Americans have been growing in recent years, however (the rate has doubled since 1991 for African-Americans and it has increased 60 percent in the last two decades for Hispanic-Americans).

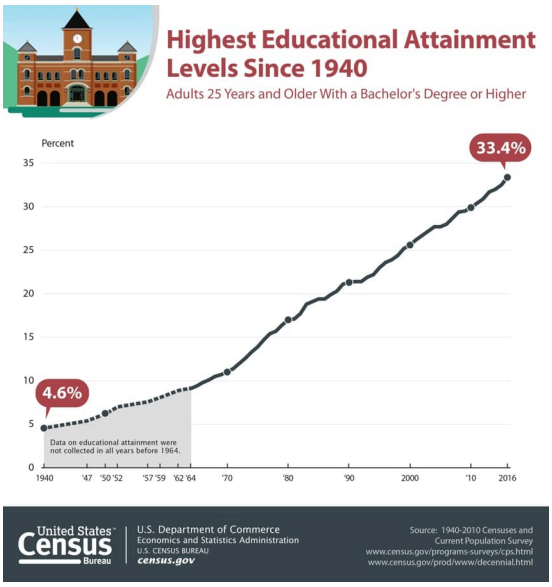



Figure 1. Since 1940, there has been a significant rise in educational attainment for adults over age 25.

What about those young or emerging adults graduating high school today—is the majority of that group going to college? According to the U.S. Bureau of Labor Statistics (2017), 66.7 percent of youth ages 16-24 who graduated high school between January and October 2017 were enrolled in colleges or universities in October 2017. There were gender differences (71.7 percent of females vs. 61.1 percent of males) and racial differences (83 percent of Asians, 67.1 percent of non-Hispanic whites, 61 percent Hispanics, and 59.4 percent Blacks). Not all of these students will persist and earn college degrees, however.[2]

**Try It**

https://assessments.lumenlearning.co...essments/16629

# Education and the Workplace

With the rising costs of higher education, various news headlines have asked if a college education is worth the cost. One way to address this question is in terms of the earning potential associated with various levels of educational achievement. In 2016, the average earnings for Americans 25 and older with only a high school education was $35,615, compared with $65,482 for those with a bachelor's degree, compared with $92,525 for those with more advanced degrees. Average earnings vary by gender, race, and geographical location in the United States.[3]

Of concern in recent years is the relationship between higher education and the workplace. In 2005, American educator and then Harvard University President, Derek Bok, called for a closer alignment between the goals of educators and the demands of the economy. Companies outsource much of their work, not only to save costs but to find workers with the skills they need. What is required to do well in today's economy? Colleges and universities, he argued, need to promote global awareness, critical thinking skills, the ability to communicate, moral reasoning, and responsibility in their students. Regional accrediting agencies and state organizations provide similar guidelines for educators. Workers need skills in listening, reading, writing, speaking, global awareness, critical thinking, civility, and computer literacy—all skills that enhance success in the workplace.

More than a decade later, the question remains: does formal education prepare young adults for the workplace? It depends on whom you ask. In an article referring to information from the National Association of Colleges and Employers' 2018 Job Outlook Survey, Bauer-Wolf (2018) explains that employers perceive gaps in students' competencies but many graduating college seniors are overly confident. The biggest difference was in perceived professionalism and work ethic (only 43 percent of employers thought that students are competent in this area compared to 90 percent of the students).[4] Similar differences were also found in terms of oral communication, written communication, and critical thinking skills. Only in terms of digital technology skills were more employers confident about students' competencies than were the students (66 percent compared to 60 percent).



Figure 2. A college education helps students learn job skills and develop soft skills to prepare them for the workplace, but there are still many career paths that do not necessitate a college degree.

It appears that students need to learn what some call "soft skills," as well as the particular knowledge and skills within their college major. As education researcher Loni Bordoloi Pazich (2018) noted, most American college students today are enrolling in business or other pre-professional programs and to be effective and successful workers and leaders, they would benefit from the communication, teamwork, and critical thinking skills, as well as the content knowledge, gained from liberal arts education.[5]In fact, two-thirds of children starting primary school now will be employed in jobs in the future that currently do not exist. Therefore, students cannot learn every single skill or fact that they may need to know, but they can learn how to learn, think, research, and communicate well so that they are prepared to continually learn new things and adapt effectively in their careers and lives since the economy, technology, and global markets will continue to evolve.[6]

# Career Choices in Early Adulthood

Hopefully, we are each becoming lifelong learners, particularly since we are living longer and will most likely change jobs multiple times during our lives. However, for many, our job changes will be within the same general occupational field, so our initial career choice is still significant. We've seen with Erikson that identity largely involves occupation and, as we will learn in the next section, Levinson found that young adults typically form a dream about work (though females may have to choose to focus relatively more on work or family initially with "split" dreams). The American School Counselor Association recommends that school counselors aid students in their career development beginning as early as kindergarten and continue this development throughout their education. [7]

One of the most well-known theories about career choice is from John Holland (1985), who proposed that there are six personality types (realistic, investigative, artistic, social, enterprising, and conventional), as well as varying types of work environments.[8] The better matched one's personality is to the workplace characteristics, the more satisfied and successful one is predicted to be with that career or vocational choice. Research support has been mixed and we should note that there is more to satisfaction and success in a career than one's personality traits or likes and dislikes. For instance, education, training, and abilities need to match the expectations and demands of the job, plus the state of the economy, availability of positions, and salary rates may play practical roles in choices about work.

## Link to Learning: What's Your Right Career?

To complete a free online career questionnaire and identify potential careers based on your preferences, go to:

Career One Stop Questionnaire

Did you find out anything interesting? Think of this activity as a starting point to your career exploration. Other great ways for young adults to research careers include informational interviewing, job shadowing, volunteering, practicums, and internships. Once you have a few careers in mind that you want to find out more about, go to the Occupational Outlook Handbook from the U.S. Bureau of Labor Statistics to learn about job tasks, required education, average pay, and projected outlook for the future.

## Try It

https://assessments.lumenlearning.co...essments/16630


1. US Census Bureau (2017, March). Highest Educational Levels Reached by Adults in the U.S. Since 1940. Retrieved from https://www.census.gov/newsroom/press-releases/2017/cb17-51.htmlmailto:/Sandboxes/lhrli@ucdavis.edu
2. US Census Bureau. (2017, March). Highest Educational Levels Reached by Adults in the U.S. Since 1940. Retrieved from https://www.census.gov/newsroom/press-releases/2017/cb17-51.htmlmailto:/Sandboxes/lhrli@ucdavis.edu
3. US Census Bureau. (2017, March). Highest Educational Levels Reached by Adults in the U.S. Since 1940. Retrieved from https://www.census.gov/newsroom/press-releases/2017/cb17-51.htmlmailto:/Sandboxes/lhrli@ucdavis.edu
4. Bauer-Wolf, J. (2018, February 23). Study: students believe they are prepared for the workplace; employers disagree. Inside Higher Ed. https://www.insidehighered.com/print/news/2018/02/23/study-studentmailto:/Sandboxes/lhrli@ucdavis.edu
5. Bordoloi Pazich, L. (2018, September 26). The power of academic friendship. Inside Higher Ed. https://www.insidehighered.com/views/2018/09/26/need-combine-businessmailto:/Sandboxes/lhrli@ucdavis.edu
6. Henseler, C. (2017, September 6). Liberal arts is the foundation for professional success in the 21st century. Huffington Post. mailto:/Sandboxes/lhrli@ucdavis.edu
7. The School Counselor and Career Development (2017). American School Counselor Association. Retrieved from https://www.schoolcounselor.org/asca/media/asca/PositionStatements/PS_CareerDevelopment.pdfmailto:/Sandboxes/lhrli@ucdavis.edu
8. Holland, J.L. (1985). Making vocational choices: A theory of vocational personalities and work environments. Englewood Cliffs, NJ: Prentice-Hall. mailto:/Sandboxes/lhrli@ucdavis.edu

# Contributors and Attributions

CC licensed content, Original

- Psyc 200 Lifespan Psychology. **Authored by**: Laura Overstreet. **Located at**: http://opencourselibrary.org/econ-201/. **License**: *CC BY: Attribution*
- Modification, adaptation, and original content. **Authored by**: Margaret Clark-Plaskie for Lumen Learning. **Provided by**: Lumen Learning. **License**: *CC BY: Attribution*

CC licensed content, Shared previously

- Glass workers. **Provided by**: Pixabay. **Located at**: https://pixabay.com/photos/glass-work-workers-carrying-glass-3770982/. **License**: *Public Domain: No Known Copyright*

All rights reserved content

- Highest Educational Levels Reached by Adults in the U.S. Since 1940. **Provided by**: U.S. Census Bureau. **Located at**: https://www.census.gov/library/visualizations/2017/comm/cb17-51_educational_attainment.html. **License**: *All Rights Reserved*

This page titled 15.12.8: Education and Work is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 8.8: Education and Work by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.12.9: Introduction to Theories of Adult Psychosocial Development

## What you'll learn to do: explain theories and perspectives on psychosocial development



From a lifespan developmental perspective, growth and development do not stop in childhood or adolescence; they continue throughout adulthood. In this section we will build on Erikson's psychosocial stages, then be introduced to theories about transitions that occur during adulthood. According to Levinson, we alternate between periods of change and periods of stability. More recently, Arnett notes that transitions to adulthood happen at later ages than in the past and he proposes that there is a new stage between adolescence and early adulthood called, "emerging adulthood." Let's see what you think.

## Contributors and Attributions

CC licensed content, Original

- Introduction to Theories of Adult Psychosocial Development. **Authored by**: Margaret Clark-Plaskie for Lumen Learning. **Provided by**: Lumen Learning. **License**: *CC BY: Attribution*

CC licensed content, Shared previously

- Mother and daughter. **Authored by**: Coffee. **Provided by**: Pixabay. **Located at**: https://pixabay.com/photos/girl-mother-daughter-mum-people-2480361/. **License**: *CC0: No Rights Reserved*

This page titled 15.12.9: Introduction to Theories of Adult Psychosocial Development is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 8.9: Introduction to Theories of Adult Psychosocial Development by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.12.10: Theories of Early Adult Psychosocial Development

**Learning Outcomes**

- Describe Erikson's stage of intimacy vs. isolation
- Summarize Levinson's theory of early adulthood transitions

## Erikson's Theory

### Intimacy vs. Isolation

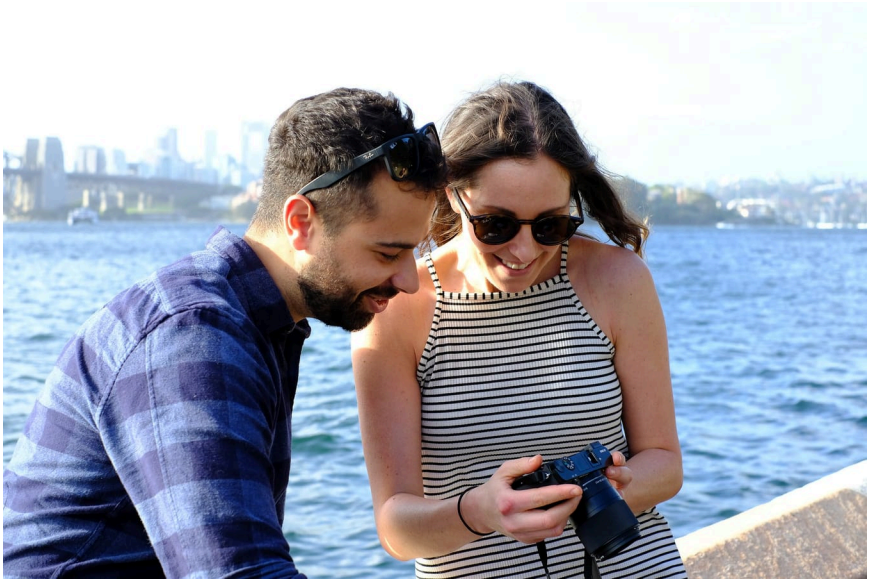


Figure 1. Young adulthood is a time to connect with others in both friendships and romantic relationships.

Erikson (1950) believed that the main task of early adulthood is to establish intimate relationships and not feel isolated from others. Intimacy does not necessarily involve romance; it involves caring about another and sharing one's self without losing one's self. This developmental crisis of "intimacy versus isolation" is affected by how the adolescent crisis of "identity versus role confusion" was resolved (in addition to how the earlier developmental crises in infancy and childhood were resolved). The young adult might be afraid to get too close to someone else and lose her or his sense of self, or the young adult might define her or himself in terms of another person. Intimate relationships are more difficult if one is still struggling with identity. Achieving a sense of identity is a life-long process, but there are periods of identity crisis and stability. And, according to Erikson, having some sense of identity is essential for intimate relationships.[1] Although, consider what that would mean for previous generations of women who may have defined themselves through their husbands and marriages, or for Eastern cultures today that value interdependence rather than independence.

## Friendships as a source of intimacy



Figure 2. Many young adulthoods find intimacy through friendships rather than through committed romantic relationships. The increase of young adults attending college has contributed to this trend.

In our twenties, intimacy needs may be met in friendships rather than with partners. This is especially true in the United States today as many young adults postpone making long-term commitments to partners either in marriage or in cohabitation. The kinds of friendships shared by women tend to differ from those shared by men (Tannen,1990). Friendships between men are more likely to involve sharing information, providing solutions, or focusing on activities rather than discussing problems or emotions. Men tend to discuss opinions or factual information or spend time together in an activity of mutual interest. Friendships between women are more likely to focus on sharing weaknesses, emotions, or problems. Women talk about difficulties they are having in other relationships and express their sadness, frustrations, and joys. These differences in approaches could lead to problems when men and women come together. She may want to vent about a problem she is having; he may want to provide a solution and move on to some activity. But when he offers a solution, she thinks he does not care! Effective communication is the key to good relationships.

Many argue that other-sex friendships become more difficult for heterosexual men and women because of the unspoken question about whether the friendships will lead to a romantic involvement. Although common during adolescence and early adulthood, these friendships may be considered threatening once a person is in a long-term relationship or marriage. Consequently, friendships may diminish once a person has a partner or single friends may be replaced with couple friends.[2]

## Gaining Adult Status

Many of the developmental tasks of early adulthood involve becoming part of the adult world and gaining independence. Young adults sometimes complain that they are not treated with respect, especially if they are put in positions of authority over older workers. Consequently, young adults may emphasize their age to gain credibility from those who are even slightly younger. “You’re only 23? I’m 27!” a young adult might exclaim. [Note: This kind of statement is much less likely to come from someone in their 40s!]

The focus of early adulthood is often on the future. Many aspects of life are on hold while people go to school, go to work, and prepare for a brighter future. There may be a belief that the hurried life now lived will improve ‘as soon as I finish school’ or ‘as soon as I get promoted’ or ‘as soon as the children get a little older.’ As a result, time may seem to pass rather quickly. The day consists of meeting many demands that these tasks bring. The incentive for working so hard is that it will all result in a better future.

Try It

https://assessments.lumenlearning.co...essments/16631

# Levinson's Theory

In 1978, Daniel Levinson published a book entitled, *The Seasons of a Man's Life* in which he presented a theory of development in adulthood. Levinson's work was based on in-depth interviews with 40 men between the ages of 35-45. According to Levinson, young adults have an image of the future that motivates them. This image is called "the dream" and for the men interviewed, it was a dream of how their career paths would progress and where they would be at midlife. Dreams are very motivating. Dreams of a home bring excitement to couples as they look, save, and fantasize about how life will be. Dreams of careers motivate students to continue in school as they fantasize about how much their hard work will pay off. Dreams of playgrounds on a summer day inspire would-be parents. A dream is perfect and retains that perfection as long as it remains in the future. But as the realization of it moves closer, it may or may not measure up to its image. If it does, all is well. But if it does not, the image must be replaced or modified. And so, in adulthood, plans are made, efforts follow, and plans are reevaluated. This creating and recreating characterizes Levinson's theory.*[*footnote]Levinson, D. (1978). *The seasons of a man's life*. New York, NY: Alfred A. Knopf, Inc.[/footnote] (The shift from idealistic dreams to more realistic experiences might remind us of the cognitive development progression from formal to postformal thought in adulthood.)

Levinson's stages (at least up to midlife) are presented below (Levinson, 1978).[3] He suggested that periods of transition last about five years and periods of stability last about seven years. The ages presented below are based on life in the middle-class several decades ago. Think about how these ages and transitions might be different today, or in other cultures, or for women compared to men.

- Early adult transition (17-22): Leaving home, leaving family; making first choices about career and education
- Entering the adult world (22-28): Committing to an occupation, defining goals, finding intimate relationships
- Age 30 transition (28-33): Reevaluating those choices and perhaps making modifications or changing one's attitude toward love and work
- Settling down (33 to 40): Reinvesting in work and family commitments; becoming involved in the community
- Midlife transition (40-45): Reevaluating previous commitments; making dramatic changes if necessary; giving expression to previously ignored talents or aspirations; feeling more of a sense of urgency about life and its meaning
- Entering middle adulthood (45-50): Committing to new choices made and placing one's energies into these commitments

Nearly twenty years after his original research, Levinson interviewed 45 women ages 35-45 and published the book, *The seasons of a woman's life*.[4] He reported similar patterns with women, although women held a "split dream"—an image of the future in both work and family life and a concern with the timing and coordination of the two. Traditionally, by working outside the home, men were seen as taking care of their families. However, for women, working outside the home and taking care of their families were perceived as separate and competing for their time and attention. Hence, one aspect of the women's dreams was focused on one goal for several years and then their time and attention shifted towards the other, often resulting in delays in women's career dreams.



Figure 3. Women are often torn between caring for their families and advancing their careers outside of the home.

Adulthood, then, is a period of building and rebuilding one's life. Many of the decisions that are made in early adulthood are made before a person has had enough experience to really understand the consequences of such decisions. And, perhaps, many of these initial decisions are made with one goal in mind – to be seen as an adult. As a result, early decisions may be driven more by the expectations of others. For example, imagine someone who chose a career path based on other's advice but now finds that the job is not what was expected.

The age 30 transition may involve recommitting to the same job, not because it's stimulating, but because it pays well; or the person may decide to go back to school and change careers. Settling down may involve settling down with a new set of expectations. As the adult gains status, he or she may be freer to make more independent choices. And sometimes these are very different from those previously made. The midlife transition differs from the age 30 transition in that the person is more aware of how much time has gone by and how much time is left. This brings a sense of urgency and impatience about making changes. The future focus of early adulthood gives way to an emphasis on the present in midlife–we will explore this in our next module. Overall, Levinson calls our attention to the dynamic nature of adulthood.

### Try It

https://assessments.lumenlearning.co...essments/16632

### Think It Over

- How well do you think Levinson's theory translates culturally? Do you think that personal desire and a concern with reconciling dreams with the realities of work and family is equally important in all cultures? Do you think these considerations are equally important in all social classes, races and ethnic groups? Why or why not? How might this model be modified in today's economy?

---


1. Erikson, E. (1950). Childhood and society. New York, NY: Norton. mailto:/Sandboxes/lhrli@ucdavis.edu
2. Ward, Adrian (2012). Men and Women Can't Be Just Friends. Scientific American. Retrieved from https://www.scientificamerican.com/article/men-and-women-cant-be-just-friends/. mailto:/Sandboxes/lhrli@ucdavis.edu
3. Levinson, D. (1978) The seasons of a man's life. New York, NY: Alfred A. Knopf, Inc. mailto:/Sandboxes/lhrli@ucdavis.edu
4. Levinson, D. (1996). The seasons of a woman's life. New York, NY: Ballantine Books. mailto:/Sandboxes/lhrli@ucdavis.edu


## Contributors and Attributions


CC licensed content, Original

- Modification, adaptation, and original content on Levinson's theory. **Authored by**: Margaret Clark-Plaskie for Lumen Learning. **Provided by**: Lumen Learning. **License**: *CC BY: Attribution*

CC licensed content, Shared previously

- Psyc 200 Lifespan Psychology. **Authored by**: Laura Overstreet. **Located at**: http://opencourselibrary.org/econ-201/. **License**: *CC BY: Attribution*
- College friends. **Authored by**: Joseph Bogden. **Provided by**: Pexels. **Located at**: https://www.pexels.com/photo/friends-graduation-high-school-457950/. **License**: *CC0: No Rights Reserved*
- friends. **Authored by**: Hans. **Provided by**: Pixabay. **Located at**: https://pixabay.com/photos/pair-human-photograph-friendship-3852277/. **License**: *CC0: No Rights Reserved*
- women. **Authored by**: Vilandrra. **Provided by**: Pixabay. **Located at**: https://pixabay.com/photos/people-happy-happy-people-joy-1230872/. **License**: *CC0: No Rights Reserved*

---

This page titled 15.12.10: Theories of Early Adult Psychosocial Development is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 8.10: Theories of Early Adult Psychosocial Development by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.12.11: Emerging Adulthood

**Learning Outcomes**

- Explain Arnett's concept of emerging adulthood

## Arnett's Theory of Emerging Adulthood

Have you noticed that many young adults in our society today are taking longer to accomplish the early adulthood developmental tasks of becoming independent? If so, you're not alone. Jeffrey Arnett (2000) pointed out this prolonged transitional period and described it as "emerging adulthood."[1]



Figure 1. The years of emerging adulthood are often times of identity exploration through work, fashion, music, education, and other venues. [Image: CC0 Public Domain, https://goo.gl/m25gce]

The theory of **emerging adulthood** proposes that a new life stage has arisen between adolescence and young adulthood over the past half-century in industrialized countries. Fifty years ago, most young people in these countries had entered stable adult roles in love and work by their late teens or early twenties. Relatively few people pursued education or training beyond secondary school, and, consequently, most young men were full-time workers by the end of their teens. Relatively few women worked in occupations outside the home, and the median marriage age for women in the United States and in most other industrialized countries in 1960 was around 20 (Arnett & Taber, 1994; Douglass, 2005). The median marriage age for men was around 22, and married couples usually had their first child about one year after their wedding day. All told, for most young people half a century ago, their teenage adolescence led quickly and directly to stable adult roles in love and work by their late teens or early twenties. These roles would form the structure of their adult lives for decades to come.

Now all that has changed. A higher proportion of young people than ever before—about 70% in the United States—pursue education and training beyond secondary school (National Center for Education Statistics, 2012). The early twenties are not a time of entering stable adult work but a time of immense job instability: In the United States, the average number of job changes from ages 20 to 29 is seven. The median age of entering marriage in the United States is now 27 for women and 29 for men (U.S. Bureau of the Census, 2011). Consequently, a new stage of the life span, emerging adulthood, has been created, lasting from the late teens through the mid-twenties, roughly ages 18 to 25.

Five features make emerging adulthood distinctive:

- identity exploration,

- instability,
- self-focus,
- feeling in-between adolescence and adulthood,
- a sense of broad possibilities for the future.

If the years 18-25 are classified as "young adulthood," Arnett believes it is then difficult to find an appropriate term for the thirties. Emerging adults are still in the process of obtaining an education, are unmarried, and are childless. By age thirty, most of these individuals do see themselves as adults, based on the belief that they have more fully formed "individualistic qualities of character" such as self-responsibility, financial independence, and independence in decision-making. Arnett suggests that many of the individualistic characteristics associated with adult status correlate to, but are not dependent upon the role responsibilities with a career, marriage, and/or parenthood.

Whether or not "emerging adulthood" is considered to be a distinct developmental stage, it can be a useful concept in discussing developmental patterns in early adulthood in our culture today.

### Watch It

To hear about emerging adulthood and why it takes longer to reach adulthood today, please view this video clip of Dr. Jeffrey Arnett. In the first 6 1/2 minutes he describes four societal revolutions that may have caused emerging adulthood. In the second half of the clip, Arnett discusses how "30 is the new 20," as twenty-somethings today enjoy unparalleled freedoms when compared with other generations.



A YouTube element has been excluded from this version of the text. You can view it online here: http://pb.libretexts.org/lsdm/?p=320

You can view the transcript for "Why does it take so long to grow up today? | Jeffrey Jensen Arnett | TEDxPSU" here (opens in new window).

## Is Emerging Adulthood a Global Phenomenon?

The five features proposed in the theory of emerging adulthood originally were based on research involving about 300 Americans between ages 18 and 29 from various ethnic groups, social classes, and geographical regions (Arnett, 2004). To what extent does the theory of emerging adulthood apply internationally?

The answer to this question depends greatly on what part of the world is considered. Demographers make a useful distinction between the developing countries that comprise the majority of the world's population and the economically developed countries

that are part of the Organization for Economic Co-operation and Development (OECD), including the United States, Canada, western Europe, Japan, South Korea, Australia, and New Zealand. The current population of OECD countries (also called developed countries) is 1.2 billion, about 18% of the total world population (UNDP, 2011). The rest of the human population resides in developing countries, which have much lower median incomes; much lower median educational attainment; and much higher incidence of illness, disease, and early death. Let us consider emerging adulthood in OECD countries first, then in developing countries.

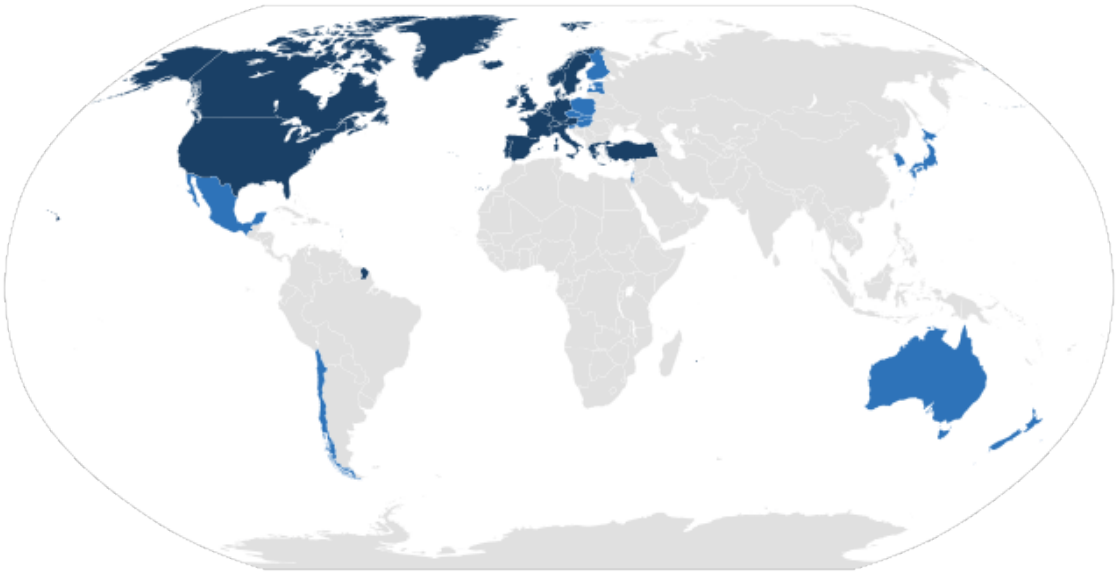


Figure 2. Map of OECD countries. Darker shaded countries are original members. [Image: Parastscilveks, https://goo.gl/MIvm0Y, CC BY-SA 2.0, https://goo.gl/eH69he]

The same demographic changes as described above for the United States have taken place in other OECD countries as well. This is true of participation in postsecondary education as well as median ages for entering marriage and parenthood (UNdata, 2010). However, there is also substantial variability in how emerging adulthood is experienced across OECD countries. Europe is the region where emerging adulthood is longest and most leisurely. The median ages for entering marriage and parenthood are near 30 in most European countries (Douglass, 2007). Europe today is the location of the most affluent, generous, and egalitarian societies in the world—in fact, in human history (Arnett, 2007). Governments pay for tertiary education, assist young people in finding jobs, and provide generous unemployment benefits for those who cannot find work. In northern Europe, many governments also provide housing support. Emerging adults in European societies make the most of these advantages, gradually making their way to adulthood during their twenties while enjoying travel and leisure with friends.

The lives of Asian emerging adults in developed countries such as Japan and South Korea are in some ways similar to the lives of emerging adults in Europe and in some ways strikingly different. Like European emerging adults, Asian emerging adults tend to enter marriage and parenthood around age 30 (Arnett, 2011). Like European emerging adults, Asian emerging adults in Japan and South Korea enjoy the benefits of living in affluent societies with generous social welfare systems that provide support for them in making the transition to adulthood—for example, free university education and substantial unemployment benefits.

However, in other ways, the experience of emerging adulthood in Asian OECD countries is markedly different than in Europe. Europe has a long history of individualism, and today's emerging adults carry that legacy with them in their focus on self-development and leisure during emerging adulthood. In contrast, Asian cultures have a shared cultural history emphasizing collectivism and family obligations. Although Asian cultures have become more individualistic in recent decades as a consequence of globalization, the legacy of collectivism persists in the lives of emerging adults. They pursue identity explorations and self-development during emerging adulthood, like their American and European counterparts, but within narrower boundaries set by their sense of obligations to others, especially their parents (Phinney & Baldelomar, 2011). For example, in their views of the most important criteria for becoming an adult, emerging adults in the United States and Europe consistently rank financial independence among the most important markers of adulthood. In contrast, emerging adults with an Asian cultural background especially emphasize becoming capable of supporting parents financially as among the most important criteria (Arnett, 2003; Nelson, Badger, & Wu, 2004). This sense of family obligation may curtail their identity explorations in emerging adulthood to some extent, as they pay more heed to their parents' wishes about what they should study, what job they should take, and where they should live than emerging adults do in the West (Rosenberger, 2007).

Another notable contrast between Western and Asian emerging adults is in their sexuality. In the West, premarital sex is normative by the late teens, more than a decade before most people enter marriage. In the United States and Canada, and in northern and eastern Europe, cohabitation is also normative; most people have at least one cohabiting partnership before marriage. In southern Europe, cohabiting is still taboo, but premarital sex is tolerated in emerging adulthood. In contrast, both premarital sex and cohabitation remain rare and forbidden throughout Asia. Even dating is discouraged until the late twenties, when it would be a prelude to a serious relationship leading to marriage. In cross-cultural comparisons, about three fourths of emerging adults in the United States and Europe report having had premarital sexual relations by age 20, versus less than one fifth in Japan and South Korea (Hatfield and Rapson, 2006).

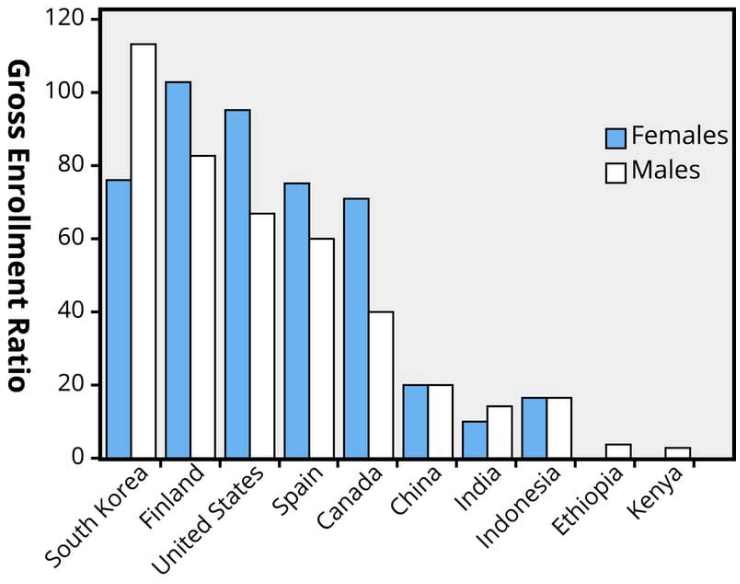



Figure 3. Gross tertiary enrollment, selected countries, 2007. Source: UNdata (2010). Note. Gross enrollment ratio is the total enrollment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school year. For the tertiary level, the population used is that of the five-year age group following the end of secondary schooling.

For young people in developing countries, emerging adulthood exists only for the wealthier segment of society, mainly the urban middle class, whereas the rural and urban poor—the majority of the population—have no emerging adulthood and may even have no adolescence because they enter adult-like work at an early age and also begin marriage and parenthood relatively early. What Saraswathi and Larson (2002) observed about adolescence applies to emerging adulthood as well: "In many ways, the lives of middle-class youth in India, South East Asia, and Europe have more in common with each other than they do with those of poor youth in their own countries." However, as globalization proceeds, and economic development along with it, the proportion of young people who experience emerging adulthood will increase as the middle class expands. By the end of the 21st century, emerging adulthood is likely to be normative worldwide.

## Try It

https://assessments.lumenlearning.co...essments/16633

## A Counter Argument: No Emerging Adulthood?

While Arnett describes "emerging adulthood" as a time of delayed entry into early adulthood, not everyone agrees. View this clip from Dr. Meg Jay, as she cautions young adults not to procrastinate since what happens during their twenties is important for the rest of adulthood: "Why 30 is not the new 20!"

## Glossary

*emerging adulthood available at the end of this section.*

1. Arnett, J.J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. American Psychologist, 55, 469-480. mailto:/Sandboxes/lhrli@ucdavis.edu

## Contributors and Attributions

CC licensed content, Original

- Modification, adaptation, and original content. **Authored by**: Margaret Clark-Plaskie for Lumen Learning. **Provided by**: Lumen Learning. **License**: *CC BY-NC-SA: Attribution-NonCommercial-ShareAlike*
- Emerging Adulthood. **Provided by**: Wikipedia. **Located at**: https://en.Wikipedia.org/wiki/Emerging_adulthood_and_early_adulthood. **License**: *CC BY-SA: Attribution-ShareAlike*

CC licensed content, Shared previously

- Emerging Adulthood. **Authored by**: Jeffrey Jensen Arnett. **Provided by**: Noba. **Located at**: https://nobaproject.com/modules/emerging-adulthood. **License**: *CC BY-NC-SA: Attribution-NonCommercial-ShareAlike*

All rights reserved content

- Why does it take so long to grow up today?. **Authored by**: Jeffrey Jensen Arnett. **Provided by**: TEDx Talks. **Located at**: https://www.youtube.com/watch?v=fv8KpQY0m6o. **License**: *Other*. **License Terms**: Standard YouTube License

## Answers

**Glossary**

life stage extending from approximately ages 18 to 25, during which the foundation of an adult life is gradually constructed in love and work. Primary features include identity explorations, instability, focus on self-development, feeling incompletely adult, and a broad sense of possibilities

This page titled 15.12.11: Emerging Adulthood is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 8.11: Emerging Adulthood by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.12.12: Introduction to Relationships in Early Adulthood

## What you'll learn to do: examine relationships in early adulthood



We have learned from Erikson that the psychosocial developmental task of early adulthood is "intimacy versus isolation" and if resolved relatively positively, it can lead to the virtue of "love." In this section, we will look more closely at relationships in early adulthood, particularly in terms of love, dating, cohabitation, marriage, and parenting.

## Contributors and Attributions

CC licensed content, Original

- Introduction to Relationships in Early Adulthood. **Authored by**: Margaret Clark-Plaskie for Lumen Learning. **Provided by**: Lumen Learning. **License**: *CC BY: Attribution*

CC licensed content, Shared previously

- Hands. **Authored by**: Tu00fa Anh. **Located at**: https://pixabay.com/images/id-437968/. **License**: *CC0: No Rights Reserved*

This page titled 15.12.12: Introduction to Relationships in Early Adulthood is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 8.12: Introduction to Relationships in Early Adulthood by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.12.13: Attraction and Love

**Learning Outcomes**

- Describe some of the factors related to attraction in relationships
- Apply Sternberg's theory of love to relationships
- Summarize attachment theory in adulthood

## Attraction

Why do some people hit it off immediately? Or decide that the friend of a friend was not likable? Using scientific methods, psychologists have investigated factors influencing attraction and have identified a number of variables, such as similarity, proximity (physical or functional), familiarity, and reciprocity, that influence with whom we develop relationships.




Figure 1. Great and important relationships can develop by chance and physical proximity helps. For example, seeing someone regularly on your daily bus commute to work or school may be all that's necessary to spark a genuine friendship. [Image: Cheri Lucas Rowlands, https://goo.gl/crCc0Q, CC BY-SA 2.0, https://goo.gl/rxiUsF]

## Proximity

Often we "stumble upon" friends or romantic partners; this happens partly due to how close in proximity we are to those people. Specifically, **proximity** or *physical nearness* has been found to be a significant factor in the development of relationships. For example, when college students go away to a new school, they will make friends consisting of classmates, roommates, and teammates (i.e., people close in proximity). Proximity allows people the opportunity to get to know one other and discover their similarities—all of which can result in a friendship or intimate relationship. Proximity is not just about geographic distance, but rather functional distance, or the frequency with which we cross paths with others. For example, college students are more likely to become closer and develop relationships with people on their dorm-room floors because they see them (i.e., cross paths) more often than they see people on a different floor. How does the notion of proximity apply in terms of online relationships? Deb Levine (2000) argues that in terms of developing online relationships and attraction, functional distance refers to being at the same place at the same time in a virtual world (i.e., a chat room or Internet forum)—crossing virtual paths.

## Familiarity

One of the reasons why proximity matters to attraction is that it breeds *familiarity*; people are more attracted to that which is

familiar. Just being around someone or being repeatedly exposed to them increases the likelihood that we will be attracted to them. We also tend to feel safe with familiar people, as it is likely we know what to expect from them. Dr. Robert Zajonc (1968) labeled this phenomenon the mere-exposure effect. More specifically, he argued that the more often we are exposed to a stimulus (e.g., sound, person) the more likely we are to view that stimulus positively. Moreland and Beach (1992) demonstrated this by exposing a college class to four women (similar in appearance and age) who attended different numbers of classes, revealing that the more classes a woman attended, the more familiar, similar, and attractive she was considered by the other students.

There is a certain comfort in knowing what to expect from others; consequently, research suggests that we like what is familiar. While this is often on a subconscious level, research has found this to be one of the most basic principles of attraction (Zajonc, 1980). For example, a young man growing up with an overbearing mother may be attracted to other overbearing women *not* because he likes being dominated but rather because it is what he considers normal (i.e., familiar).

## Similarity

When you hear about celebrity couples such as Kim Kardashian and Kanye West, do you shake your head thinking "this won't last"? It is probably because they seem so different. While many make the argument that opposites attract, research has found that is generally not true; s*imilarity* is key. Sure, there are times when couples can appear fairly different, but overall we like others who are like us. Ingram and Morris (2007) examined this phenomenon by inviting business executives to a cocktail mixer, 95% of whom reported that they wanted to meet new people. Using electronic name tag tracking, researchers revealed that the executives did not mingle or meet new people; instead, they only spoke with those they already knew well (i.e., people who were similar).

When it comes to marriage, research has found that couples tend to be very similar, particularly when it comes to age, social class, race, education, physical attractiveness, values, and attitudes (McCann Hamilton, 2007; Taylor, Fiore, Mendelsohn, & Cheshire, 2011). This phenomenon is known as the **matching hypothesis** (Feingold, 1988; Mckillip & Redel, 1983). We like others who validate our points of view and who are similar in thoughts, desires, and attitudes.

## Reciprocity

Another key component in attraction is **reciprocity**; this principle is based on the notion that we are more likely to like someone if they feel the same way toward us. In other words, it is hard to be friends with someone who is not friendly in return. Another way to think of it is that relationships are built on give and take; if one side is not reciprocating, then the relationship is doomed. Basically, we feel obliged to give what we get and to maintain equity in relationships. Researchers have found that this is true across cultures (Gouldner, 1960).

Try It

https://assessments.lumenlearning.co...essments/16634

# Love



Figure 2. Romantic relationships are so central to psychological health that most people in the world are or will be in a romantic relationship in their lifetime. [Image: CC0 Public Domain, https://goo.gl/m25gce]

Is all love the same? Are there different types of love? Examining these questions more closely, Robert Sternberg's (2004; 2007) work has focused on the notion that all types of love are comprised of three distinct areas: intimacy, passion, and commitment. Intimacy includes caring, closeness, and emotional support. The passion component of love is comprised of physiological and emotional arousal; these can include physical attraction, emotional responses that promote physiological changes, and sexual arousal. Lastly, commitment refers to the cognitive process and decision to commit to love another person and the willingness to work to keep that love over the course of your life. The elements involved in intimacy (caring, closeness, and emotional support) are generally found in all types of close relationships—for example, a mother's love for a child or the love that friends share. Interestingly, this is not true for passion. Passion is unique to romantic love, differentiating friends from lovers. In sum, depending on the type of love and the stage of the relationship (i.e., newly in love), different combinations of these elements are present.

Taking this theory a step further, anthropologist Helen Fisher explained that she scanned the brains (using fMRI) of people who had just fallen in love and observed that their brain chemistry was "going crazy," similar to the brain of an addict on a drug high (Cohen, 2007). Specifically, serotonin production increased by as much as 40% in newly-in-love individuals. Further, those newly in love tended to show obsessive-compulsive tendencies. Conversely, when a person experiences a breakup, the brain processes it in a similar way to quitting a heroin habit (Fisher, Brown, Aron, Strong, & Mashek, 2009). Thus, those who believe that breakups are physically painful are correct! Another interesting point is that long-term love and sexual desire activate different areas of the brain. More specifically, sexual needs activate the part of the brain that is particularly sensitive to innately pleasurable things such as food, sex, and drugs (i.e., the striatum—a rather simplistic reward system), whereas love requires conditioning—it is more like a habit. When sexual needs are rewarded consistently, then love can develop. In other words, love grows out of positive rewards, expectancies, and habit (Cacioppo, Bianchi-Demicheli, Hatfield & Rapson, 2012).

## Link to Learning

Dive deeper into Helen Fisher's research by watching her TED talk "The Brain in Love."

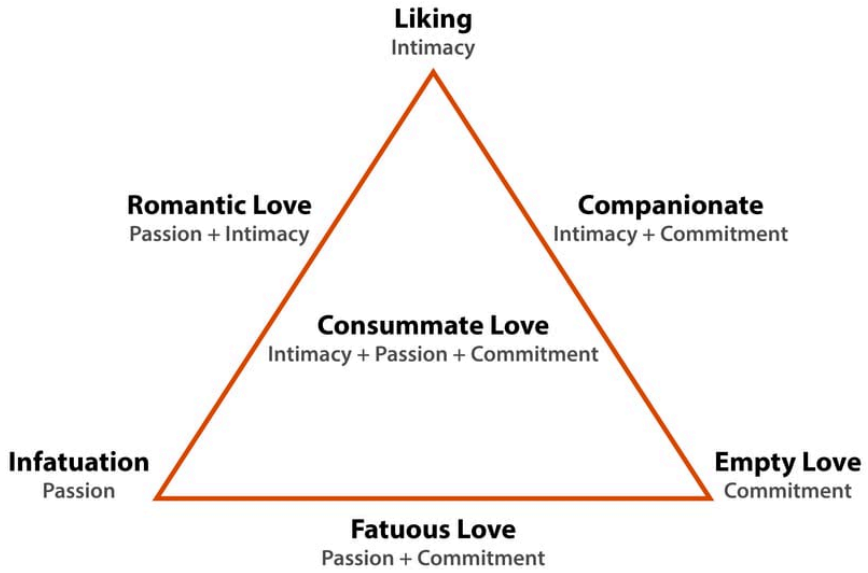



Figure 2. The Triangular Theory of Love. Adapted from Wikipedia Creative Commons, 2013.

## Try It

https://assessments.lumenlearning.co...essments/16635

## Attachment Theory in Adulthood

The need for intimacy, or close relationships with others, is universal and persistent across the lifespan. What our adult intimate relationships look like actually stems from infancy and our relationship with our primary caregiver (historically our mother)—a process of development described by attachment theory, which you learned about in the module on infancy. Recall that according to attachment theory, different styles of caregiving result in different relationship "attachments."

For example, responsive mothers—mothers who soothe their crying infants—produce infants who have secure attachments (Ainsworth, 1973; Bowlby, 1969). About 60% of all children are securely attached. As adults, secure individuals rely on their working models—concepts of how relationships operate—that were created in infancy, as a result of their interactions with their primary caregiver (mother), to foster happy and healthy adult intimate relationships. Securely attached adults feel comfortable being depended on and depending on others.

As you might imagine, inconsistent or dismissive parents also impact the attachment style of their infants (Ainsworth, 1973), but in a different direction. In early studies on attachment style, infants were observed interacting with their caregivers, followed by being separated from them, then finally reunited. About 20% of the observed children were "resistant," meaning they were anxious even before, and especially during, the separation; and 20% were "avoidant," meaning they actively avoided their caregiver after separation (i.e., ignoring the mother when they were reunited). These early attachment patterns can affect the way people relate to one another in adulthood. Anxious-resistant adults worry that others don't love them, and they often become frustrated or angry when their needs go unmet. Anxious-avoidant adults will appear not to care much about their intimate relationships and are uncomfortable being depended on or depending on others themselves.

*Table 1. Types of Early Attachment and Adult Intimacy*

| | | | | | | |
|---|---|---|---|---|---|---|
| **Attachment Style** | Secure | "I find it relatively easy to get close to others and am comfortable depending on them and having them depend on me. I don't often worry about being abandoned or about someone getting too close to me," | Anxious-avoidant | "I am somewhat uncomfortable being close to others; I find it difficult to trust them completely, difficult to allow myself to depend on them. I am nervous when anyone gets too close, and often, love partners want me to be more intimate than I feel comfortable being." | Anxious-resistant | "I find that others are reluctant to get as close as I would like. I often worry that my partner doesn't really love me or won't want to stay with me. I want to merge completely with another person, and this desire sometimes scares people away." |

The good news is that our attachment can be changed. It isn't easy, but it is possible for anyone to "recover" a secure attachment. The process often requires the help of a supportive and dependable other, and for the insecure person to achieve coherence—the realization that his or her upbringing is not a permanent reflection of character or a reflection of the world at large, nor does it bar him or her from being worthy of love or others of being trustworthy (Treboux, Crowell, & Waters, 2004).

You can watch this video "What is Your Attachment Style?" from The School of Life to learn more.

## Try It

https://assessments.lumenlearning.co...essments/16636

## Applications of Sternberg's Theory

Click through the following interactive to review and apply Sternberg's theory.

A link to an interactive elements can be found at the bottom of this page.

## glossary

*proximity available at the end of this section.*

*matching hypothesis available at the end of this section.*

*reciprocity available at the end of this section.*

## Contributors and Attributions

CC licensed content, Original

- Modification, adaptation, and original content. **Authored by**: Margaret Clark-Plaskie for Lumen Learning. **Provided by**: Lumen Learning. **License**: *CC BY-NC-SA: Attribution-NonCommercial-ShareAlike*

CC licensed content, Shared previously

- Section on Love . **Authored by**: Debi Brannan and Cynthia D. Mohr . **Provided by**: Western Oregon University, Portland State University. **Located at**: https://nobaproject.com/modules/love-friendship-and-social-support. **Project**: The Noba Project. **License**: *CC BY-NC-SA: Attribution-NonCommercial-ShareAlike*
- The Family; section on attachment. **Authored by**: Joel A. Muraco . **Provided by**: University of Wisconsin, Green Bay. **Located at**: https://nobaproject.com/modules/the-family. **Project**: The Noba Project. **License**: *CC BY-NC-SA: Attribution-NonCommercial-ShareAlike*
- Psyc 200 Lifespan Psychology. **Authored by**: Laura Overstreet . **Located at**: http://opencourselibrary.org/econ-201/. **License**: *CC BY: Attribution*

## Answers

**glossary**

a term for physical nearness which been found to be a significant factor in the development of relationships

**glossary**

we tend to be attracted to those who are similar to us in age, social class, race, education, physical attractiveness, values, and attitudes

**glossary**

we are more likely to like someone if they feel the same way toward us

This page titled 15.12.13: Attraction and Love is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 8.13: Attraction and Love by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.12.14: Trends in Dating, Cohabitation, and Marriage

**Learning Outcomes**

- Describe trends and norms in dating, cohabitation, and marriage in the United States

## Dating

In general, traditional dating among teens and those in their early twenties has been replaced with more varied and flexible ways of getting together (and technology with social media, no doubt, plays a key role). The Friday night date with dinner and a movie that may still be enjoyed by those in their 30s gives way to less formal, more spontaneous meetings that may include several couples or a group of friends. Two people may get to know each other and go somewhere alone. How would you describe a "typical" date? Who calls, texts, or face times? Who pays? Who decides where to go? What is the purpose of the date? In general, greater planning is required for people who have additional family and work responsibilities.

### Dating and the Internet

The ways people are finding love has changed with the advent of the Internet. In a poll, 49% of all American adults reported that either themselves or someone they knew had dated a person they met online (Madden & Lenhart, 2006). As Finkel and colleagues (2007) found, social networking sites, and the Internet generally, perform three important tasks. Specifically, sites provide individuals with access to a database of other individuals who are interested in meeting someone. Dating sites generally reduce issues of proximity, as individuals do not have to be close in proximity to meet. Also, they provide a medium in which individuals can communicate with others. Finally, some Internet dating websites advertise special matching strategies, based on factors such as personality, hobbies, and interests, to identify the "perfect match" for people looking for love online. In general, scientific questions about the effectiveness of Internet matching or online dating compared to face-to-face dating remain to be answered.

It is important to note that social networking sites have opened the doors for many to meet people that they might not have ever had the opportunity to meet; unfortunately, it now appears that the social networking sites can be forums for unsuspecting people to be duped. In 2010 a documentary, Catfish, focused on the personal experience of a man who met a woman online and carried on an emotional relationship with this person for months. As he later came to discover, though, the person he thought he was talking and writing with did not exist. As Dr. Aaron Ben-Zeév stated, online relationships leave room for deception; thus, people have to be cautious.

## Cohabitation

**Cohabitation** is an arrangement where two people who are not married live together. They often involve a romantic or sexually intimate relationship on a long-term or permanent basis. Such arrangements have become increasingly common in Western countries during the past few decades, being led by changing social views, especially regarding marriage, gender roles and religion. Today, cohabitation is a common pattern among people in the Western world. In Europe, the Scandinavian countries have been the first to start this leading trend, although many countries have since followed. Mediterranean Europe has traditionally been very conservative, with religion playing a strong role. Until the mid-1990s, cohabitation levels remained low in this region, but have since increased. Cohabitation is common in many countries, with the Scandinavian nations of Iceland, Sweden, and Norway reporting the highest percentages, and more traditional countries like India, China, and Japan reporting low percentages (DeRose, 2011).

In countries where cohabitation is increasingly common, there has been speculation as to whether or not cohabitation is now part of the natural developmental progression of romantic relationships: dating and courtship, then cohabitation, engagement, and finally marriage. Though, while many cohabitating arrangements ultimately lead to marriage, many do not.

How prevalent is cohabitation today in the United States? According to the U.S. Census Bureau (2018), cohabitation has been increasing, while marriage has been decreasing in young adulthood. As seen in the graph below, over the past 50 years, the

percentage of 18-24 year olds in the U.S. living with an unmarried partner has gone from 0.1 percent to 9.4 percent, while living with a spouse has gone from 39.2 percent to 7 percent. More 18-24 year olds live with an unmarried partner now than with a married partner.

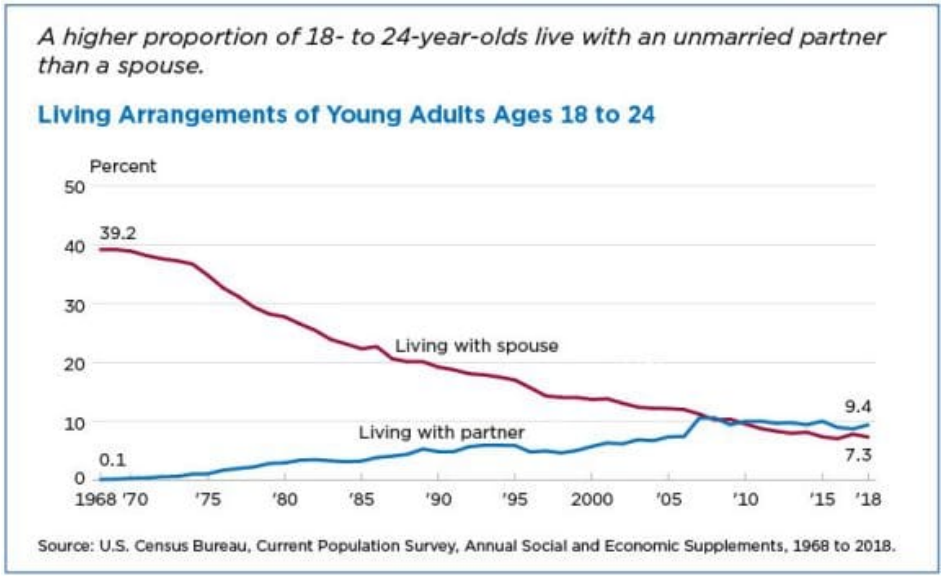



Figure 1. The rates of those between ages 18-24 living with a spouse have gone down dramatically, while rates of those living with a partner are gradually on the rise.

While the percent living with a spouse is still higher than the percent living with an unmarried partner among 25 to 34-year-olds today, the next graph clearly shows a similar pattern of decline in marriage and increase in cohabitation over the last five decades. The percent living with a spouse in this age group today is only half of what it was in 1968 (40.3 percent vs. 81.5 percent), while the percent living with an unmarried partner rose from 0.2 percent to 14.8 percent in this age group. Another way to look at some of the data is that only 30% of today's 18 to 34-year-olds in the U.S. are married, compared with almost double that, 59 percent forty years ago (1978). The marriage rates for less-educated young adults (who tend to have lower income) have fallen at faster rates than those of better educated young adults since the 1970s. Past and present economic climate are key factors; perhaps more couples are waiting until they can afford to get married, financially. Gurrentz (2018) does caution that there are limitations of the measures of cohabitation, particularly in the past.[1]

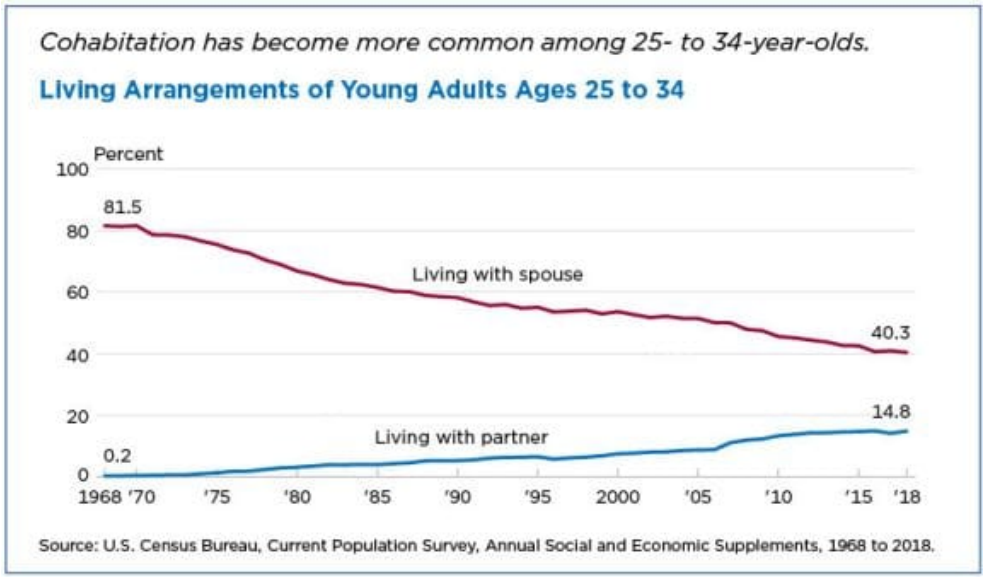



Figure 2. Rates of those living with spouses between the ages of 25 and 34 has been declining, while those cohabitating is on the rise.

## How long do cohabiting relationships last?

Cohabitation tends to last longer in European countries than in the United States. Half of cohabiting relationships in the U. S. end within a year; only 10 percent last more than 5 years. These short-term cohabiting relationships are more characteristics of people in their early 20s. Many of these couples eventually marry. Those who cohabit more than five years tend to be older and more committed to the relationship. Cohabitation may be preferable to marriage for a number of reasons. For partners over 65, cohabitation is preferable to marriage for practical reasons. For many of them, marriage would result in a loss of Social Security benefits and consequently is not an option. Others may believe that their relationship is more satisfying because they are not bound by marriage.

**Think it Over**

Do you think that you will cohabitate before marriage? Or did you cohabitate? Why or why not? Does your culture play a role in your decision? Does what you learned in this module change your thoughts on this practice?



Figure 3. While marriage is common across cultures, the details such as “How” and “When” are often quite different. Now the “Who” of marriage is experiencing an important change as laws are updated in a growing number of countries and states to give same-sex couples the same rights and benefits through marriage as heterosexual couples. [Image: Bart Vis, http://goo.gl/liSy9P, CC BY 2.0, http://goo.gl/T4qgSp]

### Same-Sex Couples

As of 2019, same-sex marriage is legal in 28 countries, and counting. Many other countries either recognize same-sex couples for the purpose of immigration, grant rights for domestic partnerships or grant common law marriage status to same-sex couples.

Same-sex couples struggle with concerns such as the division of household tasks, finances, sex, and friendships as do heterosexual couples. One difference between same-sex and heterosexual couples, however, is that same-sex couples have to live with the added stress that comes from social disapproval and discrimination. And continued contact with an ex-partner may be more likely among homosexuals and bisexuals because of the closeness of the circle of friends and acquaintances.

The number of adults who remain single has increased dramatically in the last 30 years. We have more people who never marry, more widows and more divorcees driving up the number of singles. Singles represent about 25 percent of American households. Singlehood has become a more acceptable lifestyle than it was in the past and many singles are very happy with their status. Whether or not a single person is happy depends on the circumstances of their remaining single.

## Stein’s Typology of Singles

Many of the research findings about singles reveal that they are not all alike. Happiness with one’s status depends on whether

the person is single by choice and whether the situation is permanent. Let's look at Stein's (1981) four categories of singles for a better understanding of this.

- **Voluntary temporary singles**: These are younger people who have never been married and divorced people who are postponing marriage and remarriage. They may be more involved in careers or getting an education or just wanting to have fun without making a commitment to any one person. They are not quite ready for that kind of relationship. These people tend to report being very happy with their single status.
- **Voluntary permanent singles**: These individuals do not want to marry and aren't intending to marry. This might include cohabiting couples who don't want to marry, priests, nuns, or others who are not considering marriage. Again, this group is typically single by choice and understandably more contented with this decision.
- **Involuntary temporary**: These are people who are actively seeking mates. They hope to marry or remarry and may be involved in going on blind dates, seeking a partner on the internet or placing "getting personal" aids in search of a mate. They tend to be more anxious about being single.
- **Involuntary permanent**: These are older divorced, widowed, or never-married people who wanted to marry but have not found a mate and are coming to accept singlehood as a probable permanent situation. Some are bitter about not having married while others are more accepting of how their life has developed.

## Engagement and Marriage

Most people will marry in their lifetime. In the majority of countries, 80% of men and women have been married by the age of 49 (United Nations, 2013). Despite how common marriage remains, it has undergone some interesting shifts in recent times. Around the world, people are tending to get married later in life or, increasingly, not at all. People in more developed countries (e.g., Nordic and Western Europe), for instance, marry later in life—at an average age of 30 years. This is very different than, for example, the economically developing country of Afghanistan, which has one of the lowest average-age statistics for marriage—at 20.2 years (United Nations, 2013). Another shift seen around the world is a gender gap in terms of age when people get married. In every country, men marry later than women. Since the 1970's, the average age of marriage has increased for both women and men.

As illustrated, the courtship process can vary greatly around the world. So too can an engagement—a formal agreement to get married. Some of these differences are small, such as on which hand an engagement ring is worn. In many countries, it is worn on the left, but in Russia, Germany, Norway, and India, women wear their ring on their right. There are also more overt differences, such as who makes the proposal. In India and Pakistan, it is not uncommon for the family of the groom to propose to the family of the bride, with little to no involvement from the bride and groom themselves. In most Western industrialized countries, it is traditional for the male to propose to the female. What types of engagement traditions, practices, and rituals are common where you are from? How are they changing?

Contemporary young adults in the United States are waiting longer than before to marry. The median age of entering marriage in the United States is 27 for women and 29 for men (U.S. Bureau of the Census, 2011). This trend in delays of young adults taking on adult roles and responsibilities is discussed in our earlier section about "emerging adulthood" or the transition from adolescence to adulthood identified by Arnett (2000).

## A fair exchange

**Social exchange theory** suggests that people try to maximize rewards and minimize costs in social relationships. Each person entering the marriage market comes equipped with assets and liabilities or a certain amount of social currency with which to attract a prospective mate. For men, assets might include earning potential and status while for women, assets might include physical attractiveness and youth.

Customers in the "marriage market" do not look for a "good deal," however. Rather, most look for a relationship that is mutually beneficial or equitable. One of the reasons for this is because most a relationship in which one partner has far more assets than the other will result if power disparities and a difference in the level of commitment from each partner. According to Waller's principle of least interest, the partner who has the most to lose without the relationship (or is the most dependent on the relationship) will have the least amount of power and is in danger of being exploited. A greater balance of power, then, may add stability to the relationship.

Societies specify through both formal and informal rules who is an appropriate mate. Consequently, mate selection is not completely left to the individual. Rules of endogamy indicate within which groups we should marry. For example, many cultures

specify that people marry within their own race, social class, age group, or religion. These rules encourage **homogamy** or marriage between people who share social characteristics (the opposite is known as **heterogamy**). The majority of marriages in the U.S. are homogamous with respect to race, social class, age and to a lesser extent, religion.

In a comparison of educational homogamy in 55 countries, Smits (2003) found strong support for higher-educated people marrying other highly educated people. As such, education appears to be a strong filter people use to help them select a mate. The most common filters we use—or, put another way, the characteristics we focus on most in potential mates—are age, race, social status, and religion (Regan, 2008). Other filters we use include compatibility, physical attractiveness (we tend to pick people who are as attractive as we are), and proximity (for practical reasons, we often pick people close to us) (Klenke-Hamel & Janda, 1980).



Figure 4. In some countries, many people are coupled and committed to marriage through arrangements made by parents or professional marriage brokers. [Image: Ananabanana, http://goo.gl/gzCR0x, CC BY-NC-SA 2.0, http://goo.gl/iF4hmM]

According to the **filter theory of mate selection,** the pool of eligible partners becomes narrower as it passes through filters used to eliminate members of the pool (Kerckhoff & Davis, 1962). One such filter is propinquity or geographic proximity. Mate selection in the United States typically involves meeting eligible partners face to face. Those with whom one does not come into contact are simply not contenders (though this has been changing with the Internet). Race and ethnicity is another filter used to eliminate partners. Although interracial dating has increased in recent years and interracial marriage rates are higher than before, interracial marriage still represents only 5.4 percent of all marriages in the United States. Physical appearance is another feature considered when selecting a mate. Age, social class, and religion are also criteria used to narrow the field of eligibles. Thus, the field of eligibles becomes significantly smaller before those things we are most conscious of such as preferences, values, goals, and interests, are even considered.

## Arranged Marriages

In some cultures, however, it is not uncommon for the families of young people to do the work of finding a mate for them. For example, the Shanghai Marriage Market refers to the People's Park in Shanghai, China—a place where parents of unmarried adults meet on weekends to trade information about their children in attempts to find suitable spouses for them (Bolsover, 2011). In India, the marriage market refers to the use of marriage brokers or marriage bureaus to pair eligible singles together (Trivedi, 2013). To many Westerners, the idea of arranged marriage can seem puzzling. It can appear to take the romance out of the equation and violate values about personal freedom. On the other hand, some people in favor of arranged marriage argue that parents are able to make more mature decisions than young people.

While such intrusions may seem inappropriate based on your upbringing, for many people of the world such help is expected, even appreciated. In India for example, "parental arranged marriages are largely preferred to other forms of marital choices" (Ramsheena & Gundemeda, 2015, p. 138). Of course, one's religious and social caste plays a role in determining how involved family may be.

Try It

https://assessments.lumenlearning.co...essments/16637

Glossary

*cohabitation available at the end of this section.*

*filter theory of mate selection available at the end of this section.*

*homogamy available at the end of this section.*

*heterogamy available at the end of this section.*

*social exchange theory available at the end of this section.*

---

1. Gurrentz, B. (2018, November 15). Living with an unmarried partner now common for young adults. https://www.census.gov/library/stories/2018/11/cohabitation-is-up-marriage-is-down-for-young-adults.htmlmailto:/Sandboxes/lhrli@ucdavis.edu

## Contributors and Attributions

CC licensed content, Original

- Modification, adaptation, and original content. **Authored by**: Margaret Clark-Plaskie for Lumen Learning. **Provided by**: Lumen Learning. **License**: *CC BY-NC-SA: Attribution-NonCommercial-ShareAlike*
- Psyc 200 Lifespan Psychology . **Authored by**: Laura Overstreet . **Located at**: http://opencourselibrary.org/econ-201/. **License**: *CC BY: Attribution*

CC licensed content, Shared previously

- Section on Love and the Internet. **Authored by**: Debi Brannan and Cynthia D. Mohr . **Provided by**: Western Oregon University, Portland State University. **Located at**: https://nobaproject.com/modules/love-friendship-and-social-support. **Project**: The Noba Project. **License**: *CC BY-NC-SA: Attribution-NonCommercial-ShareAlike*
- https://en.Wikipedia.org/wiki/Cohabitation. **Provided by**: Wikipedia. **Located at**: https://en.Wikipedia.org/wiki/Cohabitation. **License**: *CC BY-SA: Attribution-ShareAlike*
- The Family; courtship and marriage. **Authored by**: Joel A. Muraco . **Provided by**: University of Wisconsin, Green Bay. **Located at**: https://nobaproject.com/modules/the-family. **Project**: The Noba Project. **License**: *CC BY-SA: Attribution-ShareAlike*

All rights reserved content

- Living with an Unmarried Partner Now Common for Young Adults Images . **Authored by**: Benjamin Gurrentz. **Provided by**: United States Census Bureau. **Located at**: https://www.census.gov/library/stories/2018/11/cohabitaiton-is-up-marriage-is-down-for-young-adults.html. **License**: *All Rights Reserved*

## Answers

**Glossary**
an arrangement where two people who have not married live together

**Glossary**
the pool of eligible partners becomes narrower as it passes through filters used to eliminate members of the pool

**Glossary**
marriage between people who share social characteristics

**Glossary**
marriage between people who do not share social characteristics

**Glossary**

people try to maximize rewards and minimize costs in social relationships

This page titled 15.12.14: Trends in Dating, Cohabitation, and Marriage is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 8.14: Trends in Dating, Cohabitation, and Marriage by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.12.15: Parenting

**Learning Outcomes**

- Describe challenges, transitions, and factors associated with parenthood

## Having Children

Do you want children? Do you already have children? Increasingly, families are postponing or not having children. Families that choose to forego having children are known as childfree families, while families that want but are unable to conceive are referred to as childless families. As more young people pursue their education and careers, age at first marriage has increased; similarly, so has the age at which people become parents. With a college degree, the average age for women to have their first child is 30.3, but without a college degree, the average age is 23.8. Marital status is also related, as the average age for married women to have their first child is 28.8, while the average age for unmarried women is 23.1. Overall, the average age of first time mothers has increased to 26, up from 21 in 1972, and the average age of first time fathers has increased to 31, up from 27 in 1972 in the United States.[1] The age of first-time parents in the U.S. increased sharply in the 1970s after abortion was legalized. Since the age of first-time parents varies by geographic region in the U.S. and women's rights to abortion are being challenged in some states, it will be interesting to follow the norms and trends for first-time parents in the future.

The decision to become a parent should not be taken lightly. There are positives and negatives associated with parenting that should be considered. Many parents report that having children increases their well-being (White & Dolan, 2009). Researchers have also found that parents, compared to their non-parent peers, are more positive about their lives (Nelson, Kushlev, English, Dunn, & Lyubomirsky, 2013). On the other hand, researchers have also found that parents, compared to non-parents, are more likely to be depressed, report lower levels of marital quality, and feel like their relationship with their partner is more businesslike than intimate (Walker, 2011).

If you do become a parent, your parenting style will impact your child's future success in romantic and parenting relationships. Recall from the module on early childhood that there are several different parenting styles. **Authoritative** parenting, arguably the best parenting style, is both demanding and supportive of the child (Maccoby & Martin, 1983). Support refers to the amount of affection, acceptance, and warmth a parent provides. **Demandingness** refers to the degree a parent controls their child's behavior. Children who have authoritative parents are generally happy, capable, and successful (Maccoby, 1992).

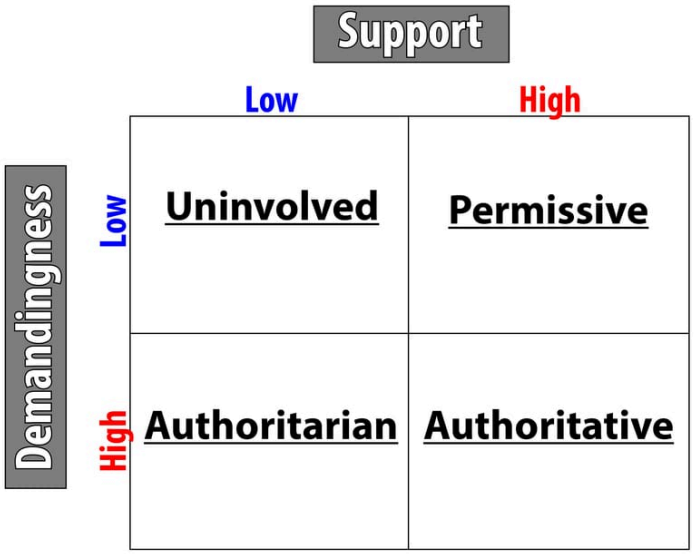



Figure 1. Authoritative parenting, or those parents who give high levels of support but also have high demands and expectations, are associated with the best outcomes for children,

Other, less advantageous parenting styles include authoritarian (in contrast to authorit*ative*), permissive, and uninvolved (Tavassolie, Dudding, Madigan, Thorvardarson, & Winsler, 2016). **Authoritarian** parents are low in support and high in demandingness. Arguably, this is the parenting style used by Harry Potter's harsh aunt and uncle, and Cinderella's vindictive stepmother. Children who receive authoritarian parenting are more likely to be obedient and proficient but score lower in happiness, social competence, and self-esteem. **Permissive** parents are high in support and low in demandingness. Their children rank low in happiness and self-regulation and are more likely to have problems with authority. **Uninvolved** parents are low in both support and demandingness. Children of these parents tend to rank lowest across all life domains, lack self-control, have low self-esteem, and are less competent than their peers.

Support for the benefits of authoritative parenting has been found in countries as diverse as the Czech Republic (Dmitrieva, Chen, Greenberger, & Gil-Rivas, 2004), India (Carson, Chowdhurry, Perry, & Pati, 1999), China (Pilgrim, Luo, Urberg, & Fang, 1999), Israel (Mayseless, Scharf, & Sholt, 2003), and Palestine (Punamaki, Qouta, & Sarraj, 1997). In fact, authoritative parenting appears to be superior in Western, individualistic societies—so much so that some people have argued that there is no longer a need to study it (Steinberg, 2001). Other researchers are less certain about the superiority of authoritative parenting and point to differences in cultural values and beliefs. For example, while many European-American children do poorly with too much strictness (authorit*arian* parenting), Chinese children often do well, especially academically. The reason for this likely stems from Chinese culture viewing strictness in parenting as related to training, which is not central to American parenting (Chao, 1994).

## The Development of Parents

Think back to an emotional event you experienced as a child. How did your parents react to you? Did your parents get frustrated or criticize you, or did they act patiently and provide support and guidance? Did your parents provide lots of rules for you or let you make decisions on your own? Why do you think your parents behaved the way they did?



Figure 2. Parenthood has a huge impact on a person's identity, emotions, daily behaviors, and many other aspects of their lives. [Image: Kim881231, CC0 Public Domain, https://goo.gl/m25gce]

Psychologists have attempted to answer these questions about the influences on parents and understand why parents behave the way they do. Because parents are critical to a child's development, a great deal of research has been focused on the impact that parents have on children. Less is known, however, about the development of parents themselves and the impact of children on parents. Nonetheless, parenting is a major role in an adult's life. Parenthood is often considered a normative developmental task of adulthood. Cross-cultural studies show that adolescents around the world plan to have children. In fact, most men and women in the United States will become parents by the age of 40 years (Martinez, Daniels, & Chandra, 2012).

People have children for many reasons, including emotional reasons (e.g., the emotional bond with children and the gratification the parent–child relationship brings), economic and utilitarian reasons (e.g., children provide help in the family and support in old age), and social-normative reasons (e.g., adults are expected to have children; children provide status) (Nauck, 2007).

# The Changing Face of Parenthood

Parenthood is undergoing changes in the United States and elsewhere in the world. Children are less likely to be living with both parents, and women in the United States have fewer children than they did previously. The average fertility rate of women in the United States was about seven children in the early 1900s and has remained relatively stable at 2.1 since the 1970s (Hamilton, Martin, & Ventura, 2011; Martinez, Daniels, & Chandra, 2012). Not only are parents having fewer children, but the context of parenthood has also changed. Parenting outside of marriage has increased dramatically among most socioeconomic, racial, and ethnic groups, although college-educated women are substantially more likely to be married at the birth of a child than are mothers with less education (Dye, 2010). Parenting is occurring outside of marriage for many reasons, both economic and social. People are having children at older ages, too. Despite the fact that young people are more often delaying childbearing, most 18- to 29-year-olds want to have children and say that being a good parent is one of the most important things in life (Wang & Taylor, 2011).

*Table 1. Demographic Changes in Parenthood in the United States*

| **Demographic Characteristic** | **1960** | **2012** |
|---|---|---|
| Average number of children (fertility rate) | 3.6 | 2.1 |
| Percent of births to unmarried women | 5% | 41% |
| Median age at first marriage for women | 20.8 | 26.5 |
| Percent of adults ages 18 to 29 married | 59% | 20% |

Galinsky (1987) was one of the first to emphasize the development of parents themselves, how they respond to their children's development, and how they grow as parents. Parenthood is an experience that transforms one's identity as parents take on new roles. Children's growth and development force parents to change their roles. They must develop new skills and abilities in response to children's development. Galinsky identified six stages of parenthood that focus on different tasks and goals (see Table 2).

*Table 2. Galinsky's Stages of Parenthood*

| **Galinsky's Stages** | **Age of Child** | **Main Tasks and Goals** |
|---|---|---|
| Stage 1: The Image-Making Stage | Planning for a child; pregnancy | Consider what it means to be a parent and plan for changes to accommodate a child |
| Stage 2: The Nurturing Stage | Infancy | Develop an attachment relationship with child and adapt to the new baby |
| Stage 3: The Authority Stage | Toddler and preschool | Parents create rules and figure out how to effectively guide their children's behavior |
| Stage 4: The Interpretative Stage | Middle childhood | Parents help their children interpret their experiences with the social world beyond the family |
| Stage 5: The Interdependent Stage | Adolescence | Parents renegotiate their relationship with their adolescent children to allow for shared power in decision-making. |
| Stage 6: The Departure Stage | Early Adulthood | Parents evaluate their successes and failures as parents |

## 1. The Image-Making Stage

As prospective parents think about and form images about their roles as parents and what parenthood will bring, and prepare for the changes an infant will bring, they enter the image-making stage. Future parents develop their ideas about what it will be like to be a parent and the type of parent they want to be. Individuals may evaluate their relationships with their own parents as a model of their roles as parents.

## 2. The Nurturing Stage

The second stage, the nurturing stage, occurs at the birth of the baby. A parent's main goal during this stage is to develop

an attachment relationship with their baby. Parents must adapt their romantic relationships, their relationships with their other children, and with their own parents to include the new infant. Some parents feel attached to the baby immediately, but for other parents, this occurs more gradually. Parents may have imagined their infant in specific ways, but they now have to reconcile those images with their actual baby. In incorporating their relationship with their child into their other relationships, parents often have to reshape their conceptions of themselves and their identity. Parenting responsibilities are the most demanding during infancy because infants are completely dependent on caregiving.

## 3. The Authority Stage

The authority stage occurs when children are 2 years old until about 4 or 5 years old. In this stage, parents make decisions about how much authority to exert over their children's behavior. Parents must establish rules to guide their child's behavior and development. They have to decide how strictly they should enforce rules and what to do when rules are broken.

## 4. The Interpretive Stage

The interpretive stage occurs when children enter school (preschool or kindergarten) to the beginning of adolescence. Parents interpret their children's experiences as children are increasingly exposed to the world outside the family. Parents answer their children's questions, provide explanations, and determine what behaviors and values to teach. They decide what experiences to provide their children, in terms of schooling, neighborhood, and extracurricular activities. By this time, parents have experience in the parenting role and often reflect on their strengths and weaknesses as parents, review their images of parenthood, and determine how realistic they have been. Parents have to negotiate how involved to be with their children, when to step in, and when to encourage children to make choices independently.

## 5. The Interdependent Stage

Parents of teenagers are in the interdependent stage. They must redefine their authority and renegotiate their relationship with their adolescent as the children increasingly make decisions independent of parental control and authority. On the other hand, parents do not permit their adolescent children to have complete autonomy over their decision-making and behavior, and thus adolescents and parents must adapt their relationship to allow for greater negotiation and discussion about rules and limits.



Figure 3. When a child achieves a new level of independence and leaves the home it marks another turning point in the identity of a parent. [Image: State Farm, https://goo.gl/Npw2fb, CC BY 2.0, https://goo.gl/BRvSA7]

## 6. The Departure Stage

During the departure stage of parenting, parents evaluate the entire experience of parenting. They prepare for their child's departure, redefine their identity as the parent of an adult child, and assess their parenting accomplishments and failures. This stage forms a transition to a new era in parents' lives. This stage usually spans a long time period from when the oldest child moves away (and often returns) until the youngest child leaves. The parenting role must be redefined as a less central role in a parent's identity.

Despite the interest in the development of parents among laypeople and helping professionals, little research has examined developmental changes in parents' experience and behaviors over time. Thus, it is not clear whether these theoretical stages are generalizable to parents of different races, ages, and religions, nor do we have empirical data on the factors that influence individual differences in these stages. On a practical note, how-to books and websites geared toward parental development

should be evaluated with caution, as not all advice provided is supported by research.

## Influences on Parenting

Parenting is a complex process in which parents and children influence one another. There are many reasons that parents behave the way they do. The multiple influences on parenting are still being explored. Proposed influences on parental behavior include 1) parent characteristics, 2) child characteristics, and 3) contextual and sociocultural characteristics (Belsky, 1984; Demick, 1999).

## Parent Characteristics

Parents bring unique traits and qualities to the parenting relationship that affect their decisions as parents. These characteristics include the age of the parent, gender, beliefs, personality, developmental history, knowledge about parenting and child development, and mental and physical health. Parents' personalities affect parenting behaviors. Mothers and fathers who are more agreeable, conscientious, and outgoing are warmer and provide more structure to their children. Parents who are more agreeable, less anxious, and less negative also support their children's autonomy more than parents who are anxious and less agreeable (Prinzie, Stams, Dekovic, Reijntjes, & Belsky, 2009). Parents who have these personality traits appear to be better able to respond to their children positively and provide a more consistent, structured environment for their children.

Parents' developmental histories, or their experiences as children, also affect their parenting strategies. Parents may learn parenting practices from their own parents. Fathers whose own parents provided monitoring, consistent and age-appropriate discipline, and warmth were more likely to provide this constructive parenting to their own children (Kerr, Capaldi, Pears, & Owen, 2009). Patterns of negative parenting and ineffective discipline also appear from one generation to the next. However, parents who are dissatisfied with their own parents' approach may be more likely to change their parenting methods with their own children.

## Child Characteristics

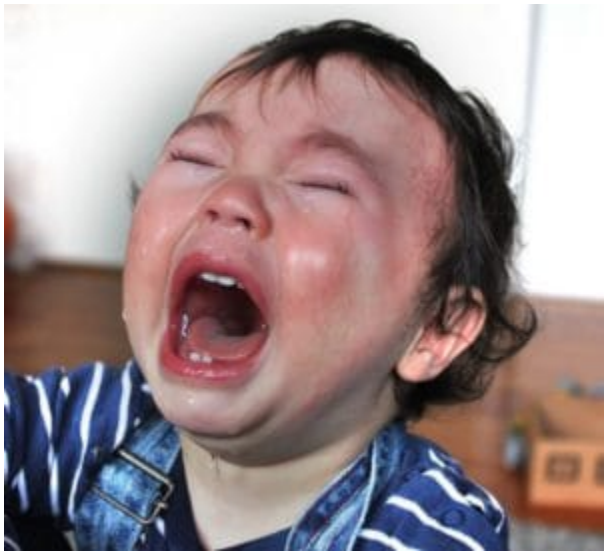


Figure 4. A child with a difficult temperament can have a significant impact on a parent. [Image: Harald Groven, https://goo.gl/cwemLg, CC BY-SA 2.0, https://goo.gl/eH69he]

Parenting is bidirectional. Not only do parents affect their children, but children also influence their parents. Child characteristics, such as gender, birth order, temperament, and health status, affect parenting behaviors and roles. For example, an infant with an easy temperament may enable parents to feel more effective, as they are easily able to soothe the child and elicit smiling and cooing. On the other hand, a cranky or fussy infant elicits fewer positive reactions from his or her parents and may result in parents feeling less effective in the parenting role (Eisenberg et al., 2008). Over time, parents of more difficult children may become more punitive and less patient with their children (Clark, Kochanska, & Ready, 2000; Eisenberg et al., 1999; Kiff, Lengua, & Zalewski, 2011). Parents who have a fussy, difficult child are less satisfied with their marriages and have greater challenges in balancing work and family roles (Hyde, Else-Quest, & Goldsmith, 2004). Thus, child temperament is one of the child characteristics that influences how parents behave with their children.

Another child characteristic is the gender of the child. Parents respond differently to boys and girls. Parents often assign different household chores to their sons and daughters. Girls are more often responsible for caring for younger siblings and household chores, whereas boys are more likely to be asked to perform chores outside the home, such as mowing the lawn (Grusec, Goodnow, & Cohen, 1996). Parents also talk differently with their sons and daughters, providing more scientific explanations to their sons and using more emotion words with their daughters (Crowley, Callanan, Tenenbaum, & Allen, 2001).

## Contextual Factors and Sociocultural Characteristics

The parent–child relationship does not occur in isolation. Sociocultural characteristics, including economic hardship, religion, politics, neighborhoods, schools, and social support, also influence parenting. Parents who experience economic hardship are more easily frustrated, depressed, and sad, and these emotional characteristics affect their parenting skills (Conger & Conger, 2002). Culture also influences parenting behaviors in fundamental ways. Although promoting the development of skills necessary to function effectively in one's community is a universal goal of parenting, the specific skills necessary vary widely from culture to culture. Thus, parents have different goals for their children that partially depend on their culture (Tamis-LeMonda et al., 2008). For example, parents vary in how much they emphasize goals for independence and individual achievements, and goals involving maintaining harmonious relationships and being embedded in a strong network of social relationships. These differences in parental goals are influenced by culture and by immigration status. Other important contextual characteristics, such as the neighborhood, school, and social networks, also affect parenting, even though these settings don't always include both the child and the parent (Brofenbrenner, 1989). For example, Latina mothers who perceived their neighborhood as more dangerous showed less warmth with their children, perhaps because of the greater stress associated with living a threatening environment (Gonzales et al., 2011). Many contextual factors influence parenting.

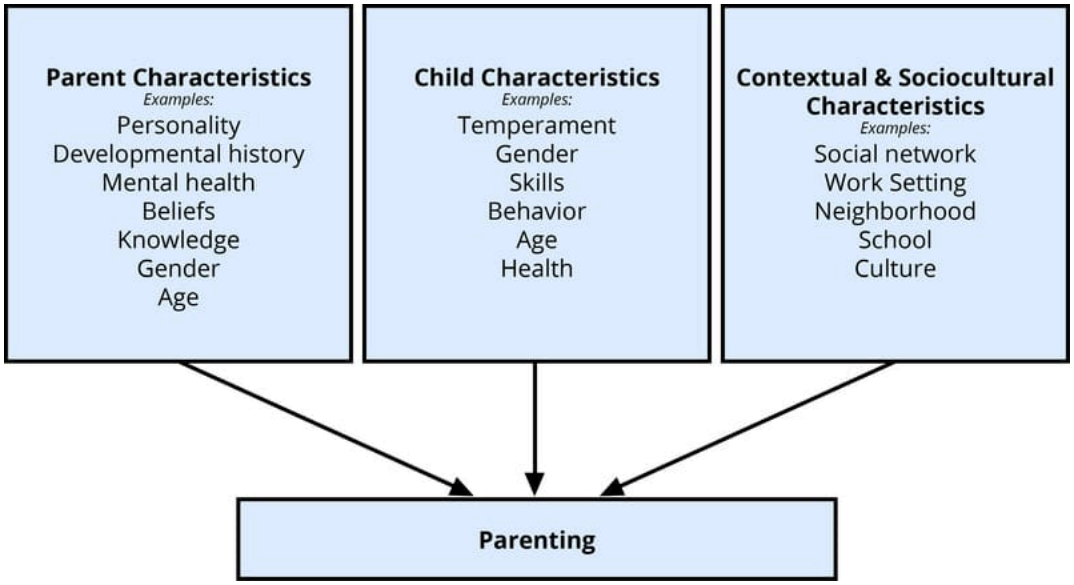



Figure 4. Influences on parenting include characteristics of the parent and child, as well as the context and world around them.

### Try It

https://assessments.lumenlearning.co...essments/16638

### Glossary

*authoritative parenting available at the end of this section.*

*authoritarian parenting available at the end of this section.*

*demandingness available at the end of this section.*

*permissive parenting available at the end of this section.*

*uninvolved parenting available at the end of this section.*

1. Bui, Quoctrung & Claire Cain Miller (August 2018). The Age That Women Have Babies: How A Gap Divides America. The New York Times. Retrieved from https://www.nytimes.com/interactive/2018/08/04/upshot/up-birth-age-gap.htmlmailto:/Sandboxes/lhrli@ucdavis.edu

## Contributors and Attributions

CC licensed content, Original

- Modification, adaptation, and original content. **Authored by**: Margaret Clark-Plaskie for Lumen Learning. **Provided by**: Lumen Learning. **License**: *CC BY-NC-SA: Attribution-NonCommercial-ShareAlike*

CC licensed content, Shared previously

- The Family; section on children and parenting styles. **Authored by**: Joel A. Muraco . **Provided by**: University of Wisconsin, Green Bay. **Located at**: https://nobaproject.com/modules/the-family. **Project**: The Noba Project. **License**: *CC BY-NC-SA: Attribution-NonCommercial-ShareAlike*
- The Developing Parent. **Authored by**: Marissa L. Diener . **Provided by**: University of Utah. **Located at**: https://nobaproject.com/modules/the-developing-parent#reference-17. **License**: *CC BY-NC-SA: Attribution-NonCommercial-ShareAlike*

## Answers

**Glossary**
parenting that is both demanding and supportive of the child

**Glossary**
parenting style that is high in demandingness and low in support

**Glossary**
the degree a parent controls their child's behavior

**Glossary**
parenting that is low in demandingness and high in support

**Glossary**
parenting that is low in both support and demandingness

This page titled 15.12.15: Parenting is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 8.15: Parenting by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.12.16: Putting It Together- Early Adulthood



As we have learned in this module, young adults are often in the "prime of life," especially physically and sexually. However, young adults may be engaged in risky behaviors and be particularly vulnerable to injuries, accidents, alcohol and drug use/abuse, sexually transmitted diseases, rape, and suicide. Nutrition and exercise habits in this stage are important since they are associated with health and certain illnesses in middle age. Cognitive and brain development continues, with the influences of education and experience. Young adults may move from formal logical thinking to postformal thinking, becoming better at considering multiple perspectives and contexts, appreciating ambiguity and uncertainty, and using practical experience in making decisions.

Higher education plays an important role for more and more young adults—in this module we examined the connections between education and work and learned about how exploring and choosing one's career is key during this stage. We saw that establishing intimacy in friendships, romance, and family relationships is another significant aspect of young adulthood; love, dating, cohabitation, marriage, and becoming parents were all examined.

We were introduced to the major theories of adult development, primarily those of Erikson and Levinson, and we learned about Arnett's "emerging adulthood," a potentially new stage involving the transition from adolescence to young adulthood, with young adults taking on "adult roles" later than expected. By the late thirties, though, most young adults have become independent of their parents/families of origin and are in the throes of adult work, family, and community activities and responsibilities.

Please read the article below for a summary of some of these early adulthood topics, but from a slightly different perspective—that of generations or cohorts. "Millennials" are defined as individuals who were born between 1981 and 1996, and as such, they make up a large part of today's young adults. Read about this group in terms of education, work, finances, living with parents, getting married, and having children, comparing their norms with those of previous generations and potentially future generations of young adults. Consider "emerging adulthood"; how much do you think generation, history, and culture are affecting this observed phenomenon? Will it continue to be part of early adulthood development in the future? Why or why not?

**Link to Learning: Millenials and other generations**

Read this article "Millennial life: How young adulthood today compares with prior generations" from the Pew Research Center.

## Contributors and Attributions

CC licensed content, Shared previously

- Workplace. **Authored by**: Free-Photos. **Located at**: https://pixabay.com/images/id-1245776/. **License**: *CC0: No Rights Reserved*

This page titled 15.12.16: Putting It Together- Early Adulthood is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 8.16: Putting It Together- Early Adulthood by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.12.17: Discussion- Early Adulthood

**DISCUSSION**: In this discussion, reflect upon and discuss BOTH of the following questions:

- Q1: At what age would you consider a person to be an adult? Explain your reasoning. Are there specific milestones that need to be accomplished?
- Q2: How important do you think the accomplishment of intimacy vs. isolation is? Can a person lead a happy life without finding a significant other? Explain using examples from your life supported by information from the reading.

**STEP 1**: First, write a response with at least EIGHT substantial sentences, integrating concepts you learned from the reading and other materials (include links with necessary). Show that you can think critically on the topic by integrating your own thoughts, analysis, or experiences.

**STEP 2**: Then return to the discussion to comment on at least TWO classmates' posts (in at least FIVE sentences). Expand on a classmate's comments in a value-adding, topic-related way. Promote a collaborative, supportive community, and advance the dialogue through follow-up questions. Reply posts cannot be one-liners, off-topic posts, vague statements, unsupported opinions, inadequate explanations or simply say, "I agree" or "good job."

## Contributors and Attributions

CC licensed content, Shared previously

- Discussion: Early Adulthood. **Authored by**: Julie Lazzara for Lumen Learning. **Provided by**: Lumen Learning. **License**: *CC BY: Attribution*

Public domain content

- **License**: *Public Domain: No Known Copyright*

This page titled 15.12.17: Discussion- Early Adulthood is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 8.17: Discussion- Early Adulthood by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.12.18: Assignment- Emerging Adulthood in the Media

**STEP 1**: Give an example of a character from a movie or a television show that is likely in the stage of emerging adulthood. Find a short clip from YouTube with a scene that shows a character that is roughly between the ages of 18 to 25 that is going through at least one of the five distinctive features of emerging adulthood.

**STEP 2**: Post the URL to your chosen clip and your explanation as to why you believe this character is in the stage of emerging adulthood to this discussion board. Be sure to cite the text when discussing the features of emerging adulthood. Your post should be between 300 to 500 words. Post early because once a character has been selected by a student, it cannot be used again.

*Sample Grading Rubric*

| Criteria | Proficient | Developing | Not Evident | Points |
|---|---|---|---|---|
| Presents a coherent post between 300-500 words | Writes in clear, descriptive sentences with no or few grammatical errors. The post is well organized and complete. | Does not provide enough detail in the post or contains several grammatical errors. | Incomplete post or difficult to understand. | __/5 |
| Correctly identifies a character in the stage of emerging adulthood that has not been used before and includes the URL to the clip. | Correctly identifies a character that has not previously been posted in the stage of emerging adulthood. Includes a working URL to the video clip. | Correctly identifies a character in emerging adulthood, but does not provide a working URL to the clip. | Identifies a character that has already been discussed in the class or does not correctly identify a character in the emerging adulthood stage. | __/5 |
| Explains the connection with the text and includes at least one of the five distinct features of emerging adulthood | Makes a strong connection between the chosen character, at least one distinct feature of emerging adulthood, and the relevant topics that were presented in the text. Gives citation from the text. | Makes a weak connection between the chosen character and the relevant topics that were presented in the text. May not include text citation. | Does not back up the choice of the character with any relevant information from the text. Does not include text citation. | __/5 |
| | | | **Total:** | __/15 |

## Contributors and Attributions

CC licensed content, Original

- Discussion: Emerging Adulthood in the Media. **Authored by**: Julie Lazzara for Lumen Learning. **Provided by**: Lumen Learning. **License**: *CC BY: Attribution*

This page titled 15.12.18: Assignment- Emerging Adulthood in the Media is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 8.18: Assignment- Emerging Adulthood in the Media by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.12.19: Discussion- Dating and Marriage Interview Assignment

**STEP 1**: Find a married couple between the ages of 20 and 40 who is unrelated to you to interview. Keep their information confidential by using pseudonyms. **Include a short introduction detailing their gender, approximate age, occupational status, and cultural background.** If your interviewees are willing to be recorded for the interview (and they understand their videos will be shared and no longer anonymous), you may include the video or audio recording, although this step is not required.

Ask them the following questions, plus **add in at least two** of your own questions and responses. Ask each person in the couple to respond separately to each question. Ask probing questions, and write the responses in as much detail as possible, so that your classmates can get a good feel and understanding for this couple's relationship.

1. How did you meet? What attracted you to each other?
2. Were you in other serious relationships prior to your marriage?
3. How long did you date? What was a typical date like?
4. When did you decide to get married? Did you live together first?
5. What do you do together for fun?
6. Describe each of your roles in the relationship. How did you come to have these roles?
7. What are your biggest arguments about in your relationship?
8. Do you have children? If you do, how did you make the decision to have children and how has having children changed your marriage?
9. Do you work? How do work responsibilities impact your family life?
10. What is the biggest strength of your relationship?
11.
12.

**STEP 2**: Post the interview and responses to the discussion forum.

**STEP 3**: After looking at your own interview and the others posted, pick at least one other interview to compare with your own. Focus on these two as you write a post between 250 and 500 words discussing what you've learned from these interviews. Compare and contrast the two marriages. Do you see any patterns? How does gender affect some of the answers? What did you learn? Were there any answers that surprised you? How do the responses in the interview tie in with or confirm the things you learned about in this module?

**STEP 4**: Return to the discussion to comment on at least ONE other post (in at least FIVE sentences). Expand on a classmate's post in a value-adding, topic-related way. Promote a collaborative, supportive community, and advance the dialogue through follow-up questions. Reply posts cannot be one-liners, off-topic posts, vague statements, unsupported opinions, inadequate explanations or simply say, "I agree" or "good job."

*Sample Grading Rubric*

| Criteria | Proficient | Developing | Not Evide |
|---|---|---|---|
| Presents a coherent post between 250-500 words | Writes in clear, descriptive sentences with no or few grammatical errors. The post is well organized and complete, and addresses observations and trends from the interviews. | Does not provide enough detail in the post about connections and observations from the interview, or post contains several grammatical errors. | Incomplet |
| Shares complete interview of the married couple | Copies and pastes the entire interview in the discussion board, and it includes two original questions. | Shares a partial interview or does not share enough detail in the interview responses. | Does not i only yes o |

| | | | |
|---|---|---|---|
| Posts at least one reply to the discussion | Posts a value-adding and related comment that contributes to discussion about marriage and early adulthood. | Includes a weak or off-topic comment on another post. | Does not p that contri early adult |
| | | | |

## Contributors and Attributions

CC licensed content, Original

- Dating and Marriage Interview. **Authored by**: Nancee Ott. **License**: *CC BY: Attribution*
- Modification, adaptation, and original content. **Provided by**: Lumen Learning. **License**: *CC BY: Attribution*

This page titled 15.12.19: Discussion- Dating and Marriage Interview Assignment is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 8.19: Discussion- Dating and Marriage Interview Assignment by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.12.20: Assignment- My Development Journal

**STEP 1**: Consider the following questions as you reflect on your developmental experiences.

1. Think back to your elementary and junior high years. How would you describe your social competence and friendships?
2. Body image is an important part of your self-esteem and is especially true during adolescence. Because of the rapid changes taking place, many adolescents are dissatisfied with their bodies. Think back to high school. How did you feel about your body? Try to imagine yourself on a typical day in high school. Compared to others, how did you feel about your: height, weight, breasts, muscles, ears, hips, legs, nose, hair, eyes, face, clothes, posture, nails, athletic ability, skin, teeth, smile, sexuality, and overall body? How do you think these early adolescent feelings have affected how you feel about yourself now?
3. Now reflect on your adulthood experience. How do your feelings now contrast with your experiences in high school? How are your attitudes the same or different? How are your relationships the same or different? Do you plan to get married or are you already married or in a relationship? Do you have any children?
4. What are your goals? When did you decide to go to college and why did you choose this college? Is this your first time in college? What difficulties are you experiencing? Is college like what you expected it to be; how is it different?

**STEP 2**: Submit your assignment as **either** detailed responses to the five questions, OR as a reflection essay (between 400-600 words) that describes your experiences through life.

*Sample Grading Rubric*

| Criteria | Proficient | Developing | Not Evident | Points |
|---|---|---|---|---|
| Complete response | Writes in clear, descriptive sentences with no or few grammatical errors. Answers responses correctly and appropriately. | Does not provide enough detail in the responses, or responds incorrectly. | Incomplete responses or difficult to understand or follow. | __/5 |
| Personal reflection | Shows personal reflection and includes examples from own experiences. | Demonstrates some personal reflection but is not thorough. | Does not include personal reflection or demonstrate understanding of the material. | __/5 |
| | | | **Total:** | __/10 |

## Contributors and Attributions

CC licensed content, Original

- Assignment: My Development Journal. **Authored by**: Nancee Ott. **License**: *CC BY: Attribution*
- Modification, adaptation, and original content. **Provided by**: Lumen Learning. **License**: *CC BY: Attribution*

This page titled 15.12.20: Assignment- My Development Journal is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 8.20: Assignment- My Development Journal by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.13: RESEARCH METHODS


**15.13.1: Introduction to Research in Lifespan Development**

**15.13.2: Research Methods**

**15.13.3: Correlational and Experimental Research**

**15.13.4: Developmental Research Designs**

**15.13.5: Challenges Conducting Developmental Research**

**15.13.6: Conducting Ethical Research**

**15.13.7: Extras - Keep/Delete**

15.13.7.1: Research Methods

15.13.7.2: Research Designs

15.13.7.3: Developmental Research Designs

15.13.7.4: The Cohort Effect


This page titled 15.13: Research Methods is shared under a license and was authored, remixed, and/or curated by LibreTexts.

# 15.13.1: Introduction to Research in Lifespan Development

## What you'll learn to do: examine how to do research in lifespan development



How do we know what changes and stays the same (and when and why) in lifespan development? We rely on research that utilizes the scientific method so that we can have confidence in the findings. How data are collected may vary by age group and by the type of information sought. The developmental design (for example, following individuals as they age over time or comparing individuals of different ages at one point in time) will affect the data and the conclusions that can be drawn from them about actual age changes. What do you think are the particular challenges or issues in conducting developmental research, such as with infants and children? Read on to learn more.

## Contributors and Attributions

CC licensed content, Shared previously

- Business. **Authored by**: rawpixel. **Located at**: https://pixabay.com/images/id-3295556/. **License**: *CC0: No Rights Reserved*
- Introduction to Research in Lifespan Development. **Authored by**: Margaret Clark-Plaskie for Lumen Learning. **Provided by**: Lumen Learning. **License**: *CC BY: Attribution*

This page titled 15.13.1: Introduction to Research in Lifespan Development is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 1.7: Introduction to Research in Lifespan Development by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.13.2: Research Methods

**Learning Outcomes**

- Describe methods for collecting research data (including observation, survey, case study, content analysis, and secondary content analysis)

We have just learned about some of the various models and objectives of research in lifespan development. Now we'll dig deeper to understand the methods and techniques used to describe, explain, or evaluate behavior.

All types of research methods have unique strengths and weaknesses, and each method may only be appropriate for certain types of research questions. For example, studies that rely primarily on observation produce incredible amounts of information, but the ability to apply this information to the larger population is somewhat limited because of small sample sizes. Survey research, on the other hand, allows researchers to easily collect data from relatively large samples. While this allows for results to be generalized to the larger population more easily, the information that can be collected on any given survey is somewhat limited and subject to problems associated with any type of self-reported data. Some researchers conduct archival research by using existing records. While this can be a fairly inexpensive way to collect data that can provide insight into a number of research questions, researchers using this approach have no control on how or what kind of data was collected.

## Types of Descriptive Research

### Observation

**Observational studies**, also called naturalistic observation, involve watching and recording the actions of participants. This may take place in the natural setting, such as observing children at play in a park, or behind a one-way glass while children are at play in a laboratory playroom. The researcher may follow a checklist and record the frequency and duration of events (perhaps how many conflicts occur among 2-year-olds) or may observe and record as much as possible about an event as a participant (such as attending an Alcoholics Anonymous meeting and recording the slogans on the walls, the structure of the meeting, the expressions commonly used, etc.). The researcher may be a participant or a non-participant. What would be the strengths of being a participant? What would be the weaknesses?

In general, observational studies have the strength of allowing the researcher to see how people behave rather than relying on self-report. One weakness of self-report studies is that what people do and what they say they do are often very different. A major weakness of observational studies is that they do not allow the researcher to explain causal relationships. Yet, observational studies are useful and widely used when studying children. It is important to remember that most people tend to change their behavior when they know they are being watched (known as the **Hawthorne effect**) and children may not survey well.

### Case Studies

**Case studies** involve exploring a single case or situation in great detail. Information may be gathered with the use of observation, interviews, testing, or other methods to uncover as much as possible about a person or situation. Case studies are helpful when investigating unusual situations such as brain trauma or children reared in isolation. And they are often used by clinicians who conduct case studies as part of their normal practice when gathering information about a client or patient coming in for treatment. Case studies can be used to explore areas about which little is known and can provide rich detail about situations or conditions. However, the findings from case studies cannot be generalized or applied to larger populations; this is because cases are not randomly selected and no control group is used for comparison. (Read *The Man Who Mistook His Wife for a Hat* by Dr. Oliver Sacks as a good example of the case study approach.)



Figure 1. A survey is a common tool for collecting research data.

## Surveys

**Surveys** are familiar to most people because they are so widely used. Surveys enhance accessibility to subjects because they can be conducted in person, over the phone, through the mail, or online. A survey involves asking a standard set of questions to a group of subjects. In a highly structured survey, subjects are forced to choose from a response set such as "strongly disagree, disagree, undecided, agree, strongly agree"; or "0, 1-5, 6-10, etc." Surveys are commonly used by sociologists, marketing researchers, political scientists, therapists, and others to gather information on many variables in a relatively short period of time. Surveys typically yield surface information on a wide variety of factors, but may not allow for an in-depth understanding of human behavior.

Of course, surveys can be designed in a number of ways. They may include forced-choice questions and semi-structured questions in which the researcher allows the respondent to describe or give details about certain events. One of the most difficult aspects of designing a good survey is wording questions in an unbiased way and asking the right questions so that respondents can give a clear response rather than choosing "undecided" each time. Knowing that 30% of respondents are undecided is of little use! So a lot of time and effort should be placed on the construction of survey items. One of the benefits of having forced-choice items is that each response is coded so that the results can be quickly entered and analyzed using statistical software. The analysis takes much longer when respondents give lengthy responses that must be analyzed in a different way. Surveys are useful in examining stated values, attitudes, opinions, and reporting on practices. However, they are based on self-report, or what people say they do rather than on observation, and this can limit accuracy. **Validity** refers to accuracy and **reliability** refers to consistency in responses to tests and other measures; great care is taken to ensure the validity and reliability of surveys.

watch it

In this video, Harvard psychologist Dan Gilbert explains survey research that was conducted to explore the way our preferences change over time.



A YouTube element has been excluded from this version of the text. You can view it online here: http://pb.libretexts.org/lsdm/?p=64

You can view the transcript for “The psychology of your future self | Dan Gilbert” here (opens in new window).

## Content Analysis

**Content analysis** involves looking at media such as old texts, pictures, commercials, lyrics or other materials to explore patterns or themes in culture. An example of content analysis is the classic history of childhood by Aries (1962) called “Centuries of Childhood” or the analysis of television commercials for sexual or violent content or for ageism. Passages in text or television programs can be randomly selected for analysis as well. Again, one advantage of analyzing work such as this is that the researcher does not have to go through the time and expense of finding respondents, but the researcher cannot know how accurately the media reflects the actions and sentiments of the population.

**Secondary content analysis,** or archival research, involves analyzing information that has already been collected or examining documents or media to uncover attitudes, practices or preferences. There are a number of data sets available to those who wish to conduct this type of research. The researcher conducting secondary analysis does not have to recruit subjects but does need to know the quality of the information collected in the original study. And unfortunately, the researcher is limited to the questions asked and data collected originally.

### Link to Learning

U.S. Census Data is available and widely used to look at trends and changes taking place in the United States (visit the United States Census website and check it out). There are also a number of other agencies that collect data on family life, sexuality, and on many other areas of interest in human development (go to the NORC at the University of Chicago website or the Henry J Kaiser Family Foundation website and see what you find.).

### Try It

https://assessments.lumenlearning.co...essments/16502

glossary

*case study available at the end of this section.*

*content analysis available at the end of this section.*

*Hawthorne effect available at the end of this section.*

*observational studies available at the end of this section.*

*reliability available at the end of this section.*

*secondary content analysis available at the end of this section.*

*survey available at the end of this section.*

*validity available at the end of this section.*

## Contributors and Attributions

CC licensed content, Shared previously

- Psyc 200 Lifespan Psychology. **Authored by**: Laura Overstreet. **Located at**: http://opencourselibrary.org/econ-201/. **License**: *CC BY: Attribution*
- magnifying glass. **Authored by**: nachar. **Located at**: https://pixabay.com/en/magnifying-glass-magnifier-glass-189254/. **License**: *CC0: No Rights Reserved*
- Survey. **Authored by**: Andreas Breitling. **Located at**: https://pixabay.com/images/id-1594962/. **License**: *CC0: No Rights Reserved*

All rights reserved content

- The psychology of your future self | Dan Gilbert. **Provided by**: TED. **Located at**: https://www.youtube.com/watch?v=XNbaR54Gpj4. **License**: *Other*. **License Terms**: Standard YouTube License

### Answers

**glossary**
exploring a single case or situation in great detail. Information may be gathered with the use of observation, interviews, testing, or other methods to uncover as much as possible about a person or situation

**glossary**
involves looking at media such as old texts, pictures, commercials, lyrics or other materials to explore patterns or themes in culture

**glossary**
individuals tend to change their behavior when they know they are being watched

**glossary**
also called naturalistic observation, involves watching and recording the actions of participants

**glossary**
when something yields consistent results

**glossary**
archival research, involves analyzing information that has already been collected or examining documents or media to uncover attitudes, practices or preferences

**glossary**
asking a standard set of questions to a group of subjects

**glossary**
when something yields accurate results

This page titled 15.13.2: Research Methods is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 1.9: Research Methods by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.13.3: Correlational and Experimental Research

**Learning Outcomes**

- Explain correlational research
- Describe the value of experimental research

## Correlational Research

When scientists passively observe and measure phenomena it is called **correlational research**. Here, researchers do not intervene and change behavior, as they do in experiments. In correlational research, the goal is to identify patterns of relationships, but not cause and effect. Importantly, with correlational research, you can examine only two variables at a time, no more and no less.

So, what if you wanted to test whether spending money on others is related to happiness, but you don't have $20 to give to each participant in order to have them spend it for your experiment? You could use a correlational design—which is exactly what Professor Elizabeth Dunn (2008) at the University of British Columbia did when she conducted research on spending and happiness. She asked people how much of their income they spent on others or donated to charity, and later she asked them how happy they were. Do you think these two variables were related? Yes, they were! The more money people reported spending on others, the happier they were.

### Understanding Correlation

To find out how well two variables correlate, you can plot the relationship between the two scores on what is known as a **scatterplot**. In the scatterplot, each dot represents a data point. (In this case it's individuals, but it could be some other unit.) Importantly, each dot provides us with two pieces of information—in this case, information about how good the person rated the past month (x-axis) and how happy the person felt in the past month (y-axis). Which variable is plotted on which axis does not matter.

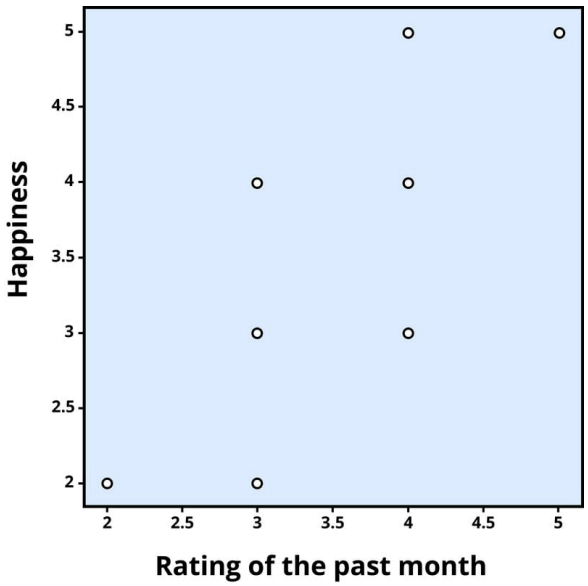



Figure 1. Scatterplot of the association between happiness and ratings of the past month, a positive correlation (r = .81). Each dot represents an individual.

The association between two variables can be summarized statistically using the **correlation coefficient** (abbreviated as r). A correlation coefficient provides information about the direction and strength of the association between two variables. For the

example above, the direction of the association is positive. This means that people who perceived the past month as being good reported feeling more happy, whereas people who perceived the month as being bad reported feeling less happy.

With a **positive correlation**, the two variables go up or down together. In a scatterplot, the dots form a pattern that extends from the bottom left to the upper right (just as they do in Figure 1). The r value for a positive correlation is indicated by a positive number (although, the positive sign is usually omitted). Here, the r value is .81.

A **negative correlation** is one in which the two variables move in opposite directions. That is, as one variable goes up, the other goes down. Figure 2 shows the association between the average height of males in a country (y-axis) and the pathogen prevalence (or commonness of disease; x-axis) of that country. In this scatterplot, each dot represents a country. Notice how the dots extend from the top left to the bottom right. What does this mean in real-world terms? It means that people are shorter in parts of the world where there is more disease. The r value for a negative correlation is indicated by a negative number—that is, it has a minus (–) sign in front of it. Here, it is –.83.

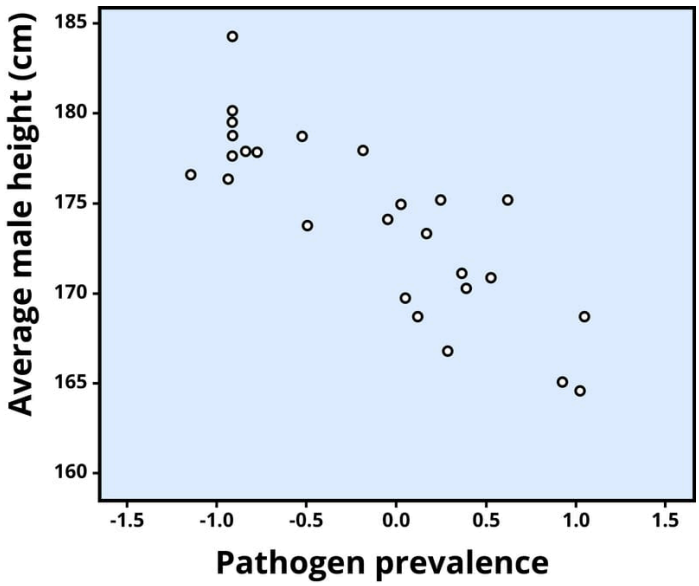



Figure 2. Scatterplot showing the association between average male height and pathogen prevalence, a negative correlation (r = –.83). Each dot represents a country (Chiao, 2009).

The strength of a correlation has to do with how well the two variables align. Recall that in Professor Dunn's correlational study, spending on others positively correlated with happiness; the more money people reported spending on others, the happier they reported to be. At this point you may be thinking to yourself, I know a very generous person who gave away lots of money to other people but is miserable! Or maybe you know of a very stingy person who is happy as can be. Yes, there might be exceptions. If an association has many exceptions, it is considered a weak correlation. If an association has few or no exceptions, it is considered a strong correlation. A strong correlation is one in which the two variables always, or almost always, go together. In the example of happiness and how good the month has been, the association is strong. The stronger a correlation is, the tighter the dots in the scatterplot will be arranged along a sloped line.

The r value of a strong correlation will have a high absolute value (a perfect correlation has an absolute value of the whole number one, or 1.00). In other words, you disregard whether there is a negative sign in front of the r value, and just consider the size of the numerical value itself. If the absolute value is large, it is a strong correlation. A weak correlation is one in which the two variables correspond some of the time, but not most of the time. Figure 3 shows the relation between valuing happiness and grade point average (GPA). People who valued happiness more tended to earn slightly lower grades, but there were lots of exceptions to this. The r value for a weak correlation will have a low absolute value. If two variables are so weakly related as to be unrelated, we say they are uncorrelated, and the r value will be zero or very close to zero. In the previous example, is the correlation between height and pathogen prevalence strong? Compared to Figure 3, the dots in Figure 2 are tighter and less dispersed. The absolute value of –.83 is large (closer to one than to zero). Therefore, it is a strong negative correlation.




Figure 3. Scatterplot showing the association between valuing happiness and GPA, a weak negative correlation (r = –.32). Each dot represents an individual.

## Problems with correlation

If generosity and happiness are positively correlated, should we conclude that being generous causes happiness? Similarly, if height and pathogen prevalence are negatively correlated, should we conclude that disease causes shortness? From a correlation alone, we can't be certain. For example, in the first case, it may be that happiness causes generosity, or that generosity causes happiness. Or, a third variable might cause both happiness and generosity, creating the illusion of a direct link between the two. For example, wealth could be the third variable that causes both greater happiness and greater generosity. This is why correlation does not mean causation—an often repeated phrase among psychologists.

watch it

In this video, University of Pennsylvania psychologist and bestselling author, Angela Duckworth describes the correlational research that informed her understanding of grit.



A TED element has been excluded from this version of the text. You can view it online here: http://pb.libretexts.org/lsdm/?p=66

You can view the transcript for "Grit: The power of passion and perseverance | Angela Lee Duckworth" here (opens in new window).

**link to learning**

Click through this interactive presentation to examine actual research studies.

A link to an interactive elements can be found at the bottom of this page.

**Try It**

https://assessments.lumenlearning.co...essments/16503

# Experimental Research

**Experiments** are designed to test **hypotheses** (or specific statements about the relationship between **variables**) in a controlled setting in efforts to explain how certain factors or events produce outcomes. A variable is anything that changes in value. Concepts are **operationalized** or transformed into variables in research which means that the researcher must specify exactly what is going to be measured in the study. For example, if we are interested in studying marital satisfaction, we have to specify what marital satisfaction really means or what we are going to use as an indicator of marital satisfaction. What is something measurable that would indicate some level of marital satisfaction? Would it be the amount of time couples spend together each day? Or eye contact during a discussion about money? Or maybe a subject's score on a marital satisfaction scale? Each of these is measurable but these may not be equally valid or accurate indicators of marital satisfaction. What do you think? These are the kinds of considerations researchers must make when working through the design.

The experimental method is the only research method that can measure cause and effect relationships between variables. Three conditions must be met in order to establish cause and effect. Experimental designs are useful in meeting these conditions:

- *The independent and dependent variables must be related.* In other words, when one is altered, the other changes in response. The **independent variable** is something altered or introduced by the researcher; sometimes thought of as the treatment or intervention. The **dependent variable** is the outcome or the factor affected by the introduction of the independent variable; the dependent variable *depends* on the independent variable. For example, if we are looking at the impact of exercise on stress levels, the independent variable would be exercise; the dependent variable would be stress.
- *The cause must come before the effect.* Experiments measure subjects on the dependent variable before exposing them to the independent variable (establishing a baseline). So we would measure the subjects' level of stress before introducing exercise and then again after the exercise to see if there has been a change in stress levels. (Observational and survey research does not always allow us to look at the timing of these events which makes understanding causality problematic with these methods.)
- *The cause must be isolated.* The researcher must ensure that no outside, perhaps unknown variables, are actually causing the effect we see. The experimental design helps make this possible. In an experiment, we would make sure that our subjects' diets were held constant throughout the exercise program. Otherwise, the diet might really be creating a change in stress level rather than exercise.

A basic experimental design involves beginning with a sample (or subset of a population) and randomly assigning subjects to one of two groups: the **experimental group** or the **control group**. Ideally, to prevent bias, the participants would be blind to their condition (not aware of which group they are in) and the researchers would also be blind to each participant's condition (referred to as "**double blind**"). The experimental group is the group that is going to be exposed to an independent variable or condition the researcher is introducing as a potential cause of an event. The control group is going to be used for comparison and is going to have the same experience as the experimental group but will not be exposed to the independent variable. This helps address the placebo effect, which is that a group may expect changes to happen just by participating. After exposing the experimental group to the independent variable, the two groups are measured again to see if a change has occurred. If so, we are in a better position to suggest that the **independent variable** caused the change in the **dependent variable**. The basic experimental model looks like this:

*Table 1. Variables and Experimental and Control Groups*

| **Sample is randomly assigned to one of the groups below:** | **Measure DV** | **Introduce** |
|---|---|---|
| Experimental Group | X | X |
| Control Group | X | – |

The major advantage of the experimental design is that of helping to establish cause and effect relationships. A disadvantage of this design is the difficulty of translating much of what concerns us about human behavior into a laboratory setting.

## Link to Learning

Have you ever wondered why people make decisions that seem to be in opposition to their longterm best interest? In Eldar Shafir's TED Talk Living Under Scarcity, Shafir describes a series of experiments that shed light on how scarcity (real or perceived) affects our decisions.

## Try It

https://assessments.lumenlearning.co...essments/16504

https://assessments.lumenlearning.co...essments/16505

https://assessments.lumenlearning.co...essments/16506

https://assessments.lumenlearning.co...essments/16507
https://assessments.lumenlearning.co...essments/16508

## Glossary

*control group available at the end of this section.*

*correlation available at the end of this section.*

*correlation coefficient available at the end of this section.*

*correlational research available at the end of this section.*

*dependent variable available at the end of this section.*

*double-blind available at the end of this section.*

*experimental group available at the end of this section.*

*experiments available at the end of this section.*

*hypotheses available at the end of this section.*

*independent variable available at the end of this section.*

*negative correlation available at the end of this section.*

*operationalized available at the end of this section.*

*positive correlation available at the end of this section.*

*scatterplot available at the end of this section.*

*variables available at the end of this section.*

## Contributors and Attributions

CC licensed content, Original

- Modification, adaptation, and original content. **Provided by**: Lumen Learning. **License**: *CC BY-NC-SA: Attribution-NonCommercial-ShareAlike*

CC licensed content, Shared previously

- Psyc 200 Lifespan Psychology. **Authored by**: Laura Overstreet. **Located at**: http://opencourselibrary.org/econ-201/. **License**: *CC BY: Attribution*
- Research Designs. **Authored by**: Christie Napa Scollon. **Provided by**: Singapore Management University. **Project**: The Noba Project. **License**: *CC BY-NC-SA: Attribution-NonCommercial-ShareAlike*
- Vocabulary and review about correlational research. **Provided by**: Lumen Learning. **Located at**: https://courses.lumenlearning.com/waymaker-psychology/wp-admin/post.php?post=1848&action=edit. **License**: *CC BY: Attribution*

All rights reserved content

- Grit: The power of passion and perseverance. **Authored by**: Angela Lee Duckworth. **Provided by**: TED. **Located at**: https://www.ted.com/talks/angela_lee_duckworth_grit_the_power_of_passion_and_perseverance. **License**: *CC BY-NC-ND: Attribution-NonCommercial-NoDerivatives*

## Answers

**Glossary**
a comparison group that is equivalent to the experimental group, but is not given the independent variable

**Glossary**
the relationship between two or more variables; when two variables are correlated, one variable changes as the other does

**Glossary**
number from -1 to +1, indicating the strength and direction of the relationship between variables, and usually represented by r

**Glossary**
research design with the goal of identifying patterns of relationships, but not cause and effect

**Glossary**
the outcome or variable that is supposedly affected by the independent variable

**Glossary**
a research design in which neither the participants nor the researchers know whether an individual is assigned to the experimental group or the control group

**Glossary**
the group of participants in an experiment who receive the independent variable

**Glossary**
designed to test hypotheses in a controlled setting in efforts to explain how certain factors or events produce outcomes; the only research method that measures cause and effect relationships between variables

**Glossary**

specific statements or predictions about the relationship between variables

**Glossary**

something that is manipulated or introduced by the researcher to the experimental group; treatment or intervention

**Glossary**

two variables change in different directions, with one becoming larger as the other becomes smaller; a negative correlation is not the same thing as no correlation

**Glossary**

concepts transformed into variables that can be measured in research

**Glossary**

two variables change in the same direction, both becoming either larger or smaller

**Glossary**

a plot or mathematical diagram consisting of data points that represent two variables

**Glossary**

factors that change in value

This page titled 15.13.3: Correlational and Experimental Research is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 1.10: Correlational and Experimental Research by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.13.4: Developmental Research Designs

**Learning Outcomes**

- Compare advantages and disadvantages of developmental research designs (cross-sectional, longitudinal, and sequential)

Now you know about some tools used to conduct research about human development. Remember, *research methods* are tools that are used to collect information. But it is easy to confuse research methods and research design. **Research design** is the strategy or blueprint for deciding how to collect and analyze information. Research design dictates which methods are used and how. Developmental research designs are techniques used particularly in lifespan development research. When we are trying to describe development and change, the research designs become especially important because we are interested in what changes and what stays the same with age. These techniques try to examine how age, cohort, gender, and social class impact development.

## Cross-sectional designs

The majority of developmental studies use cross-sectional designs because they are less time-consuming and less expensive than other developmental designs. **Cross-sectional research** designs are used to examine behavior in participants of different ages who are tested at the same point in time. Let's suppose that researchers are interested in the relationship between intelligence and aging. They might have a hypothesis (an educated guess, based on theory or observations) that intelligence declines as people get older. The researchers might choose to give a certain intelligence test to individuals who are 20 years old, individuals who are 50 years old, and individuals who are 80 years old at the same time and compare the data from each age group. This research is cross-sectional in design because the researchers plan to examine the intelligence scores of individuals of different ages within the same study at the same time; they are taking a "cross-section" of people at one point in time. Let's say that the comparisons find that the 80-year-old adults score lower on the intelligence test than the 50-year-old adults, and the 50-year-old adults score lower on the intelligence test than the 20-year-old adults. Based on these data, the researchers might conclude that individuals become less intelligent as they get older. Would that be a valid (accurate) interpretation of the results?

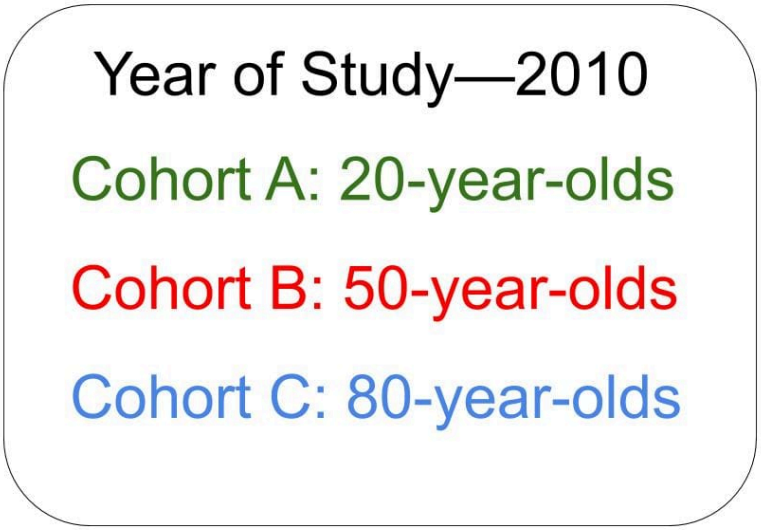



Figure 1. Example of cross-sectional research design

No, that would not be a valid conclusion because the researchers did not follow individuals as they aged from 20 to 50 to 80 years old. One of the primary limitations of cross-sectional research is that the results yield information about age *differences* not necessarily *changes* with age or over time. That is, although the study described above can show that in 2010, the 80-year-olds scored lower on the intelligence test than the 50-year-olds, and the 50-year-olds scored lower on the intelligence test than the 20-year-olds, the data used to come up with this conclusion were collected from different individuals (or groups of individuals).

It could be, for instance, that when these 20-year-olds get older (50 and eventually 80), they will still score just as high on the intelligence test as they did at age 20. In a similar way, maybe the 80-year-olds would have scored relatively low on the intelligence test even at ages 50 and 20; the researchers don't know for certain because they did not follow the same individuals as they got older.

It is also possible that the differences found between the age groups are not due to age, per se, but due to cohort effects. The 80-year-olds in this 2010 research grew up during a particular time and experienced certain events as a group. They were born in 1930 and are part of the Traditional or Silent Generation. The 50-year-olds were born in 1960 and are members of the Baby Boomer cohort. The 20-year-olds were born in 1990 and are part of the Millennial or Gen Y Generation. What kinds of things did each of these cohorts experience that the others did not experience or at least not in the same ways?

You may have come up with many differences between these cohorts' experiences, such as living through certain wars, political and social movements, economic conditions, advances in technology, changes in health and nutrition standards, etc. There may be particular cohort differences that could especially influence their performance on intelligence tests, such as education level and use of computers. That is, many of those born in 1930 probably did not complete high school; those born in 1960 may have high school degrees, on average, but the majority did not attain college degrees; the young adults are probably current college students. And this is not even considering additional factors such as gender, race, or socioeconomic status. The young adults are used to taking tests on computers, but the members of the other two cohorts did not grow up with computers and may not be as comfortable if the intelligence test is administered on computers. These factors could have been a factor in the research results.

Another disadvantage of cross-sectional research is that it is limited to one time of measurement. Data are collected at one point in time and it's possible that something could have happened in that year in history that affected all of the participants, although possibly each cohort may have been affected differently. Just think about the mindsets of participants in research that was conducted in the United States right after the terrorist attacks on September 11, 2001.

## Longitudinal research designs



Figure 2. Longitudinal research studies the same person or group of people over an extended period of time.

**Longitudinal research** involves beginning with a group of people who may be of the same age and background (cohort) and measuring them repeatedly over a long period of time. One of the benefits of this type of research is that people can be followed through time and be compared with themselves when they were younger; therefore changes with age over time are measured. What would be the advantages and disadvantages of longitudinal research? Problems with this type of research include being expensive, taking a long time, and subjects dropping out over time. Think about the film, *63 Up*, part of the Up Series mentioned earlier, which is an example of following individuals over time. In the videos, filmed every seven years, you see how people change physically, emotionally, and socially through time; and some remain the same in certain ways, too. But many of the participants really disliked being part of the project and repeatedly threatened to quit; one disappeared for several years; another died before her 63rd year. Would you want to be interviewed every seven years? Would you want to have it made public for all to watch?

Longitudinal research designs are used to examine behavior in the same individuals over time. For instance, with our example of

studying intelligence and aging, a researcher might conduct a longitudinal study to examine whether 20-year-olds become less intelligent with age over time. To this end, a researcher might give an intelligence test to individuals when they are 20 years old, again when they are 50 years old, and then again when they are 80 years old. This study is longitudinal in nature because the researcher plans to study the same individuals as they age. Based on these data, the pattern of intelligence and age might look different than from the cross-sectional research; it might be found that participants' intelligence scores are higher at age 50 than at age 20 and then remain stable or decline a little by age 80. How can that be when cross-sectional research revealed declines in intelligence with age?




Figure 3. Example of a longitudinal research design

Since longitudinal research happens over a period of time (which could be short term, as in months, but is often longer, as in years), there is a risk of attrition. **Attrition** occurs when participants fail to complete all portions of a study. Participants may move, change their phone numbers, die, or simply become disinterested in participating over time. Researchers should account for the possibility of attrition by enrolling a larger sample into their study initially, as some participants will likely drop out over time. There is also something known as **selective attrition—**this means that certain groups of individuals may tend to drop out. It is often the least healthy, least educated, and lower socioeconomic participants who tend to drop out over time. That means that the remaining participants may no longer be representative of the whole population, as they are, in general, healthier, better educated, and have more money. This could be a factor in why our hypothetical research found a more optimistic picture of intelligence and aging as the years went by. What can researchers do about selective attrition? At each time of testing, they could randomly recruit more participants from the same cohort as the original members, to replace those who have dropped out.

The results from longitudinal studies may also be impacted by repeated assessments. Consider how well you would do on a math test if you were given the exact same exam every day for a week. Your performance would likely improve over time, not necessarily because you developed better math abilities, but because you were continuously practicing the same math problems. This phenomenon is known as a practice effect. Practice effects occur when participants become better at a task over time because they have done it again and again (not due to natural psychological development). So our participants may have become familiar with the intelligence test each time (and with the computerized testing administration).

Another limitation of longitudinal research is that the data are limited to only one cohort. As an example, think about how comfortable the participants in the 2010 cohort of 20-year-olds are with computers. Since only one cohort is being studied, there is no way to know if findings would be different from other cohorts. In addition, changes that are found as individuals age over time could be due to age or to time of measurement effects. That is, the participants are tested at different periods in history, so the variables of age and time of measurement could be confounded (mixed up). For example, what if there is a major shift in workplace training and education between 2020 and 2040 and many of the participants experience a lot more formal education in adulthood, which positively impacts their intelligence scores in 2040? Researchers wouldn't know if the intelligence scores increased due to growing older or due to a more educated workforce over time between measurements.

## Sequential research designs

**Sequential research** designs include elements of both longitudinal and cross-sectional research designs. Similar to longitudinal designs, sequential research features participants who are followed over time; similar to cross-sectional designs, sequential research includes participants of different ages. This research design is also distinct from those that have been discussed previously in that individuals of different ages are enrolled into a study at various points in time to examine age-related changes, development within the same individuals as they age, and to account for the possibility of cohort and/or time of measurement effects. In 1965, K. Warner Schaie[1] (a leading theorist and researcher on intelligence and aging), described particular sequential designs: cross-sequential, cohort sequential, and time-sequential. The differences between them depended on which variables were focused on for analyses of the data (data could be viewed in terms of multiple cross-sectional designs or multiple longitudinal designs or multiple cohort designs). Ideally, by comparing results from the different types of analyses, the effects of age, cohort, and time in history could be separated out.

Consider, once again, our example of intelligence and aging. In a study with a sequential design, a researcher might recruit three separate groups of participants (Groups A, B, and C). Group A would be recruited when they are 20 years old in 2010 and would

be tested again when they are 50 and 80 years old in 2040 and 2070, respectively (similar in design to the longitudinal study described previously). Group B would be recruited when they are 20 years old in 2040 and would be tested again when they are 50 years old in 2070. Group C would be recruited when they are 20 years old in 2070 and so on.

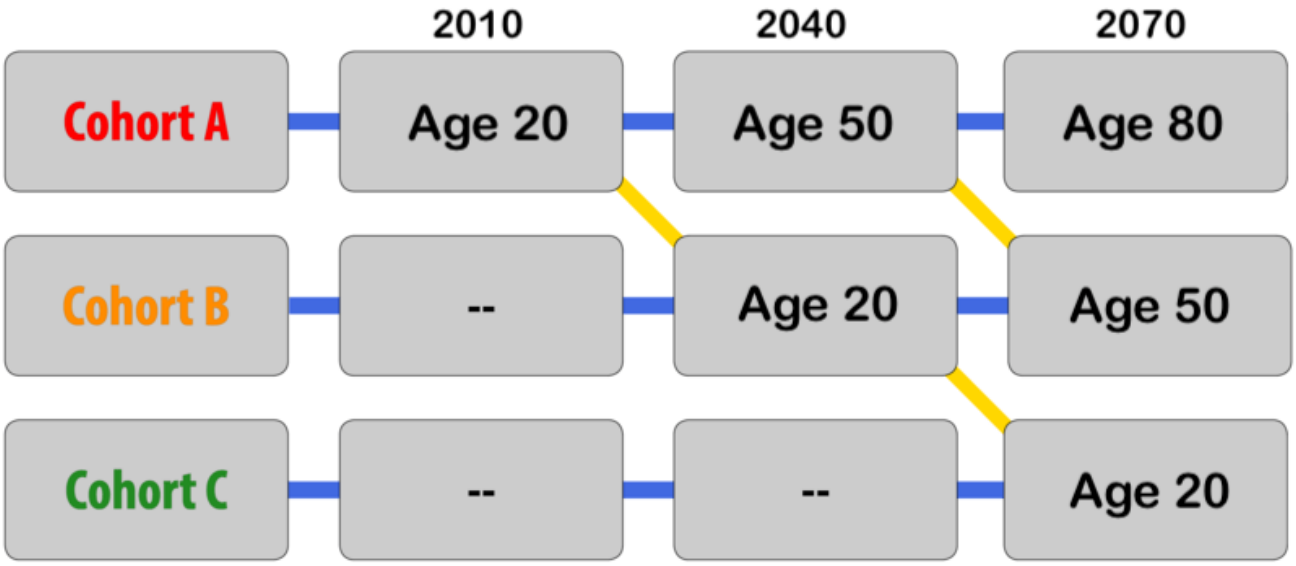



Figure 4. Example of sequential research design

Studies with sequential designs are powerful because they allow for both longitudinal and cross-sectional comparisons—changes and/or stability with age over time can be measured and compared with differences between age and cohort groups. This research design also allows for the examination of cohort and time of measurement effects. For example, the researcher could examine the intelligence scores of 20-year-olds in different times in history and different cohorts (follow the yellow diagonal lines in figure 3). This might be examined by researchers who are interested in sociocultural and historical changes (because we know that lifespan development is multidisciplinary). One way of looking at the usefulness of the various developmental research designs was described by Schaie and Baltes (1975)[2]: cross-sectional and longitudinal designs might reveal change patterns while sequential designs might identify developmental origins for the observed change patterns.

Since they include elements of longitudinal and cross-sectional designs, sequential research has many of the same strengths and limitations as these other approaches. For example, sequential work may require less time and effort than longitudinal research (if data are collected more frequently than over the 30-year spans in our example) but more time and effort than cross-sectional research. Although practice effects may be an issue if participants are asked to complete the same tasks or assessments over time, attrition may be less problematic than what is commonly experienced in longitudinal research since participants may not have to remain involved in the study for such a long period of time.

When considering the best research design to use in their research, scientists think about their main research question and the best way to come up with an answer. A table of advantages and disadvantages for each of the described research designs is provided here to help you as you consider what sorts of studies would be best conducted using each of these different approaches.

*Table 1. Advantages and disadvantages of different research designs*

| Research Design | Advantages | Disadvantages |
|---|---|---|
| Cross-Sectional | • Examines changes between participants of different ages at the same point in time<br>• Provides information on age differences | • Cannot examine change over time<br>• Limited to one time in history<br>• Cohort differences confounded with age differences |

| | | |
|---|---|---|
| Longitudinal | • Examines changes within individuals over time<br>• Provides a developmental analysis | • Expensive<br>• Takes a long time<br>• Participant attrition<br>• Possibility of practice effects<br>• Limited to one cohort<br>• Time in history effects confounded with age changes |
| Sequential | • Examines changes within individuals over time<br>• Examines changes between participants of different ages at the same point in time<br>• Can be used to examine cohort effects<br>• Can be used to examine time in history effects | • May be expensive<br>• May take a long time<br>• Possibility of practice effects<br>• Some participant attrition |

**Try It**

https://assessments.lumenlearning.co...essments/16509

**glossary**

*attrition available at the end of this section.*

*cross-sectional research available at the end of this section.*

*longitudinal research available at the end of this section.*

*research design available at the end of this section.*

*selective attrition available at the end of this section.*

*sequential research design available at the end of this section.*


1. Schaie, K.W. (1965). A general model for the study of developmental problems. Psychological Bulletin, 64(2), 92-107. mailto:/Sandboxes/lhrli@ucdavis.edu
2. Schaie, K.W. & Baltes, B.P. (1975). On sequential strategies in developmental research: Description or Explanation. Human Development, 18: 384-390. mailto:/Sandboxes/lhrli@ucdavis.edu


## Contributors and Attributions


CC licensed content, Original

- Modification, adaptation, and original content. **Authored by**: Margaret Clark-Plaskie for Lumen Learning. **Provided by**: Lumen Learning. **License**: *CC BY-NC-SA: Attribution-NonCommercial-ShareAlike*

CC licensed content, Shared previously

- Research Methods in Developmental Psychology. **Authored by**: Angela Lukowski and Helen Milojevich. **Provided by**: University of Calfornia, Irvine. **Located at**: https://nobaproject.com/modules/research-methods-in-developmental-psychology?r=LDcyNTg0. **Project**: The Noba Project. **License**: *CC BY-NC-SA: Attribution-NonCommercial-ShareAlike*
- Woman holding own photograph. **Provided by**: Pxhere. **Located at**: https://pxhere.com/en/photo/221167. **License**: *CC0: No Rights Reserved*

## Answers

**glossary**
occurs when participants fail to complete all portions of a study

**glossary**
used to examine behavior in participants of different ages who are tested at the same point in time; may confound age and cohort differences

**glossary**
studying a group of people who may be of the same age and background (cohort), and measuring them repeatedly over a long period of time; may confound age and time of measurement effects

**glossary**
the strategy or blueprint for deciding how to collect and analyze information; dictates which methods are used and how

**glossary**
certain groups of individuals may tend to drop out more frequently resulting in the remaining participants longer being representative of the whole population

**glossary**
combines aspects of cross-sectional and longitudinal designs, but also adding new cohorts at different times of measurement; allows for analyses to consider effects of age, cohort, time of measurement, and socio-historical change

This page titled 15.13.4: Developmental Research Designs is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 1.11: Developmental Research Designs by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.13.5: Challenges Conducting Developmental Research

**Learning Outcomes**

- Describe challenges associated with conducting research in lifespan development

## Challenges Associated with Conducting Developmental Research

The previous sections describe research tools to assess development across the lifespan, as well as the ways that research designs can be used to track age-related changes and development over time. Before you begin conducting developmental research, however, you must also be aware that testing individuals of certain ages (such as infants and children) or making comparisons across ages (such as children compared to teens) comes with its own unique set of challenges. In the final section of this module, let's look at some of the main issues that are encountered when conducting developmental research, namely ethical concerns, recruitment issues, and participant attrition.

### Ethical Concerns

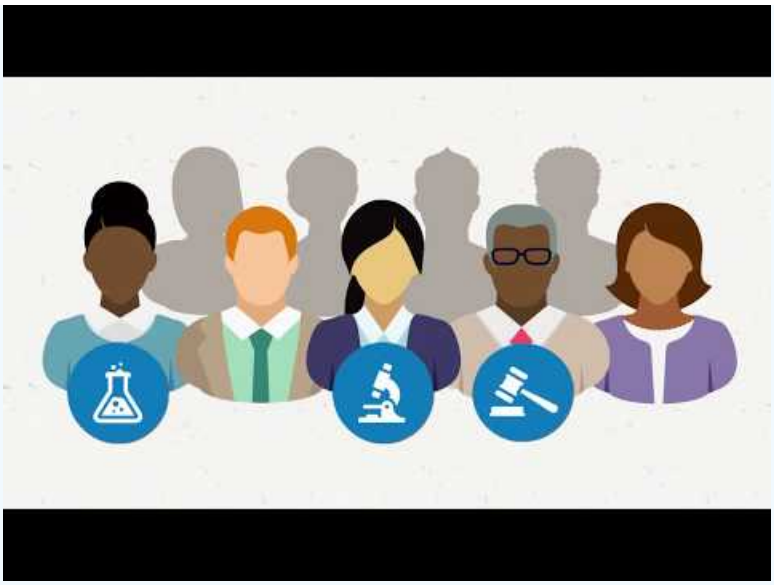
As a student of the social sciences, you may already know that **Institutional Review Boards (IRBs)** must review and approve all research projects that are conducted at universities, hospitals, and other institutions (each broad discipline or field, such as psychology or social work, often has its own code of ethics that must also be followed, regardless of institutional affiliation). An IRB is typically a panel of experts who read and evaluate proposals for research. IRB members want to ensure that the proposed research will be carried out ethically and that the potential benefits of the research outweigh the risks and potential harm (psychological as well as physical harm) for participants.

What you may not know though, is that the IRB considers some groups of participants to be more vulnerable or at-risk than others. Whereas university students are generally not viewed as vulnerable or at-risk, infants and young children commonly fall into this category. What makes infants and young children more vulnerable during research than young adults? One reason infants and young children are perceived as being at increased risk is due to their limited cognitive capabilities, which makes them unable to state their willingness to participate in research or tell researchers when they would like to drop out of a study. For these reasons, infants and young children require special accommodations as they participate in the research process. Similar issues and accommodations would apply to adults who are deemed to be of limited cognitive capabilities.

When thinking about special accommodations in developmental research, consider the **informed consent** process. If you have ever participated in scientific research, you may know through your own experience that adults commonly sign an informed consent statement (a contract stating that they agree to participate in research) after learning about a study. As part of this process, participants are informed of the procedures to be used in the research, along with any expected risks or benefits. Infants and young children cannot verbally indicate their willingness to participate, much less understand the balance of potential risks and benefits. As such, researchers are oftentimes required to obtain written informed consent from the parent or legal guardian of the child participant, an adult who is almost always present as the study is conducted. In fact, children are not asked to indicate whether they would like to be involved in a study at all (a process known as assent) until they are approximately seven years old. Because infants and young children cannot easily indicate if they would like to discontinue their participation in a study, researchers must be sensitive to changes in the state of the participant (determining whether a child is too tired or upset to continue) as well as to parent desires (in some cases, parents might want to discontinue their involvement in the research). As in adult studies, researchers must always strive to protect the rights and well-being of the minor participants and their parents when conducting developmental research.

**watch it**

This video from the US Department of Health and Human Services provides an overview of the Institutional Review Board process.



A YouTube element has been excluded from this version of the text. You can view it online here: http://pb.libretexts.org/lsdm/?p=70

You can view the transcript for "How IRBs Protect Human Research Participants" here (opens in new window).

## Recruitment

An additional challenge in developmental science is participant recruitment. Recruiting university students to participate in adult studies is typically easy. Many colleges and universities offer extra credit for participation in research and have locations such as bulletin boards and school newspapers where research can be advertised. Unfortunately, young children cannot be recruited by making announcements in Introduction to Psychology courses, by posting ads on campuses, or through online platforms such as Amazon Mechanical Turk. Given these limitations, how do researchers go about finding infants and young children to be in their studies?

The answer to this question varies along multiple dimensions. Researchers must consider the number of participants they need and the financial resources available to them, among other things. Location may also be an important consideration. Researchers who need large numbers of infants and children may attempt to recruit them by obtaining infant birth records from the state, county, or province in which they reside. Some areas make this information publicly available for free, whereas birth records must be purchased in other areas (and in some locations birth records may be entirely unavailable as a recruitment tool). If birth records are available, researchers can use the obtained information to call families by phone or mail them letters describing possible research opportunities. All is not lost if this recruitment strategy is unavailable, however. Researchers can choose to pay a recruitment agency to contact and recruit families for them. Although these methods tend to be quick and effective, they can also be quite expensive. More economical recruitment options include posting advertisements and fliers in locations frequented by families, such as mommy-and-me classes, local malls, and preschools or daycare centers. Researchers can also utilize online social media outlets like Facebook, which allows users to post recruitment advertisements for a small fee. Of course, each of these different recruitment techniques requires IRB approval. And if children are recruited and/or tested in school settings, permission would need to be obtained ahead of time from teachers, schools, and school districts (as well as informed consent from parents or guardians).

And what about the recruitment of adults? While it is easy to recruit young college students to participate in research, some would argue that it is too easy and that college students are samples of convenience. They are not randomly selected from the wider population, and they may not represent all young adults in our society (this was particularly true in the past with certain cohorts, as college students tended to be mainly white males of high socioeconomic status). In fact, in the early research on aging, this type of convenience sample was compared with another type of convenience sample—young college students tended to be compared with residents of nursing homes! Fortunately, it didn't take long for researchers to realize that older adults in nursing homes are not representative of the older population; they tend to be the oldest and sickest (physically and/or psychologically). Those initial studies probably painted an overly negative view of aging, as young adults in college were being compared to older adults who

were not healthy, had not been in school nor taken tests in many decades, and probably did not graduate high school, let alone college. As we can see, recruitment and random sampling can be significant issues in research with adults, as well as infants and children. For instance, how and where would you recruit middle-aged adults to participate in your research?

## Attrition



Figure 1. Participating in developmental research can sometimes be difficult for both children and their parents. This can contribute to a higher attrition rate than is typical in other types of research. [Image: Tina Franklin, https://goo.gl/bN19Gm, CC BY 2.0, https://goo.gl/5YbMw6]

Another important consideration when conducting research with infants and young children is **attrition**. Although attrition is quite common in longitudinal research in particular (see the previous section on longitudinal designs for an example of high attrition rates and selective attrition in lifespan developmental research), it is also problematic in developmental science more generally, as studies with infants and young children tend to have higher attrition rates than studies with adults. For example, high attrition rates in ERP (event-related potential, which is a technique to understand brain function) studies oftentimes result from the demands of the task: infants are required to sit still and have a tight, wet cap placed on their heads before watching still photographs on a computer screen in a dark, quiet room. In other cases, attrition may be due to motivation (or a lack thereof). Whereas adults may be motivated to participate in research in order to receive money or extra course credit, infants and young children are not as easily enticed. In addition, infants and young children are more likely to tire easily, become fussy, and lose interest in the study procedures than are adults. For these reasons, research studies should be designed to be as short as possible – it is likely better to break up a large study into multiple short sessions rather than cram all of the tasks into one long visit to the lab. Researchers should also allow time for breaks in their study protocols so that infants can rest or have snacks as needed. Happy, comfortable participants provide the best data.

# Conclusions

Lifespan development is a fascinating field of study – but care must be taken to ensure that researchers use appropriate methods to examine human behavior, use the correct experimental design to answer their questions, and be aware of the special challenges that are part-and-parcel of developmental research. After reading this module, you should have a solid understanding of these various issues and be ready to think more critically about research questions that interest you. For example, what types of questions do you have about lifespan development? What types of research would you like to conduct? Many interesting questions remain to be examined by future generations of developmental scientists – maybe you will make one of the next big discoveries!

Try It

https://assessments.lumenlearning.co...essments/16510

glossary

*attrition available at the end of this section.*

*informed consent available at the end of this section.*

*Institutional Review Boards (IRBs) available at the end of this section.*

## Contributors and Attributions

CC licensed content, Shared previously

- Volunteer Signs Informed Consent Form. **Authored by**: NIAID. **Located at**: https://www.flickr.com/photos/niaid/45116548901. **License**: *CC BY: Attribution*
- Research Methods in Developmental Psychology. **Authored by**: Angela Lukowski and Helen Milojevich. **Provided by**: University of Calfornia, Irvine. **Located at**: https://nobaproject.com/modules/research-methods-in-developmental-psychology?r=LDcyNTg0. **Project**: The Noba Project. **License**: *CC BY-SA: Attribution-ShareAlike*

All rights reserved content

- Institutional Review Boards. **Provided by**: U.S. Department of Health and Human Services. **Located at**: https://www.youtube.com/watch?time_continue=196&v=U8fme1boEbE. **License**: *Other*. **License Terms**: Standard YouTube License

## Answers

**glossary**

reduction in the number of research participants as some drop out over time

**glossary**

a process of informing a research participant what to expect during a study, any risks involved, and the implications of the research, and then obtaining the person's agreement to participate

**glossary**

a panel of experts who review research proposals for any research to be conducted in association with the institution (for example, a university)

This page titled 15.13.5: Challenges Conducting Developmental Research is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 1.12: Challenges Conducting Developmental Research by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.13.6: Conducting Ethical Research

One of the issues that all scientists must address concerns the ethics of their research. Research in psychology may cause some stress, harm, or inconvenience for the people who participate in that research. Psychologists may induce stress, anxiety, or negative moods in their participants, expose them to weak electrical shocks, or convince them to behave in ways that violate their moral standards. Additionally, researchers may sometimes use animals, potentially harming them in the process.

Decisions about whether research is ethical are made using established ethical codes developed by scientific organizations, such as the American Psychological Association, and federal governments. In the United States, the Department of Health and Human Services provides the guidelines for ethical standards in research. The following are the American Psychological Association code of ethics when using humans in research (APA, 2016).

- **No Harm:** The most direct ethical concern of the scientist is to prevent harm to the research participants.
- **Informed Consent:** Researchers must obtain **informed consent**, which *explains as much as possible about the true nature of the study, particularly everything that might be expected to influence willingness to participate*. Participants can withdraw their consent to participate at any point.

  Infants and young children cannot verbally indicate their willingness to participate, much less understand the balance of potential risks and benefits. As such, researchers are oftentimes required to obtain written informed consent from the parent or legal guardian of the child participant. Further, this adult is almost always present as the study is conducted. Children are not asked to indicate whether they would like to be involved in a study until they are approximately seven years old. Because infants and young children also cannot easily indicate if they would like to discontinue their participation in a study, researchers must be sensitive to changes in the state of the participant, such as determining whether a child is too tired or upset to continue, as well as to what the parent desires. In some cases, parents might want to discontinue their involvement in the research. As in adult studies, researchers must always strive to protect the rights and wellbeing of the minor participants and their parents when conducting developmental research.
- **Confidentiality:** Researchers must also protect the privacy of the research participants' responses by not using names or other information that could identify the participants.
- **Deception: Deception** *occurs whenever research participants are not completely and fully informed about the nature of the research project before participating in it*. Deception may occur when the researcher tells the participants that a study is about one thing when in fact it is about something else, or when participants are not told about the hypothesis.
- **Debriefing:** At the end of a study **debriefing**, which is *a procedure designed to fully explain the purposes and procedures of the research and remove any harmful aftereffects of participation*, must occur.

This page titled 15.13.6: Conducting Ethical Research is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Martha Lally & Suzanne Valentine-French via source content that was edited to the style and standards of the LibreTexts platform.

- 1.10: Conducting Ethical Research by Martha Lally & Suzanne Valentine-French is licensed CC BY-NC-SA 4.0. Original source: http://dept.clcillinois.edu/psy/LifespanDevelopment.pdf.

# 15.13.7: Extras - Keep/Delete

This page titled 15.13.7: Extras - Keep/Delete is shared under a license and was authored, remixed, and/or curated by LibreTexts.

# 15.13.7.1: Research Methods

## How do we know what we know?



Figure 15.13.7.1.1

An important part of learning any science is having a basic knowledge of the techniques used in gathering information. The hallmark of scientific investigation is that of following a set of procedures designed to keep questioning or skepticism alive while describing, explaining, or testing any phenomenon. Not long ago a friend said to me that he did not trust academicians or researchers because they always seem to change their story. That, however, is exactly what science is all about; it involves continuously renewing our understanding of the subjects in question and an ongoing investigation of how and why events occur. Science is a vehicle for going on a never-ending journey. In the area of development, we have seen changes in recommendations for nutrition, in explanations of psychological states as people age, and in parenting advice. So think of learning about human development as a lifelong endeavor.

## Personal Knowledge

How do we know what we know? Take a moment to write down two things that you know about childhood...

Okay. Now, how do you know? Chances are you know these things based on your own history (experiential reality) or based on what others have told you or cultural ideas (agreement reality) (Seccombe and Warner, 2004). There are several problems with personal inquiry. Read the following sentence aloud:

Paris in the
the spring

Are you sure that is what it said? Read it again:

Paris in the
the spring

If you read it differently the second time (adding the second “the”) you just experienced one of the problems with personal inquiry; that is, the tendency to see what we believe. Our assumptions very often guide our perceptions, consequently, when we believe something, we tend to see it even if it is not there. This problem may just be a result of cognitive ‘blinders’ or it may be part of a more conscious attempt to support our own views. Confirmation bias is the tendency to look for evidence that we are right and in so doing, we ignore contradictory evidence. Popper suggests that the distinction between that which is scientific and that which

is unscientific is that science is falsifiable; scientific inquiry involves attempts to reject or refute a theory or set of assumptions (Thornton, 2005). Theory that cannot be falsified is not scientific. And much of what we do in personal inquiry involves drawing conclusions based on what we have personally experienced or validating our own experience by discussing what we think is true with others who share the same views.

Science offers a more systematic way to make comparisons guard against bias. One technique used to avoid sampling bias is to select participants for a study in a random way. This means using a technique to insure that all members have an equal chance of being selected. Simple random sampling may involve using a set of random numbers as a guide in determining who is to be selected. For example, if we have a list of 400 people and wish to randomly select a smaller group or sample to be studied, we use a list of random numbers and select the case that corresponds with that number (Case 39, 3, 217 etc.). This is preferable to asking only those individuals with whom we are familiar to participate in a study; if we conveniently chose only people we know, we know nothing about those who had no opportunity to be selected. There are many more elaborate techniques that can be used to obtain samples that represent the composition of the population we are studying. But even though a randomly selected representative sample is preferable, it is not always used because of costs and other limitations. (As a consumer of research, however, you should know how the sample was obtained and keep this in mind when interpreting results.)

## Scientific Methods

One method of scientific investigation involves the following steps:

- Determining a research question
- Reviewing previous studies addressing the topic in question (known as a literature review)
- Determining a method of gathering information
- Conducting the study
- Interpreting results
- Drawing conclusions; stating limitations of the study and suggestions for future research
- Making your findings available to others (both to share information and to have your work scrutinized by others)

Your findings can then be used by others as they explore the area of interest and through this process a literature or knowledge base is established. This model of scientific investigation presents research as a linear process guided by a specific research question. And it typically involves quantifying or using statistics to understand and report what has been studied. Many academic journals publish reports on studies conducted in this manner and a good way to become more familiar with these steps is to look at journal articles which will be written in sections that follow these steps. For example, after a section entitled “Statement of the Problem”, you might find a second section entitled, “Literature Review”. Other headings will reflect the stages of research mentioned above.

Another model of research referred to as qualitative research may involve steps such as these:

- Begin with a broad area of interest
- Gain entrance into a group to be researched
- Gather field notes about the setting, the people, the structure, the activities or other areas of interest
- Ask open ended, broad “grand tour” types of questions when interviewing subjects
- Modify research questions as study continues
- Note patterns or consistencies
- Explore new areas deemed important by the people being observed
- Report findings

In this type of research, theoretical ideas are “grounded” in the experiences of the participants. The researcher is the student and the people in the setting are the teachers as they inform the researcher of their world (Glazer & Strauss, 1967). Researchers are to be aware of their own biases and assumptions, acknowledge them and bracket them in efforts to keep them from limiting accuracy in reporting. Sometimes qualitative studies are used initially to explore a topic and more quantitative studies are used to test or explain what was first described.

## Types of Studies

Not all studies are designed to reach the same goal. **Descriptive studies** focus on describing an occurrence. Some examples of descriptive questions include:

- “How much time do parents spend with children?”
- “How many times per week do couples have intercourse?”
- “When is marital satisfaction greatest?”

**Explanatory studies** are efforts to answer the question “why” such as:

- “Why have rates of divorce leveled off?”
- “Why are teen pregnancy rates down?”

**Evaluation research** is designed to assess the effectiveness of policies or programs. For instance, a research might be designed to study the effectiveness of safety programs implemented in schools for installing car seats or fitting bicycle helmets. Do children wear their helmets? Do parents use car seats properly? If not, why not?

### Video: 49 Up (Interview with Michael Apted)

The film is the seventh film in a series of landmark documentaries that began 42 years ago when UK-based Granada’s World in Action team, inspired by the Jesuit maxim “Give me the child until he is seven and I will give you the man,” interviewed a diverse group of seven-year-old children from all over England. They asked them about their lives and their dreams for the future. Michael Apted, a researcher for the original film, has returned to interview the “children” every seven years since, at ages 14, 21, 28, 35, 42 and now again at age 49.



A YouTube element has been excluded from this version of the text. You can view it online here: https://pb.libretexts.org/alwaysdeveloping/?p=42

### Video: 49 Up (Meet Neil)

The original concept of the film was to interview 14 children from diverse backgrounds from all over England, asking them about their lives and their dreams for the future. Every seven years, renowned director Michael Apted, a researcher for Seven Up, has been back to talk to them, examining the progression of their lives. Learn more about Neil in this clip, who has taken a path less traveled in life, at age 49. . .



A YouTube element has been excluded from this version of the text. You can view it online here: https://pb.libretexts.org/

This page titled 15.13.7.1: Research Methods is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Anne Baird (eCampus Ontario) via source content that was edited to the style and standards of the LibreTexts platform.

- 1.4: Research Methods by Anne Baird is licensed CC BY-NC-SA 4.0. Original source: https://ecampusontario.pressbooks.pub/alwaysdeveloping/.

# 15.13.7.2: Research Designs



Figure 15.13.7.2.1

We have just been looking at models of the research process and goals of research. The following is a comparison of research methods or techniques used to describe, explain, or evaluate. Each of these designs has strengths and weaknesses and is sometimes used in combination with other designs within a single study.

**Observational studies** involve watching and recording the actions of participants. This may take place in the natural setting, such as observing children at play at a park, or behind a one-way glass while children are at play in a laboratory playroom. The researcher may follow a check list and record the frequency and duration of events (perhaps how many conflicts occur among 2 year olds) or may observe and record as much as possible about an event as a participant (such as attending an Alcoholics Anonymous meeting and recording the slogans on the walls, the structure of the meeting, the expressions commonly used, etc.). The researcher may be a participant or a non-participant. What would be the strengths of being a participant? What would be the weaknesses? Consider the strengths and weaknesses of not participating. In general, observational studies have the strength of allowing the researcher to see how people behave rather than relying on self-report. What people do and what they say they do are often very different. A major weakness of observational studies is that they do not allow the researcher to explain causal relationships. Yet, observational studies are useful and widely used when studying children. Children tend to change their behavior when they know they are being watched (known as the **Hawthorne effect**) and may not survey well.

**Experiments** are designed to test **hypotheses** (or specific statements about the relationship between **variables**) in a controlled setting in efforts to explain how certain factors or events produce outcomes. A variable is anything that changes in value. Concepts are **operationalized** or transformed into variables in research which means that the researcher must specify exactly what is going to be measured in the study. For example, if we are interested in studying marital satisfaction, we have to specify what marital satisfaction really means or what we are going to use as an indicator of marital satisfaction. What is something measurable that would indicate some level of marital satisfaction? Would it be the amount of time couples spend together each day? Or eye contact during a discussion about money? Or maybe a subject's score on a marital satisfaction scale. Each of these is measurable but these may not be equally valid or accurate indicators of marital satisfaction. What do you think? These are the kinds of considerations researchers must make when working through the design.

Three conditions must be met in order to establish cause and effect. Experimental designs are useful in meeting these conditions.

- The **independent and dependent variables must be related**. In other words, when one is altered, the other changes in response. (The independent variable is something altered or introduced by the researcher. The dependent variable is the outcome or the factor affected by the introduction of the independent variable. For example, if we are looking at the impact of exercise on stress levels, the independent variable would be exercise; the dependent variable would be stress.)
- **The cause must come before the effect.** Experiments involve measuring subjects on the dependent variable before exposing them to the independent variable (establishing a baseline). So we would measure the subjects' level of stress before

introducing exercise and then again after the exercise to see if there has been a change in stress levels. (Observational and survey research does not always allow us to look at the timing of these events which makes understanding causality problematic with these designs.)
- **The cause must be isolated.** The researcher must ensure that no outside, perhaps unknown variables are actually causing the effect we see. The experimental design helps make this possible. In an experiment, we would make sure that our subjects' diets were held constant throughout the exercise program. Otherwise, diet might really be creating the change in stress level rather than exercise.

A basic experimental design involves beginning with a sample (or subset of a population) and randomly assigning subjects to one of two groups: the **experimental group** or the **control group**. The experimental group is the group that is going to be exposed to an independent variable or condition the researcher is introducing as a potential cause of an event. The control group is going to be used for comparison and is going to have the same experience as the experimental group but will not be exposed to the independent variable. After exposing the experimental group to the independent variable, the two groups are measured again to see if a change has occurred. If so, we are in a better position to suggest that the **independent variable** caused the change in the **dependent variable**. The basic experimental model looks like this:

*Table 1.5.1*

| Sample is randomly assigned to one of the groups below | **Measure DV** | **Introduce IV** | **Measure DV** |
|---|---|---|---|
| **Experimental Group** | X | X | X |
| **Control Group** | X | - | X |

The major advantage of the experimental design is that of helping to establish cause and effect relationships. A disadvantage of this design is the difficulty of translating much of what concerns us about human behavior into a laboratory setting. I hope this brief description of experimental design helps you appreciate both the difficulty and the rigor of conducting an experiment.

**Case studies** involve exploring a single case or situation in great detail. Information may be gathered with the use of observation, interviews, testing, or other methods to uncover as much as possible about a person or situation. Case studies are helpful when investigating unusual situations such as brain trauma or children reared in isolation. And they often used by clinicians who conduct case studies as part of their normal practice when gathering information about a client or patient coming in for treatment. Case studies can be used to explore areas about which little is known and can provide rich detail about situations or conditions. However, the findings from case studies cannot be **generalized**or applied to larger populations; this is because cases are not randomly selected and no control group is used for comparison. (Read "The Man Who Mistook His Wife for a Hat" by Dr. Oliver Sacks as a good example of the case study approach.)

**Correlational studies** look at relationships or associations between two or more independent variables. Correlational studies do not allow us to draw any conclusions about evidence for cause and effect. However, these studies often help us form hunches or hypotheses about cause and effect.

**Surveys**are familiar to most people because they are so widely used. Surveys enhance accessibility to subjects because they can be conducted in person, over the phone, through the mail, or online. A survey involves asking a standard set of questions to a group of subjects. In a highly structured survey, subjects are forced to choose from a response set such as "strongly disagree, disagree, undecided, agree, strongly agree"; or "0, 1-5, 6-10, etc." Surveys are commonly used by sociologists, marketing researchers, political scientists, therapists, and others to gather information on many independent and dependent variables in a relatively short period of time. Surveys typically yield surface information on a wide variety of factors, but may not allow for in-depth understanding of human behavior. Of course, surveys can be designed in a number of ways. They may include **forced choice** questions and **open-ended questions** in which the researcher allows the respondent to describe or give details about certain events. One of the most difficult aspects of designing a good survey is wording questions in an unbiased way and asking the right questions so that respondents can give a clear response rather that choosing "undecided" each time. Knowing that 30% of respondents are undecided is of little use! So a lot of time and effort should be placed on the construction of survey items. One of the benefits of having forced choice items is that each response is coded so that the results can be quickly entered and analyzed using statistical software. Analysis takes much longer when respondents give lengthy responses that must be analyzed in a different way. Surveys are useful in examining stated values, attitudes, opinions, and reporting on practices. However, they are based on **self-report** or what people say they do rather than on observation and this can limit accuracy.

**Secondary analysis(archival data)** involves analyzing information that has already been collected or examining documents or media to uncover attitudes, practices or preferences. There are a number of data sets available to those who wish to conduct this type of research. For example, Canadian Census Data is available through Statistics Canada and is widely used to look at trends and changes taking place within the country. You can go to https://www12.statcan.gc.ca/census-recensement/index-eng.cfm to check it out. You can find similar data for the U.S. at http://www.census.gov. The researcher conducting secondary analysis does not have to recruit subjects but does need to know the quality of the information collected in the original study.

**Content analysis** involves looking at media such as old texts, pictures, commercials, lyrics or other materials to explore patterns or themes in culture. An example of content analysis is the classic history of childhood by Aries (1962) called "Centuries of Childhood" or the analysis of television commercials for sexual or violent content. Passages in text or programs that air can be randomly selected for analysis as well. Again, one advantage of analyzing work such as this is that the researcher does not have to go through the time and expense of finding respondents, but the researcher cannot know how accurately the media reflects the actions and sentiments of the population.

This page titled 15.13.7.2: Research Designs is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Anne Baird (eCampus Ontario) via source content that was edited to the style and standards of the LibreTexts platform.

- 1.5: Research Designs by Anne Baird is licensed CC BY-NC-SA 4.0. Original source: https://ecampusontario.pressbooks.pub/alwaysdeveloping/.

# 15.13.7.3: Developmental Research Designs

These designs examine what changes and what stays the same in a human life. **Chronological age**, **cohort membership**, and **time of measurement** are the basic elements of research designs looking at development. The frustrating thing about doing this kind of research is that you only can vary two of these three elements at a time. The two that you choose will determine the third element. Therefore no single study can definitively tell you about how human beings develop. However, combining results of multiple studies and using more complex designs, such as cross-sequential designs, can help us get closer to the truth.

**Cross-sectional research** involves beginning with a sample that represents a cross-section of the population. Respondents who vary in age, gender, ethnicity, and social class might be asked to complete a survey about television program preferences or attitudes toward the use of the Internet. The attitudes of males and females could then be compared as could attitudes based on age. In cross-sectional research, respondents are measured only once. This method is much less expensive than longitudinal research but does not allow the researcher to distinguish between the impact of age and the cohort effect. Different attitudes about the Internet, for example, might not be altered by a person's biological age as much as their life experiences as members of a cohort.

**Longitudinal research** involves beginning with a group of people who may be of the same age and background, and measuring them repeatedly over a long period of time. One of the benefits of this type of research is that people can be followed through time and be compared with them when they were younger. A problem with this type of research is that it is very expensive and subjects may drop out over time. (The film 49 Up is a example of following individuals over time. You see how people change physically, emotionally, and socially through time.) What would be the drawbacks of being in a longitudinal study? What about 49 Up? Would you want to be filmed every 7 years? What would be the advantages and disadvantages? Can you imagine why some would continue and others drop out of the project?

**Cross-sequential research** involves combining aspects of the previous two techniques; beginning with a cross-sectional sample and measuring them through time. This is the perfect model for looking at age, gender, social class, and ethnicity. But here the drawbacks of high costs and attrition are here as well.

This page titled 15.13.7.3: Developmental Research Designs is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Anne Baird (eCampus Ontario) via source content that was edited to the style and standards of the LibreTexts platform.

- 1.6: Developmental Research Designs by Anne Baird is licensed CC BY-NC-SA 4.0. Original source: https://ecampusontario.pressbooks.pub/alwaysdeveloping/.

# 15.13.7.4: The Cohort Effect

One important context that is sometimes mistaken for age is the **cohort effect**. A cohort is a group of people who are born at roughly the same period in a particular society. Cohorts share histories and contexts for living. Members of a cohort have experienced the same historic events and cultural climates which have an impact on the values, priorities, and goals that may guide their lives.



Figure 15.13.7.4.1: Two boys collect rubber during WWII.

Consider a young boy's concerns as he grows up in the United States during World War II. What his family buys is limited by their small budget and by a governmental program set up to ration food and other materials that are in short supply because of the war. He is eager rather than resentful about being thrifty and sees his actions as meaningful contributions to the good of others. As he grows up and has a family of his own, he is motivated by images of success tied to his past experience: a successful man is one who can provide for his family financially, who has a wife who stays at home and cares for the children, and children who are respectful but enjoy the luxury of days filled with school and play without having to consider the burdens of society's struggles. He marries soon after completing high school, has four children, works hard to support his family and is able to do so during the prosperous postwar economics of the 1950s in America. But economic conditions change in the mid-1960s and through the 1970s. His wife begins to work to help the family financially and to overcome her boredom with being a stay-at-home mother. The children are teenagers in a very different social climate: one of social unrest, liberation, and challenging the status quo. They are not sheltered from the concerns of society; they see television broadcasts in their own living room of the war in Vietnam, and they fear the draft. They are part of a middle-class youth culture that is very visible and vocal. His employment as an engineer eventually becomes difficult as a result of downsizing in the defense industry. His marriage of 25 years ends in divorce. *This is not a unique personal history*, rather it is a story shared by many members of his cohort. Historical contexts shape our life choices and motivations as well as our eventual assessments of success or failure during the course of our existence.

Consider your cohort. Can you identify it? Does it have a name? If so, what does the name imply? To what extent does your cohort shape your values, thoughts, and aspirations? (Some cohort labels popularized in the media for generations in the United States and Canada include Baby Boomers, Generation X, Millenials, and Generation Z.)

**Socioeconomic Status**

Another context that influences our lives is our social standing, socioeconomic status, or social class. **Socioeconomic status** (SES) is a way to identify families and households based on their shared levels of education, income, and occupation. While there is certainly individual variation, members of a social class tend to share similar lifestyles, patterns of consumption, parenting styles, stressors, religious preferences, and other aspects of daily life. (Consider, for example, some terms that have been used in marketing to refer to different consumer groups: the "truck and trailer" or the "pool and poodle" group referring to working class and upper middle-class groups.) All of us born into a class system or are socially located and may move up or down depending

on a combination of both socially and individually created limits and opportunities.

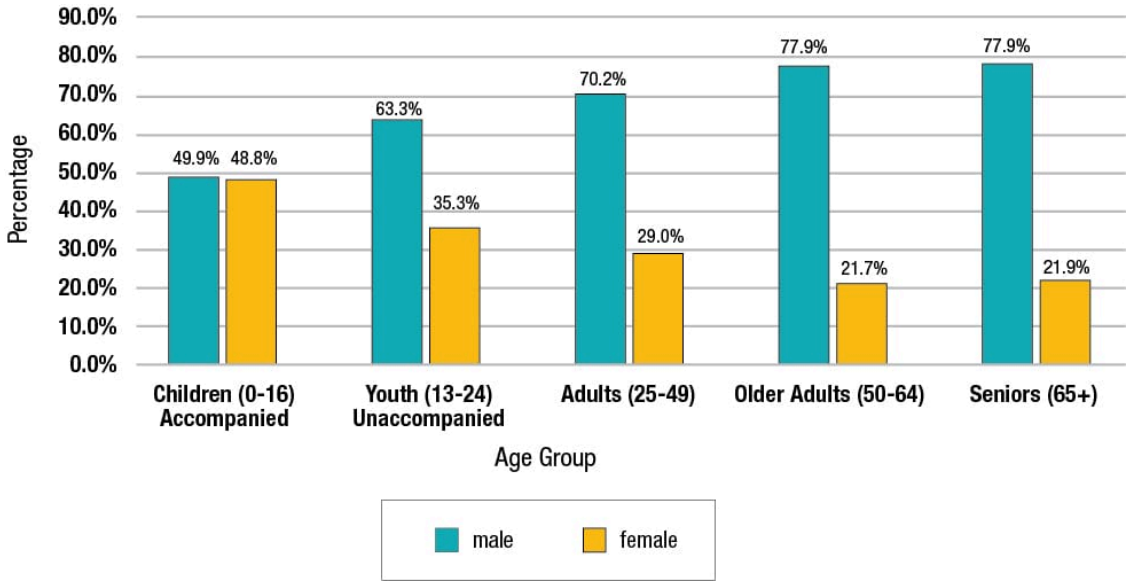



Figure 15.13.7.4.2: In 2016, approximately 129,127 people stayed at least one night in a homeless shelter. This graph depicts shelter use by gender and age group for 2016 (male & female responses only).

Consider how life is different for people who are homeless in Canada in different ages and of different genders. Who might be most negatively affected by this status? Who might be best equipped to recover and thrive? Why?

This page titled 15.13.7.4: The Cohort Effect is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Anne Baird (eCampus Ontario) via source content that was edited to the style and standards of the LibreTexts platform.

- 1.1: The Cohort Effect by Anne Baird is licensed CC BY-NC-SA 4.0. Original source: https://ecampusontario.pressbooks.pub/alwaysdeveloping/.

# 15.14: DEVELOPMENTAL THEORIES


## 15.14.1: Historical Theories on Development

15.14.1.1: Psychodynamic Theory

## 15.14.2: Contemporary Theories on Development

15.14.2.1: Psychosocial Theory

15.14.2.2: Exploring Behaviour

15.14.2.3: Exploring Cognition



This page titled 15.14: Developmental Theories is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Anne Baird (eCampus Ontario) via source content that was edited to the style and standards of the LibreTexts platform.

- Part 2: Developmental Theories by Anne Baird is licensed CC BY-NC-SA 4.0. Original source: https://ecampusontario.pressbooks.pub/alwaysdeveloping/.

# 15.14.1: Historical Theories on Development

**Preformationist View:** Well into the $18^{\text{th}}$ century, children were merely thought of as little adults. **Preformationism**, *or the belief that a tiny, fully formed human is implanted in the sperm or egg at conception and then grows in size until birth*, was the predominant early theory. Children were believed to possess all their sensory capabilities, emotions, and mental aptitude at birth, and as they developed these abilities unfolded on a predetermined schedule (Thomas, 1979). The environment was thought to play no role in determining development.

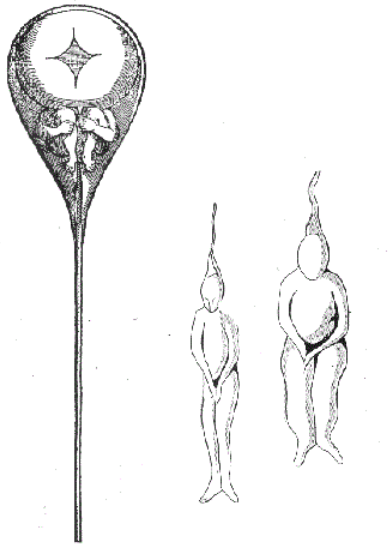


Figure 15.14.1.1. A tiny person inside a sperm. Image source.

**John Locke** (1632-1704): Locke, a British philosopher, refuted the idea of innate knowledge and instead proposed that children are largely shaped by their social environments, especially their education as adults teach them important knowledge. He believed that through education a child learns socialization, or what is needed to be an appropriate member of society. Locke advocated thinking of a child's mind as a **tabula rasa** *or blank slate*, where whatever comes into the child's mind comes from the environment. Locke emphasized that the environment is especially powerful in the child's early life because he considered the mind the most pliable then. Locke indicated that the environment exerts its effects through associations between thoughts and feelings, behavioral repetition, imitation, and rewards and punishments (Crain, 2005). Locke's ideas laid the groundwork for the behavioral perspective and subsequent learning theories of Pavlov, Skinner and Bandura.

**Jean-Jacques Rousseau** (1712-1778): Like Locke, Rousseau also believed that children were not just little adults. However, he did not believe they were blank slates, but instead developed according to a natural plan which unfolded in different stages (Crain, 2005). He did not believe in teaching them the correct way to think, but believed children should be allowed to think by themselves according to their own ways and an inner, biological timetable. This focus on biological maturation resulted in Rousseau being considered the father of developmental psychology. Followers of Rousseau's developmental perspective include Gesell, Montessori, and Piaget.

**Arnold Gesell** (1880-1961): Gesell spent 50 years at the Yale Clinic of Child Development, and with his colleagues he studied the neuromotor development of children. Gesell believed that the child's development was activated by genes and he called this process *maturation* (Crain, 2005). Further, he believed that development unfolded in fixed sequences, and he opposed efforts to teach children ahead of schedule as he believed they will engage in behaviors when their nervous systems had sufficiently matured.

**Sigmund Freud** (1856-1939): Freud was a very influential figure in the area of development. Freud emphasized the importance of early childhood experiences in shaping our personality and behavior. In our natural state, we are biological beings and are driven primarily by instincts. During childhood, however, we begin to become social beings as we learn how to manage our instincts and transform them into socially acceptable behaviors. His assumptions were that personality formed during the first few years of life. The ways in which parents or other caregivers interacted with children were assumed to have a long-lasting impact on

children's emotional states. His beliefs formed the psychodynamic perspective and his theories of psychosexual development and psychopathology dominated the field of psychiatry until the growth of behaviorism in the 1950s.

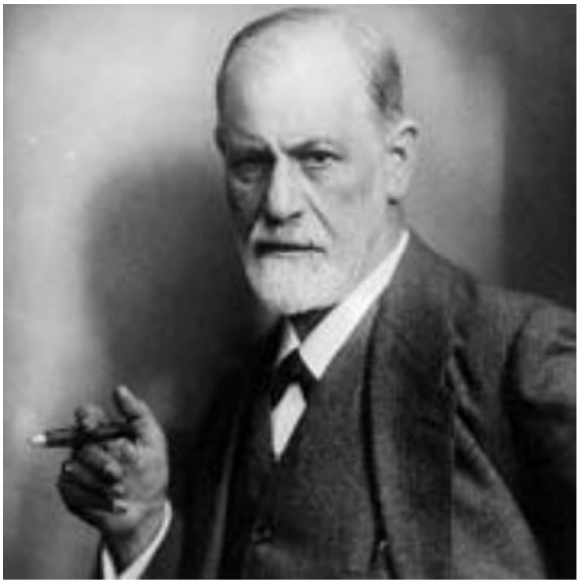


Figure 15.14.1.2. Sigmund Freud.

However, Freud's theory has been heavily criticized for several reasons. One is that it is very difficult to test scientifically (Crews, 1998). Freud suggested that much of what determines our actions were unknown to us, and as scientists we cannot measure these unconscious concepts. A second criticism is that Freud's case studies were not validated and cannot be used as evidence for his theories. Many later theories, particularly behaviorism and humanism, came about as challenges to Freud's views.

This page titled 15.14.1: Historical Theories on Development is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Martha Lally & Suzanne Valentine-French via source content that was edited to the style and standards of the LibreTexts platform.

- 1.6: Historical Theories on Development by Martha Lally & Suzanne Valentine-French is licensed CC BY-NC-SA 4.0. Original source: http://dept.clcillinois.edu/psy/LifespanDevelopment.pdf.

# 15.14.1.1: Psychodynamic Theory

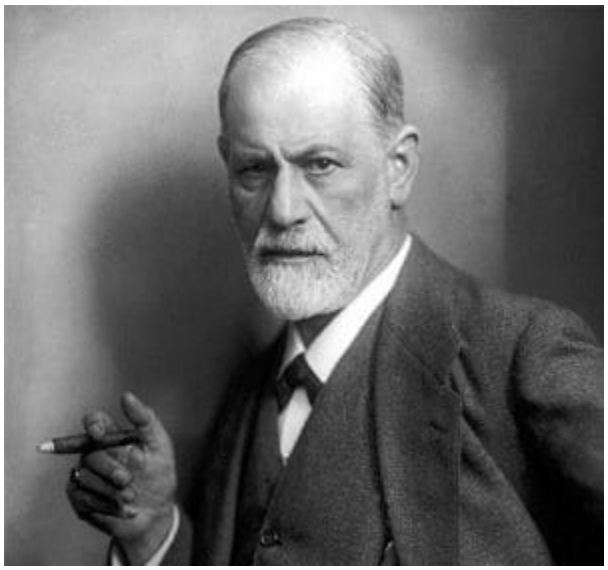


Figure 15.14.1.1.1: Sigmund Freud contributed significantly to the field of psychology

We begin with the often controversial figure, Sigmund Freud. Freud has been a very influential figure in the area of development; his view of development and psychopathology dominated the field of psychiatry until the growth of behaviorism in the 1950s. His assumptions that personality forms during the first few years of life and that the ways in which parents or other caregivers interact with children have a long-lasting impact on children's emotional states have guided parents, educators, clinicians, and policy-makers for many years. We have only recently begun to recognize that early childhood experiences do not always result in certain personality traits or emotional states. There is a growing body of literature addressing resiliency in children who come from harsh backgrounds and yet develop without damaging emotional scars (O'Grady and Metz, 1987). Freud has stimulated an enormous amount of research and generated many ideas. Agreeing with Freud's theory in its entirety is hardly necessary for appreciating the contribution he has made to the field of development.

## Background

Sigmund Freud (1856-1939) was a Viennese M. D. who was trained in neurology and asked to work with patients suffering from hysteria, a conditioned marked by uncontrollable emotional outbursts, fears and anxiety that had puzzled physicians for centuries. He was also asked to work with women who suffered from physical symptoms and forms of paralysis which had no organic causes. During that time, many people believed that certain individuals were genetically inferior and thus more susceptible to mental illness. Women were thought to be genetically inferior and thus prone to illnesses such as hysteria (which had previously been attributed to a detached womb which was traveling around in the body).

However, after World War I, many soldiers came home with problems similar to hysteria. This called into questions the idea of genetic inferiority as a cause of mental illness. Freud began working with hysterical patients and discovered that when they began to talk about some of their life experiences, particularly those that took place in early childhood, their symptoms disappeared. This led him to suggest the first purely psychological explanation for physical problems and mental illness. What he proposed was that unconscious motives and desires, fears and anxieties drive our actions. When upsetting memories or thoughts begin to find their way into our consciousness, we develop defenses to shield us from these painful realities. These **defense mechanisms** include denying a reality, repressing or pushing away painful thoughts, rationalization or finding a seemingly logical explanation for circumstances, projecting or attributing our feelings to someone else, or outwardly opposing something we inwardly desire (called reaction formation). Freud believed that many mental illnesses are a result of a person's inability to accept reality. **Freud emphasized the importance of early childhood experiences in shaping our personality and behavior**. In our natural state, we are biological beings. We are driven primarily by instincts. During childhood, however, we begin to become social beings as we learn how to manage our instincts and transform them into socially acceptable behaviors. The type of parenting the child receives has a very power impact on the child's personality development. We will explore this idea further in our discussion of psychosexual development.

## Theory of the Mind

Freud believed that most of our mental processes, motivations and desires are outside of our awareness. Our consciousness, that of which we are aware, represents only the tip of the iceberg that comprises our mental state. The preconscious represents that which can easily be called into the conscious mind. During development, our motivations and desires are gradually pushed into the unconscious because raw desires are often unacceptable in society.

## Theory of the Self

As adults, our personality or self consists of three main parts: the **id**, the **ego** and the **superego**. The id is the part of the self with which we are born. It consists of the biologically-driven self and includes our instincts and drives. It is the part of us that wants immediate gratification. Later in life, it comes to house our deepest, often unacceptable desires such as sex and aggression. It operates under the pleasure principle which means that the criteria for determining whether something is good or bad is whether it feels good or bad. An infant is all id. The ego is the part of the self that develops as we learn that there are limits on what is acceptable to do and that often, we must wait to have our needs satisfied. This part of the self is realistic and reasonable. It knows how to make compromises. It operates under the reality principle or the recognition that sometimes need gratification must be postponed for practical reasons. It acts as a mediator between the Id and the Superego and is viewed as the healthiest part of the self.

Defense mechanisms emerge to help a person distort reality so that the truth is less painful. Defense mechanisms include repression which means to push the painful thoughts out of consciousness (in other words, think about something else). Denial is basically not accepting the truth or lying to the self. Thoughts such as “it won’t happen to me” or “you’re not leaving” or “I don’t have a problem with alcohol” are examples. Regression refers to going back to a time when the world felt like a safer place, perhaps reverting to one’s childhood. This is less common than the first two defense mechanisms. Sublimation involves transforming unacceptable urges into more socially acceptable behaviors. For example, a teenager who experiences strong sexual urges uses exercise to redirect those urges into more socially acceptable behavior. Displacement involves taking out frustrations on to a safer target. A person who is angry at a boss may take out their frustration at others when driving home or at a spouse upon arrival. Projection is a defense mechanism in which a person attributes their unacceptable thoughts onto others. If someone is frightened, for example, he or she accuses someone else of being afraid. Finally, reaction formation is a defense mechanism in which a person outwardly opposes something they inwardly desire, but that they find unacceptable. An example of this might be homophobia or a strong hatred and fear of homosexuality. This is a partial listing of defense mechanisms suggested by Freud. If the ego is strong, the individual is realistic and accepting of reality and remains more logical, objective, and reasonable. Building ego strength is a major goal of psychoanalysis (Freudian psychotherapy). So for Freud, having a big ego is a good thing because it does not refer to being arrogant, it refers to being able to accept reality.

The superego is the part of the self that develops as we learn the rules, standards, and values of society. This part of the self takes into account the moral guidelines that are a part of our culture. It is a rule-governed part of the self that operates under a sense of guilt (guilt is a social emotion-it is a feeling that others think less of you or believe you to be wrong). If a person violates the superego, he or she feels guilty. The superego is useful but can be too strong; in this case, a person might feel overly anxious and guilty about circumstances over which they had no control. Such a person may experience high levels of stress and inhibition that keeps them from living well. The id is inborn, but the ego and superego develop during the course of our early interactions with others. These interactions occur against a backdrop of learning to resolve early biological and social challenges and play a key role in our personality development.

## Psychosexual Stages

Freud’s psychosexual stages of development are presented below. At any of these stages, the child might become “stuck” or fixated if a caregiver either overly indulges or neglects the child’s needs. A fixated adult will continue to try and resolve this later in life. Examples of fixation are given after the presentation of each stage.

For about the first year of life, the infant is in the **oral stage** of psychosexual development. The infant meets needs primarily through oral gratification. A baby wishes to suck or chew on any object that comes close to the mouth. Babies explore the world through the mouth and find comfort and stimulation as well. Psychologically, the infant is all Id. The infant seeks immediate gratification of needs such as comfort, warmth, food, and stimulation. If the caregiver meets oral needs consistently, the child will move away from this stage and progress further. However, if the caregiver is inconsistent or neglectful, the person may stay stuck in the oral stage. As an adult, the person might not feel good unless involved in some oral activity such as eating, drinking,

smoking, nail-biting, or compulsive talking. These actions bring comfort and security when the person feels insecure, afraid, or bored.

During the **anal stage** which coincides with toddlerhood or mobility and potty-training, the child is taught that some urges must be contained and some actions postponed. There are rules about certain functions and when and where they are to be carried out. The child is learning a sense of self-control. The ego is being developed. If the caregiver is extremely controlling about potty training (stands over the child waiting for the smallest indication that the child might need to go to the potty and immediately scoops the child up and places him on the potty chair, for example), the child may grow up fearing losing control. He may becoming fixated in this stage or "anal retentive"-fearful of letting go. Such a person might be extremely neat and clean, organized, reliable, and controlling of others. If the caregiver neglects to teach the child to control urges, he may grow up to be "anal expulsive" or an adult who is messy, irresponsible, and disorganized.

The **phallic stage** occurs during the preschool years (ages 3-5) when the child has a new biological challenge to face. Freud believed that the child becomes sexually attracted to his or her opposite sexed parent. Boys experience the "Oedipal Complex" in which they become sexually attracted to their mothers but realize that Father is in the way. He is much more powerful. For awhile, the boy fears that if he pursues his mother, father may castrate him (castration anxiety). So rather than risking losing his penis, he gives up his affections for his mother and instead learns to become more like his father, imitating his actions and mannerisms and thereby learns the role of males in his society. From this experience, the boy learns a sense of masculinity. He also learns what society thinks he should do and experiences guilt if he does not comply. In this way, the superego develops. If he does not resolve this successfully, he may become a "phallic male" or a man who constantly tries to prove his masculinity (about which he is insecure) by seducing women and beating up men! A little girl experiences the "Electra Complex" in which she develops an attraction for her father but realizes that she cannot compete with mother and so gives up that affection and learns to become more like her mother. This is not without some regret, however. Freud believed that the girl feels inferior because she does not have a penis (experiences "penis envy"). But she must resign herself to the fact that she is female and will just have to learn her inferior role in society as a female. However, if she does not resolve this conflict successfully, she may have a weak sense of femininity and grow up to be a "castrating female" who tries to compete with men in the workplace or in other areas of life.

During middle childhood (6-11), the child enters the **latent stage** focusing his or her attention outside the family and toward friendships. The biological drives are temporarily quieted (latent) and the child can direct attention to a larger world of friends. If the child is able to make friends, he or she will gain a sense of confidence. If not, the child may continue to be a loner or shy away from others, even as an adult.

The final stage of psychosexual development is referred to as the **genital stage**. From adolescence throughout adulthood a person is preoccupied with sex and reproduction. The adolescent experiences rising hormone levels and the sex drive and hunger drives become very strong. Ideally, the adolescent will rely on the ego to help think logically through these urges without taking actions that might be damaging. An adolescent might learn to redirect their sexual urges into safer activity such as running, for example. Quieting the Id with the Superego can lead to feeling overly self-conscious and guilty about these urges. Hopefully, it is the ego that is strengthened during this stage and the adolescent uses reason to manage urges.

## Strengths and Weaknesses of Freud's Theory

Freud's theory has been heavily criticized for several reasons. One is that it is very difficult to test scientifically. How can parenting in infancy be traced to personality in adulthood? Are there other variables that might better explain development? The theory is also considered to be sexist in suggesting that women who do not accept an inferior position in society are somehow psychologically flawed. Freud focuses on the darker side of human nature and suggests that much of what determines our actions is unknown to us. So why do we study Freud? As mentioned above, despite the criticisms, Freud's assumptions about the importance of early childhood experiences in shaping our psychological selves have found their way into child development, education, and parenting practices. Freud's theory has heuristic value in providing a framework from which elaborate and modify subsequent theories of development. Many later theories, particularly behaviorism and humanism, were challenges to Freud's views.

---

This page titled 15.14.1.1: Psychodynamic Theory is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Anne Baird (eCampus Ontario) via source content that was edited to the style and standards of the LibreTexts platform.

- 2.1: Psychodynamic Theory by Anne Baird is licensed CC BY-NC-SA 4.0. Original source: https://ecampusontario.pressbooks.pub/alwaysdeveloping/.

# 15.14.2: Contemporary Theories on Development

## Erikson (1902-1994) and Psychosocial Theory:

Now, let's turn to a less controversial psychodynamic theorist, Erik Erikson. Erikson presents eight developmental stages that encompass the entire lifespan. For that reason, Erikson's psychosocial theory forms the foundation for much of our discussion of psychosocial development.



Figure 15.14.2.1. Erik Erikson.

Erikson (1950) proposed a model of lifespan development that provides a useful guideline for thinking about the changes we experience throughout life. Erikson broke with Freud's emphasis on sexuality as the cornerstone of social-emotional development and instead suggested that social relationships fostered development. Erikson proposed that *each period of life has a unique challenge or crisis that the person who reaches it must face, referred to as* **psychosocial crises**. According to Erikson, successful development involves dealing with and resolving the goals and demands of each of these psychosocial crises in a positive way. These crises are usually called stages, although that is not the term Erikson used. If a person does not resolve a stage successfully, it may hinder their ability to deal with later stages. For example, the person who does not develop a sense of trust (Erikson's first stage) may find it challenging as an adult to form a positive intimate relationship (Erikson's sixth stage). Or an individual who does not develop a clear sense of purpose and identity (Erikson's fifth stage) may become self-absorbed and stagnate rather than work toward the betterment of others (Erikson's seventh stage). However, most individuals are able to successfully complete the eight stages of his theory (See Table 15.14.2.1).

*Table* 15.14.2.1. *Erikson's Psychosocial Stages.*

| Age range | Psychosocial crisis | Positive resolution of crisis |
|---|---|---|
| Birth to 12 to 18 months | Trust versus Mistrust | The child develops a feeling of trust in caregivers. |
| 18 months to 3 years | Autonomy versus Shame/Doubt | The child learns what can and cannot be controlled and develops a sense of free will. |
| 3 to 6 years | Initiative versus Guilt | The child learns to become independent by exploring, manipulating, and taking action. |
| 6 to 12 years | Industry versus Inferiority | The child learns to do things well or correctly according to standards set by others, particularly in school. |

| Age range | Psychosocial crisis | Positive resolution of crisis |
|---|---|---|
| 12 to 18 years | Identity versus Role Confusion | The adolescent develops a well-defined and positive sense of self in relationship to others. |
| 19 to 40 years | Intimacy versus Isolation | The person develops the ability to give and receive love and to make long-term commitments. |
| 40 to 65 years | Generativity versus Stagnation | The person develops an interest in guiding the development of the next generation, often by becoming a parent. |
| 65 to death | Ego Integrity versus Despair | The person develops acceptance of how one has lived. |

Erikson's theory has been criticized for focusing so heavily on crises and assuming that the completion of one crisis is a prerequisite for the next crisis of development. His theory also focused on the social expectations that are found in certain cultures, but not in all. For instance, the idea that adolescence is a time of searching for identity might translate well in the middle-class culture of the United States, but not as well in cultures where the transition into adulthood coincides with puberty through rites of passage and where adult roles offer fewer choices.

## Learning Theory:

Also known as **Behaviorism**, this theory *is based on the premise that it is not possible to objectively study the mind, and therefore psychologists should limit their attention to the study of behavior itself*. The most famous behaviorist was Burrhus Frederick (B. F.) Skinner (1904–1990), who expanded the principles of behaviorism and also brought them to the attention of the public at large. Skinner used the ideas of stimulus and response, along with the *application of rewards or* **reinforcements**, to train pigeons and other animals. In addition, he used the general principles of behaviorism to develop theories about how best to teach children and how to create societies that were peaceful and productive (Skinner, 1957, 1968, 1972).

The behaviorists made substantial contributions to psychology by identifying the principles of learning. Although the behaviorists were incorrect in their beliefs that it was not possible to measure thoughts and feelings, their ideas provided new insights that helped further our understanding regarding the nature-nurture debate as well as the question of free will. The ideas of behaviorism are fundamental to psychology and have been developed to help us better understand the role of prior experiences in a variety of areas of psychology.

## Social Learning Theory:

Social learning theory, or *learning by watching others*, was developed by Albert Bandura (1977). His theory calls our attention to the ways in which many of our actions are not learned through conditioning, as suggested by Skinner. Young children frequently learn behaviors through imitation. Especially when children do not know what else to do, they learn by modeling or copying the behavior of others.

Bandura (1986) suggests that there is interplay between the environment and the individual. We are not just the product of our surroundings; rather, we influence our surroundings. *There is interplay between our personality and the way we interpret events and how they influence us. This concept is called* **reciprocal determinism**. An example of this might be the interplay between parents and children. Parents not only influence their child's environment, perhaps intentionally through the use of reinforcement, etc., but children influence parents as well. Parents may respond differently with their first child than with their fourth. Perhaps they try to be the perfect parents with their firstborn, but by the time their last child comes along they have very different expectations, both of themselves and their child. Our environment creates us and we create our environment.

Other social influences: TV or not TV? Bandura, Ross and Ross (1963) began a series of studies to look at the impact of television on the behavior of children. Bandura began by conducting an experiment in which he showed children a film of a woman hitting an inflatable clown or "bobo" doll. Then the children were allowed in the room, where they found the doll and during their play they began to hit it. The children also demonstrated novel ways of being aggressive toward the doll that were not demonstrated by those children who did not see the aggressive model. Bandura's research raised concerns about the impact of violence on young children. Since then, considerable research has been conducted on the impact of violent media on children's aggression including playing video games.

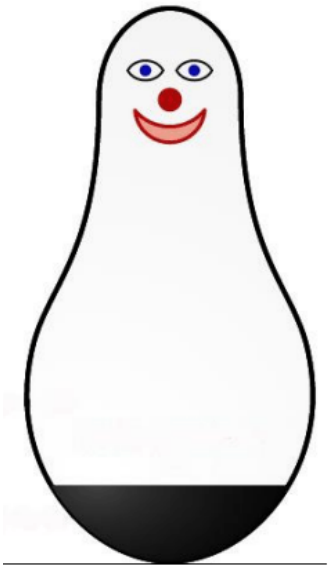


Figure 15.14.2.1. The Bobo Doll. Image source.

## Cognitive Theory:

The **cognitive theories** *focus on how our mental processes or cognitions change over time*. Three important theories are Jean Piaget's, Lev Vygotsky's, and Information-processing.

**Jean Piaget** (1896-1980) was one of the most influential cognitive theorists in development. He was inspired to explore children's ability to think and reason by watching his own children's development. He was one of the first to recognize and map out the ways in which children's intelligence differs from that of adults (Piaget, 1929). He became interested in this area when he was asked to test the IQ of children and began to notice that there was a pattern in their wrong answers. He believed that children's intellectual skills change over time and that maturation, rather than training, brings about that change. Children of differing ages interpret the world differently. Piaget theorized that children progressed through four stages of cognitive development (see Table 15.14.2.2 ).

*Table 15.14.2.2. Piaget's Stages of Cognitive Development.*

| Stage | Approximate age range | Characteristics | Stage attainments |
|---|---|---|---|
| Sensorimotor | Birth to about 2 years | Children experience the world through their fundamental senses of seeing, hearing, touching, and tasting. | Object permanence |
| Preoperational | 2 to 7 years | Children acquire the ability to internally represent the world through language and mental imagery. They also start to see the world from other people's perspectives. | Theory of mind; rapid increase in language ability |
| Concrete | 7 to 11 years | Children become able to think logically. They can increasingly perform operations on objects that are real. | Conservation |
| Formal operational | 11 years to adulthood | Adolescents can think systematically, can understand ethics and scientific reasoning. | Abstract logic |

Piaget has been criticized for overemphasizing the role that physical maturation plays in cognitive development and in underestimating the role that culture and experience plays. Looking across cultures reveals considerable variation in what children are able to do at various ages. Research has shown considerable overlap among the four stages and that development is more continuous.

**Lev Vygotsky** (1896-1934) was a Russian psychologist who wrote in the early 1900s, but whose work was not discovered by researchers in the United States until the 1960s and became more widely known in the 1980s (Crain, 2005). His **sociocultural theory** *emphasizes the importance of culture and interaction in the development of cognitive abilities*. Vygotsky differed with

Piaget in that he believed that a person not only has a set of abilities, but also a set of potential abilities that can be realized if given the proper guidance from others. Vygotsky developed theories on teaching that have been adopted by educators today.

**Information Processing** is not the work of a single theorist, but based on the ideas and research of several cognitive scientists studying how individuals perceive, analyze, manipulate, use, and remember information. This approach assumes that humans gradually improve in their processing skills; that is, cognitive development is continuous rather than stage-like. The more complex mental skills of adults are built from the primitive abilities of children. We are born with the ability to notice stimuli, store, and retrieve information. Brain maturation enables advancements in our information processing system. At the same time, interactions with the environment also aid in our development of more effective strategies for processing information.

**Urie Bronfenbrenner** (1917-2005) developed the **Ecological Systems Theory**, *which provides a framework for understanding and studying the many influences on human development* (Bronfenbrenner, 1979). Bronfenbrenner recognized that human interaction is influenced by larger social forces and that an understanding of these forces is essential for understanding an individual. The individual is impacted by several systems including:

- **Microsystem** *includes the individual's setting and those who have direct, significant contact with the person, such as parents or siblings*. The input of those is modified by the cognitive and biological state of the individual as well. These influence the person's actions, which in turn influence systems operating on the person.
- **Mesosystem** *includes the larger organizational structures, such as school, the family, or religion*. These institutions impact the microsystems just described. The philosophy of the school system, daily routine, assessment methods, and other characteristics can affect the child's self-image, growth, sense of accomplishment, and schedule thereby impacting the child, physically, cognitively, and emotionally.
- **Exosystem** *includes the larger contexts of community*. A community's values, history, and economy can impact the organizational structures it houses. Mesosystems both influence and are influenced by the exosystem.
- **Macrosystem** *includes the cultural elements*, such as global economic conditions, war, technological trends, values, philosophies, and a society's responses to the global community.
- **Chronosystem** *is the historical context in which these experiences occur*. This relates to the different generational time periods previously discussed, such as the baby boomers and millennials.

In sum, a child's experiences are shaped by larger forces, such as the family, schools, religion, culture, and time period. Bronfenbrenner's model helps us understand all of the different environments that impact each one of us simultaneously. Despite its comprehensiveness, Bronfenbrenner's ecological system's theory is not easy to use. Taking into consideration all the different influences makes it difficult to research and determine the impact of all the different variables (Dixon, 2003). Consequently, psychologists have not fully adopted this approach, although they recognize the importance of the ecology of the individual. Figure 15.14.2.2 is a model of Bronfenbrenner's Ecological Systems Theory.

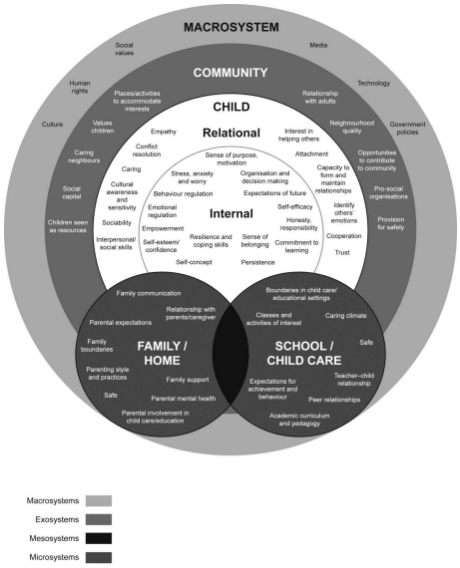



Figure 15.14.2.2. Visual model of Bronfenbrenner's Ecological Systems Theory. Image source.

This page titled 15.14.2: Contemporary Theories on Development is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Martha Lally & Suzanne Valentine-French via source content that was edited to the style and standards of the LibreTexts platform.

- 1.7: Contemporary Theories on Development by Martha Lally & Suzanne Valentine-French is licensed CC BY-NC-SA 4.0. Original source: http://dept.clcillinois.edu/psy/LifespanDevelopment.pdf.

# 15.14.2.1: Psychosocial Theory

## The Ego Rules



Figure 15.14.2.1.1: Erik Erikson

Erik Erikson (1902-1994) was a student of Freud's and expanded on his theory of psychosexual development by emphasizing the importance of culture in parenting practices and motivations and adding three stages of adult development (Erikson, 1950; 1968). He believed that we are aware of what motivates us throughout life and the ego has greater importance in guiding our actions than does the id. We make conscious choices in life and these choices focus on meeting certain social and cultural needs rather than purely biological ones. Humans are motivated, for instance, by the need to feel that the world is a trustworthy place, that we are capable individuals, that we can make a contribution to society, and that we have lived a meaningful life. These are all psychosocial problems. Erikson divided the life span into eight stages. In each stage, we have a major psychosocial task to accomplish or crisis to overcome. Erikson believed that our personality continues to take shape throughout our life span as we face these challenges in living. We will discuss each of these stages in length as we explore each period of the life span, but here is a brief overview

## Psychosocial Stages

1. **Trust vs. Mistrust** (0-1): the infant must have basic needs met in a consistent way in order to feel that the world is a trustworthy place
2. **Autonomy vs. Shame and Doubt** (1-2): mobile toddlers have newfound freedom they like to exercise and by being allowed to do so, they learn some basic independence
3. **Initiative vs. Guilt** (3-5): preschoolers like to initiate activities and emphasize doing things "all by myself"
4. **Industry vs. Inferiority** (6-11): school aged children focus on accomplishments and begin making comparisons between themselves and their classmates
5. **Identity vs. Identity Confusion** (adolescence): teenagers are trying to gain a sense of identity as they experiment with various roles, beliefs, and ideas
6. **Intimacy vs. Isolation** (young adulthood): in our 20s and 30s we are making some of our first long-term commitments in intimate relationships
7. **Generativity vs. Stagnation** (middle adulthood): the 40s through the early 60s we focus on being productive at work and home and are motivated by wanting to feel that we've made a contribution to society
8. **Integrity vs. Despair** (late adulthood): we look back on our lives and hope to like what we see-that we have lived well and have a sense of integrity because we lived according to our beliefs.

These eight stages form a foundation for discussions on emotional and social development during the life span. Keep in mind,

however, that these stages or crises can occur more than once. For instance, a person may struggle with a lack of trust beyond infancy under certain circumstances. Erikson's theory has been criticized for focusing so heavily on stages and assuming that the completion of one stage is prerequisite for the next crisis of development. His theory also focuses on the social expectations that are found in certain cultures, but not in all. For instance, the idea that adolescence is a time of searching for identity might translate well in the middle-class culture of the United States, but not as well in cultures where the transition into adulthood coincides with puberty through rites of passage and where adult roles offer fewer choices.

This page titled 15.14.2.1: Psychosocial Theory is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Anne Baird (eCampus Ontario) via source content that was edited to the style and standards of the LibreTexts platform.

- 2.2: Psychosocial Theory by Anne Baird is licensed CC BY-NC-SA 4.0. Original source: https://ecampusontario.pressbooks.pub/alwaysdeveloping/.

# 15.14.2.2: Exploring Behaviour

**How do we act?**

Learning theories focus on how we respond to events or stimuli rather than emphasizing what motivates our actions. These theories provide an explanation of how experience can change what we are capable of doing or feeling.

## Classical Conditioning and Emotional Responses

**Classical Conditioning** theory helps us to understand how our responses to one situation become attached to new situations. For example, a smell might remind us of a time when we were a kid (elementary school cafeterias smell like milk and mildew!). If you went to a new cafeteria with the same smell, it might evoke feelings you had when you were in school. Or a song on the radio might remind you of a memorable evening you spent with your first true love. Or, if you hear your entire name (John Wilmington Brewer, for instance) called as you walk across the stage to get your diploma and it makes you tense because it reminds you of how your father used to use your full name when he was mad at you, you've been classically conditioned!

Classical conditioning explains how we develop many of our emotional responses to people or events or our "gut level" reactions to situations. New situations may bring about an old response because the two have become connected. Attachments form in this way. Addictions are affected by classical conditioning, as anyone who's tried to quit smoking can tell you. When you try to quit, everything that was associated with smoking makes you crave a cigarette.

### Pavlov

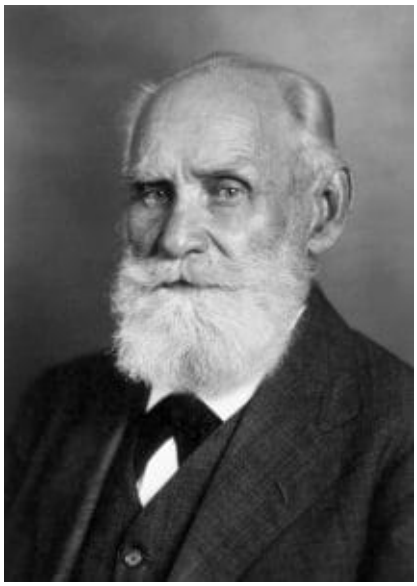


Figure 15.14.2.2.1: Ivan Pavlov was integral in the development of classical conditioning

**Ivan Pavlov** (1880-1937) was a Russian physiologist interested in studying digestion. As he recorded the amount of salivation his laboratory dogs produced as they ate, he noticed that they actually began to salivate before the food arrived as the researcher walked down the hall and toward the cage. "This," he thought, "is not natural!" One would expect a dog to automatically salivate when food hit their palate, but BEFORE the food comes? Of course, what had happened was . . . you tell me. That's right! The dogs knew that the food was coming because they had learned to associate the footsteps with the food. The key word here is "learned". A learned response is called a "**conditioned response**". Pavlov began to experiment with this "psychic" reflex. He began to ring a bell, for instance, prior to introducing the food. Sure enough, after making this connection several times, the dogs could be made to salivate to the sound of a bell. Once the bell had become an event to which the dogs had learned to salivate, it was called a **conditioned stimulus**. The act of salivating to a bell was a response that had also been learned, now termed in Pavlov's jargon, a conditioned response. Notice that the response, salivation, is the same whether it is conditioned or unconditioned (unlearned or natural). What changed is the stimulus to which the dog salivates. One is natural (unconditioned) and one is learned (conditioned).

Well, enough of Pavlov's dogs. Who cares? Let's think about how classical conditioning is used on us. One of the most widespread applications of classical conditioning principles was brought to us by the psychologist, John B. Watson.

## Watson and Behaviorism

**John B. Watson** believed that most of our fears and other emotional responses are classically conditioned. He had gained a good deal of popularity in the 1920s with his expert advice on parenting offered to the public. He believed that parents could be taught to help shape their children's behavior and tried to demonstrate the power of classical conditioning with his famous experiment with an 18 month old boy named "**Little Albert**".

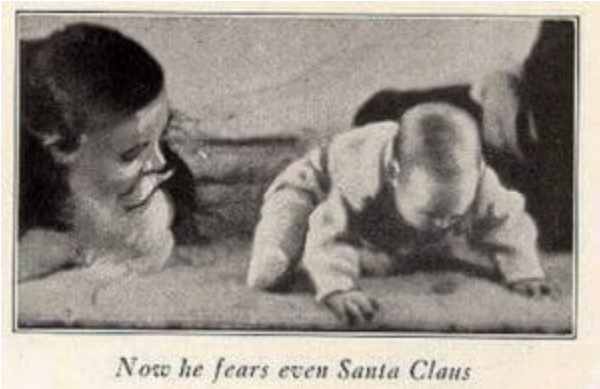



Figure 15.14.2.2.2: Little Albert learned to be afraid of most things white and fluffy – including men with white beards.

Watson sat Albert down and introduced a variety of seemingly scary objects to him: a burning piece of newspaper, a white rat, etc. But Albert remained curious and reached for all of these things. Watson knew that one of our only inborn fears is the fear of loud noises so he proceeded to make a loud noise each time he introduced one of Albert's favorites, a white rat. After hearing the loud noise several times paired with the rat, Albert soon came to fear the rat and began to cry when it was introduced. Watson filmed this experiment for posterity and used it to demonstrate that he could help parents achieve any outcomes they desired, if they would only follow his advice. Watson wrote columns in newspapers and in magazines and gained a lot of popularity among parents eager to apply science to household order. Parenting advice was not the legacy Watson left us, however. Where he really made his impact was in advertising. After Watson left academia, he went into the world of business and showed companies how to tie something that brings about a natural positive feeling to their products to enhance sales. Thus the union of sex and advertising! So, let's use a much more interesting example than Pavlov's dogs to check and see if you understand the difference between conditioned and unconditioned stimuli and responses.

Exercise

In the experiment with Little Albert, identify the unconditioned stimulus, the unconditioned response, and, after conditioning, the conditioned stimulus and the conditioned response.

# Operant Conditioning and Repeating Actions

Operant Conditioning is another learning theory that emphasizes a more conscious type of learning than that of classical conditioning. A person (or animal) does something (operates something) to see what effect it might bring. Simply said, operant conditioning describes how we repeat behaviors because they pay off for us. It is based on a principle authored by a psychologist named **Thorndike** (1874-1949) called the law of effect. The law of effect suggest that we will repeat an action if it is followed by a good effect.

## Skinner and Reinforcement

EXAMPLE: Watch a pigeon learn through reinforcement

Link: https://youtu.be/TtfQlkGwE2U

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

**B.F. Skinner** (1904-1990) expanded on Thorndike's principle and outlined the principles of **operant conditioning**. Skinner believed that we learn best when our actions are reinforced. For example, a child who cleans his room and is reinforced (rewarded) with a big hug and words of praise is more likely to clean it again than a child whose deed goes unnoticed. Skinner believed that almost anything could be reinforcing.



Figure 15.14.2.2.3: B.F.Skinner, circa 1950 at the Harvard Psychology Department

A **reinforcer** is anything following a behavior that makes it more likely to occur again. It can be something intrinsically rewarding (called intrinsic or primary reinforcers), such as food or praise, or it can be something that is rewarding because it can be exchanged for what one really wants (such as using money to buy a cookie). Such reinforcers are referred to as **secondary reinforcers** or extrinsic reinforcers.

Sometimes, adding something to the situation is reinforcing as in the cases we described above with cookies, praise and money. **Positive reinforcement** involves adding something to the situation in order to encourage a behavior. Other times, taking something away from a situation can be reinforcing. For example, the loud, annoying buzzer on your alarm clock encourages you to get up so that you can turn it off and get rid of the noise. Children whine in order to get their parents to do something and often, parents give in just to stop the whining. In these instances, negative reinforcement has been used.

**Operant conditioning** tends to work best if you focus on trying to encourage a behavior or move a person into the direction you want them to go rather than telling them what not to do. Reinforcers are used to encourage a behavior; punishers are used to stop behavior. A **punisher** is anything that follows an act and decreases the chance it will reoccur. But often a punished behavior

doesn't really go away. It is just suppressed and may reoccur whenever the threat of punishment is removed. For example, a child may not cuss around you because you've washed his mouth out with soap, but he may cuss around his friends. Or a motorist may only slow down when the trooper is on the side of the freeway. Another problem with punishment is that when a person focuses on punishment, they may find it hard to see what the other does right or well. And punishment is stigmatizing; when punished, some start to see themselves as bad and give up trying to change.

**Reinforcement** can occur in a predictable way, such as after every desired action is performed, or intermittently, after the behavior is performed a number of times or the first time it is performed after a certain amount of time. The schedule of reinforcement has an impact on how long a behavior continues after reinforcement is discontinued. So a parent who has rewarded a child's actions each time may find that the child gives up very quickly if a reward is not immediately forthcoming. A lover who is warmly regarded now and then may continue to seek out his or her partner's attention long after the partner has tried to break up. Think about the kinds of behaviors you may have learned through classical and operant conditioning. You may have learned many things in this way. But sometimes we learn very complex behaviors quickly and without direct reinforcement. Bandura explains how.

## Social Learning Theory



Figure 15.14.2.2.4: Albert Bandura, pictured here in 2005, played an integral role in shaping our understanding of social learning

**Albert Bandura** is a leading contributor to social learning theory. He calls our attention to the ways in which many of our actions are not learned through conditioning; rather, they are learned by watching others (1977). Young children frequently learn behaviors through imitation. Sometimes, particularly when we do not know what else to do, we learn by modeling or copying the behavior of others. An employee on his or her first day of a new job might eagerly look at how others are acting and try to act the same way to fit in more quickly. Adolescents struggling with their identity rely heavily on their peers to act as role-models. Newly married couples often rely on roles they may have learned from their parents and begin to act in ways they did not while dating and then wonder why their relationship has changed. Sometimes we do things because we've seen it pay off for someone else. They were operantly conditioned, but we engage in the behavior because we hope it will pay off for us as well. This is referred to as vicarious reinforcement (Bandura, Ross and Ross, 1963).

## Do parents socialize children or do children socialize parents?

Bandura (1986) suggests that there is interplay between the environment and the individual. We are not just the product of our surroundings, rather we influence our surroundings. There is interplay between our personality and the way we interpret events and how they influence us. This concept is called reciprocal determinism. An example of this might be the interplay between parents and children. Parents not only influence their child's environment, perhaps intentionally through the use of reinforcement, etc., but children influence parents as well. Parents may respond differently with their first child than with their fourth. Perhaps they try to be the perfect parents with their firstborn, but by the time their last child comes along they have very different expectations both of themselves and their child. Our environment creates us and we create our environment. Other social influences: TV or not TV? Bandura (et als. 1963) began a series of studies to look at the impact of television, particularly commercials, have on

the behavior of children. Are children more likely to act out aggressively when they see this behavior modeled? What if they see it being reinforced? Bandura began by conducting an experiment in which he showed children a film of a woman hitting an inflatable clown or “bobo” doll. Then the children were allowed in the room where they found the doll and immediately began to hit it. This was without any reinforcement whatsoever. Later they viewed a woman hitting a real clown and sure enough, when allowed in the room, they too began to hit the clown! Not only that, but they found new ways to behave aggressively. It’s as if they learned an aggressive role.

Example: Watch Bandura’s Bobo doll experiment

Link here: https://youtu.be/zerCK0lRjp8

YouTube Video

*This interactive element is not available in this format. Visit the link or scan the QR code to access it online.*

View this YouTube Video online

Children view far more television today than in the 1960s; so much, in fact, that they have been referred to as Generation M (media). Based on a study of a national representative sample of over 7,000 8-18 year olds, the Kaiser Foundation reports that children spend just over 8 hours a day involved with media outside of schoolwork. This includes almost 4 hours of television viewing and over an hour on the computer. Two-thirds have television in their room and those children watch an average of 1.27 hours more of television per day than those do not have television in their bedroom (Kaiser Family Foundation, 2005). The prevalence of violence, sexual content, and messages promoting foods high in fat and sugar in the media are certainly cause for concern and the subjects of ongoing research and policy review. Many children spend even more time on the computer viewing content from the internet. And the amount of time spent connected to the internet continues to increase with the use of smart phones that essentially serve as mini-computers. What are the implications of this?

This page titled 15.14.2.2: Exploring Behaviour is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Anne Baird (eCampus Ontario) via source content that was edited to the style and standards of the LibreTexts platform.

- 2.3: Exploring Behaviour by Anne Baird is licensed CC BY-NC-SA 4.0. Original source: https://ecampusontario.pressbooks.pub/alwaysdeveloping/.

# 15.14.2.3: Exploring Cognition

## What do we think?

Cognitive theories focus on how our mental processes or cognitions change over time. We will examine the ideas of two cognitive theorists: Jean Piaget and Lev Vygotsky.

## Piaget: Changes in thought with maturation



Figure 15.14.2.3.1: Jean Piaget stands outside of the University of Michigan, circa 1968

**Jean Piaget** (1896-1980) is one of the most influential cognitive theorists in development inspired to explore children's ability to think and reason by watching his own children's development. He was one of the first to recognize and map out the ways in which children's intelligence differs from that of adults. He became interested in this area when he was asked to test the IQ of children and began to notice that there was a pattern in their wrong answers! He believed that children's intellectual skills change over time that that maturation rather than training brings about that change. Children of differing ages interpret the world differently.

#### Making sense of the world

Piaget believed that we are continuously trying to maintain cognitive equilibrium or a balance or cohesiveness in what we see and what we know. Children have much more of a challenge in maintaining this balance because they are constantly being confronted with new situations, new words, new objects, etc. When faced with something new, a child may either fit it into an existing framework (**schema**) and match it with something known (**assimilation**) such as calling all animals with four legs "doggies" because he or she knows the word doggie, or expand the framework of knowledge to accommodate the new situation (**accommodation**) by learning a new word to more accurately name the animal. This is the underlying dynamic in our own cognition. Even as adults we continue to try and "make sense" of new situations by determining whether they fit into our old way of thinking or whether we need to modify our thoughts.

## Stages of Cognitive Development

Piaget outlined four major stages of cognitive development. Let me briefly mention them here. We will discuss them in detail throughout the course.For about the first two years of life, the child experiences the world primarily through their senses and motor skills. Piaget referred to this type of intelligence as sensorimotor intelligence. During the preschool years, the child begins to master the use of symbols or words and is able to think of the world symbolically but not yet logically. This stage is the preoperational stage of development. The concrete operational stage in middle childhood is marked by an ability to use logic in

understanding the physical world. In the final stage, the formal operational stage the adolescent learns to think abstractly and to use logic in both concrete and abstract ways.

## Criticisms of Piaget's Theory

Piaget has been criticized for overemphasizing the role that physical maturation plays in cognitive development and in underestimating the role that culture and interaction (or experience) plays in cognitive development. Looking across cultures reveals considerable variation in what children are able to do at various ages. Piaget may have underestimated what children are capable of given the right circumstances.

# Vygotsky: Changes in thought with guidance



Figure 15.14.2.3.2: A young Lev Vygotsky who became famous for his sociocultural theory of development

**Lev Vygotsky** (1896-1934) was a Russian psychologist who wrote in the early 1900s but whose work was discovered in the United States in the 1960s but became more widely known in the 1980s. Vygotsky differed with Piaget in that he believed that a person not only has a set of abilities, but also a set of potential abilities that can be realized if given the proper guidance from others. His **sociocultural theory** emphasizes the importance of culture and interaction in the development of cognitive abilities. He believed that through guided participation known as scaffolding, with a teacher or capable peer, a child can learn cognitive skills within a certain range known as the zone of proximal development. Have you ever taught a child to perform a task? Maybe it was brushing their teeth or preparing food. Chances are you spoke to them and described what you were doing while you demonstrated the skill and let them work along with you all through the process. You gave them assistance when they seemed to need it, but once they knew what to do-you stood back and let them go. This is scaffolding and can be seen demonstrated throughout the world. This approach to teaching has also been adopted by educators. Rather than assessing students on what they are doing, they should be understood in terms of what they are capable of doing with the proper guidance. You can see how Vygotsky would be very popular with modern day educators. We will discuss Vygotsky in greater depth in upcoming lessons.

# Putting it all together: Ecological Systems Model

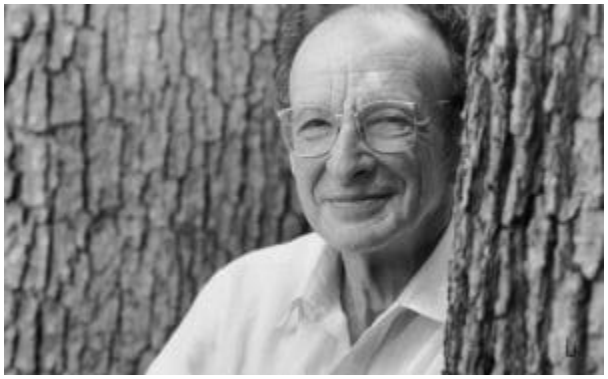


Figure 15.14.2.3.3: Urie Bronfenbrenner contributed the important Ecological Systems Theory applicable across many disciplines.

**Urie Brofenbrenner** (1917-2005) provides a model of human development that addresses its many influences. Brofenbrenner recognized that human interaction is influenced by larger social forces and that an understanding of those forces is essential for understanding an individual. The individual is impacted by **microsystems** such as parents or siblings; those who have direct, significant contact with the person. The input of those is modified by the cognitive and biological state of the individual as well. And these influence the person's actions which in turn influence systems operating on him or her. The **mesosystem** includes larger organizational structures such as school, the family, or religion. These institutions impact the microsystems just described. For example, the religious teachings and traditions may guide the child's family's actions or create a climate that makes the family feel stigmatized and this indirectly impacts the child's view of self and others. The philosophy of the school system, daily routine, assessment methods, and other characteristics can affect the child's self-image, growth, sense of accomplishment, and schedule thereby impacting the child, physically, cognitively, and emotionally. These mesosystems both influence and are influenced by the larger contexts of community referred to as the exosystem. A community's values, history, and economy can impact the organizational structures it houses. And the community is influenced by **macrosystems** which are cultural elements such as global economic conditions, war, technological trends, values, philosophies, and a society's responses to the global community. In sum, a child's experiences are shaped by larger forces such as the family, schools, and religion, and culture. All of this occurs in an historical context or chronosystem. Bronfenbrenner's model helps us combine each of the other theories described above and gives us a perspective that brings it all together.

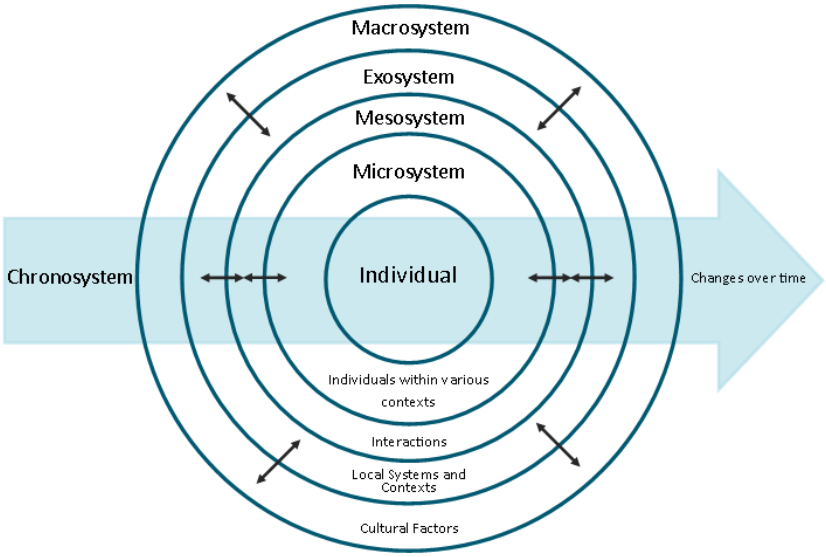



Figure 15.14.2.3.4: A visual representation of Bronfenbrenner's Ecological Systems Theory

This page titled 15.14.2.3: Exploring Cognition is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Anne Baird (eCampus Ontario) via source content that was edited to the style and standards of the LibreTexts platform.

- 2.4: Exploring Cognition by Anne Baird is licensed CC BY-NC-SA 4.0. Original source: https://ecampusontario.pressbooks.pub/alwaysdeveloping/.

# 15.15: ADOLESCENCE - PHYSICAL DEVELOPMENT

learning objectives

After this chapter, you should be able to:

1. Explain the changes in physical growth and brain growth
2. Compare and contrast different male and female changes that occur during puberty
3. Discuss teenage pregnancy, birth control, and sexual health
4. Summarize adolescent health: sleep, diet, and exercise
5. Discuss drug and substance abuse
6. Explain the prevalence, risk factors, and consequences of adolescent pregnancy and sexual health
7. Describe several mental health issues for teens

Adolescence is often defined as the period that begins with puberty and ends with the transition to adulthood. The commonly accepted beginning age for this period of development is age 12. When adolescence ends is harder to pin down. When does adulthood truly begin? Are we an adult at 18 years of age? Or 20? Or even older? Adolescence physical development has evolved historically, with evidence indicating that this stage is lengthening as individuals start puberty earlier and transition to adulthood later than in the past. Puberty today begins, on average, at age 10–11 years for girls and 11–12 years for boys. This average age of onset has decreased gradually over time since the 19th century by 3–4 months per decade, which has been attributed to a range of factors including better nutrition, obesity, increased father absence, and other environmental factors (Steinberg, 2013). Completion of formal education, financial independence from parents, marriage, and parenthood have all been markers of the end of adolescence and beginning of adulthood, and all of these transitions happen, on average, later now than in the past.


**15.15.1: Physical Growth**

**15.15.2: Brain Growth**

**15.15.3: Physical Changes in Adolescence**

**15.15.4: Adolescent Health- Sleep, Diet, and Exercise**

**15.15.5: Maintaining Emotional Health**

**15.15.6: Disorders and Syndromes**

**15.15.S: Summary**



This page titled 15.15: Adolescence - Physical Development is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Paris, Ricardo, Rymond, and Johnson (College of the Canyons) via source content that was edited to the style and standards of the LibreTexts platform.

- 13: Adolescence - Physical Development by Paris, Ricardo, Rymond, and Johnson is licensed CC BY 4.0. Original source: https://open.umn.edu/opentextbooks/textbooks/child-growth-and-development.

# 15.15.1: Physical Growth

The **adolescent growth spurt** is a rapid increase in an individual's height and weight during puberty resulting from the simultaneous release of growth hormones, thyroid hormones, and androgens. Males experience their growth spurt about two years later than females. The accelerated growth in various body parts happens at different times, but for all adolescents it has a fairly regular sequence. The first places to grow are the extremities (head, hands, and feet), followed by the arms and legs, and later the torso and shoulders. This non-uniform growth is one reason why an adolescent body may seem out of proportion. During puberty, bones become harder and more brittle.

Before puberty, there are nearly no differences between males and females in the distribution of fat and muscle. During puberty, males grow muscle much faster than females, and females experience a higher increase in body fat. An adolescent's heart and lungs increase in both size and capacity during puberty; these changes contribute to increased strength and tolerance for exercise.



Figure 15.15.1.1: An adolescent boy (Image on Pixabay)



Figure 15.15.1.2: An adolescent girl (Image on Pixabay)

This page titled 15.15.1: Physical Growth is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Paris, Ricardo, Rymond, and Johnson (College of the Canyons) via source content that was edited to the style and standards of the LibreTexts platform.

- 13.1: Physical Growth by Paris, Ricardo, Rymond, and Johnson is licensed CC BY 4.0. Original source: https://open.umn.edu/opentextbooks/textbooks/child-growth-and-development.

# 15.15.2: Brain Growth

Brain Growth continues into the early 20s. The development of the frontal lobe, in particular, is important during this stage. Adolescents often engage in increased risk-taking behaviors and experience heightened emotions during puberty; this may be due to the fact that the frontal lobes of their brains—which are responsible for judgment, impulse control, and planning—are still maturing until early adulthood (Casey, Tottenham, Liston, & Durston, 2005)

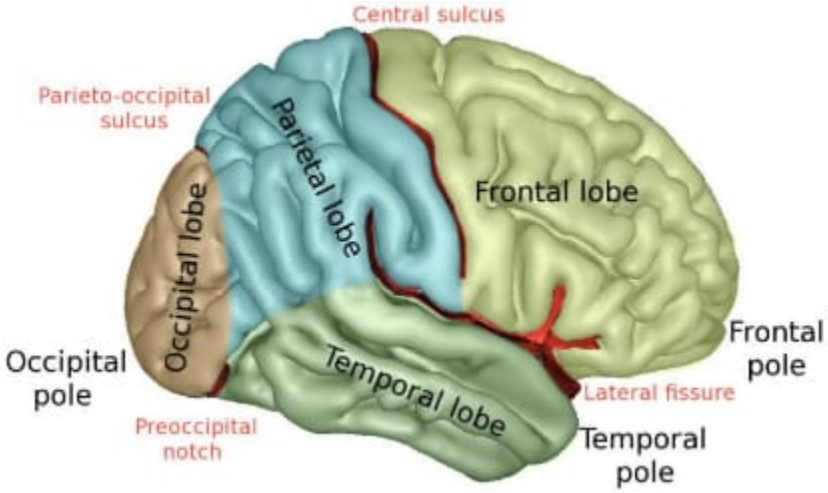



Figure 15.15.2.1: The brain continues developing into early adulthood. (Image by Sebastian023 is licensed under CC BY-SA 3.0)

The brain undergoes dramatic changes during adolescence. Although it does not get larger, it matures by becoming more interconnected and specialized (Giedd, 2015). The myelination and development of connections between neurons continues. This results in an increase in the white matter of the brain, and allows the adolescent to make significant improvements in their thinking and processing skills. Different brain areas become myelinated at different times. For example, the brain's language areas undergo myelination during the first 13 years. Completed insulation of the axons consolidates these language skills but makes it more difficult to learn a second language. With greater myelination, however, comes diminished plasticity as a myelin coating inhibits the growth of new connections (Dobbs, 2012).

Even as the connections between neurons are strengthened, synaptic pruning occurs more than during childhood as the brain adapts to changes in the environment. This **synaptic pruning** causes the gray matter of the brain, or the cortex, to become thinner but more efficient (Dobbs, 2012). The corpus callosum, which connects the two hemispheres, continues to thicken, allowing for stronger connections between brain areas. Additionally, the hippocampus becomes more strongly connected to the frontal lobes, allowing for greater integration of memory and experiences into our decision-making. 4

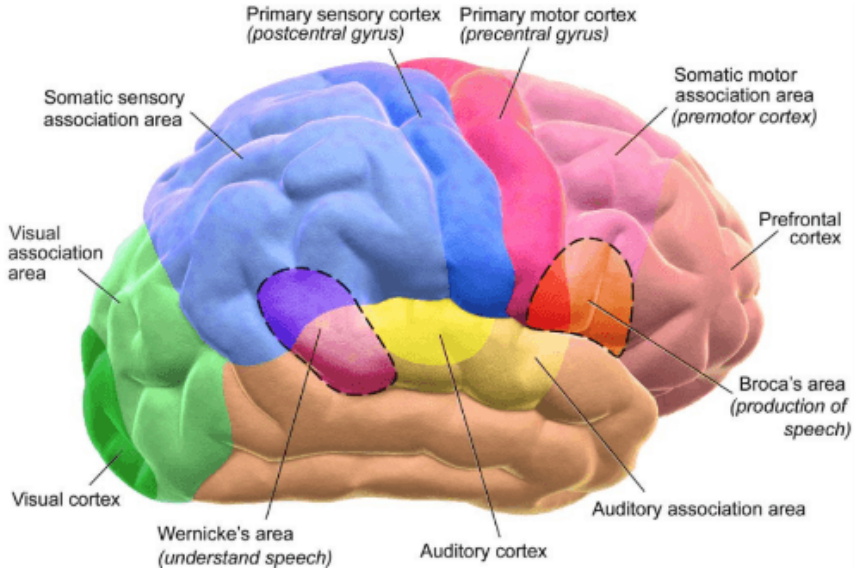



Figure 15.15.2.2: During adolescence the brain becomes more interconnected and specialized. (Image by BruceBlaus is licensed under CC BY 3.0)

The **limbic system**, which regulates emotion and reward, is linked to the hormonal changes that occur at puberty. The limbic system is also related to novelty seeking and a shift toward interacting with peers. In contrast, the **prefrontal cortex**, which is involved in the control of impulses, organization, planning, and making good decisions, does not fully develop until the mid-20s. According to Giedd (2015) the significant aspect of the later developing prefrontal cortex and early development of the limbic system is the "mismatch" in timing between the two. The approximately ten years that separates the development of these two brain areas can result in risky behavior, poor decision-making, and weak emotional control for the adolescent. When puberty begins earlier, this mismatch extends even further.

Teens often take more risks than adults and, according to research, it is because they weigh risks and rewards differently than adults do (Dobbs, 2012). For adolescents, the brain's sensitivity to the neurotransmitter dopamine peaks, and **dopamine** is involved in reward circuits so the possible rewards outweigh the risks. Adolescents respond especially strongly to social rewards during activities, and they prefer the company of others their same age. In addition to dopamine, the adolescent brain is affected by **oxytocin**, which facilitates bonding and makes social connections more rewarding. With both dopamine and oxytocin engaged, it is no wonder that adolescents seek peers and excitement in their lives that could end up actually harming them.

Because of all the changes that occur in the adolescent brain, the chances for abnormal development can occur, including mental illness. In fact, 50% of mental illness occurs by the age 14 and 75% occurs by age 24 (Giedd, 2015). Additionally, during this period of development the adolescent brain is especially vulnerable to damage from drug exposure. For example, repeated exposure to marijuana can affect cellular activity in the endocannabinoid system. Consequently, adolescents are more sensitive to the effects of repeated marijuana exposure (Weir, 2015).

However, researchers have also focused on the highly adaptive qualities of the adolescent brain, which allow the adolescent to move away from the family towards the outside world (Dobbs, 2012; Giedd, 2015). Novelty seeking and risk taking can generate positive outcomes including meeting new people and seeking out new situations. Separating from the family and moving into new relationships and different experiences are actually quite adaptive for society. 6



Figure 15.15.2.3: Adolescents prefer the company of others their same age. (Image by Bailey Torres on Unsplash)

The physical growth and the changes of puberty mark the onset of adolescence (Lerner & Steinberg, 2009). For both boys and girls, these changes include a growth spurt in height, growth of pubic and underarm hair, and skin changes (e.g., pimples). Hormones drive these pubescent changes, particularly the increase in testosterone for boys and estrogen for girls. 8

## Contributors and Attributions

4. Lifespan Development: A Psychological Perspective by Martha Lally and Suzanne Valentine-French is licensed under CC BY-NC-SA 3.0

6. An Introduction to Nutrition- Nutrition through the Life Cycle: From Pregnancy to the Toddler Years by Maureen Zimmerman and Beth Snow is licensed under CC BY-NC-SA 3.0

8. Adolescent Development by Jennifer Lansford is licensed under CC BY-NC-SA 4.0

This page titled 15.15.2: Brain Growth is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Paris, Ricardo, Rymond, and Johnson (College of the Canyons) via source content that was edited to the style and standards of the LibreTexts platform.

- 13.2: Brain Growth by Paris, Ricardo, Rymond, and Johnson is licensed CC BY 4.0. Original source: https://open.umn.edu/opentextbooks/textbooks/child-growth-and-development.

# 15.15.3: Physical Changes in Adolescence

Adolescence begins with the onset of **puberty**, a developmental period in which hormonal changes cause rapid physical alterations in the body, culminating in sexual maturity. Although the timing varies to some degree across cultures, the average age range for reaching puberty is between 9 and 14 years for girls and between 10 and 17 years for boys (Marshall & Tanner, 1986). This period of physical development of the adolescent age 9-13 is divided into two phases. 9

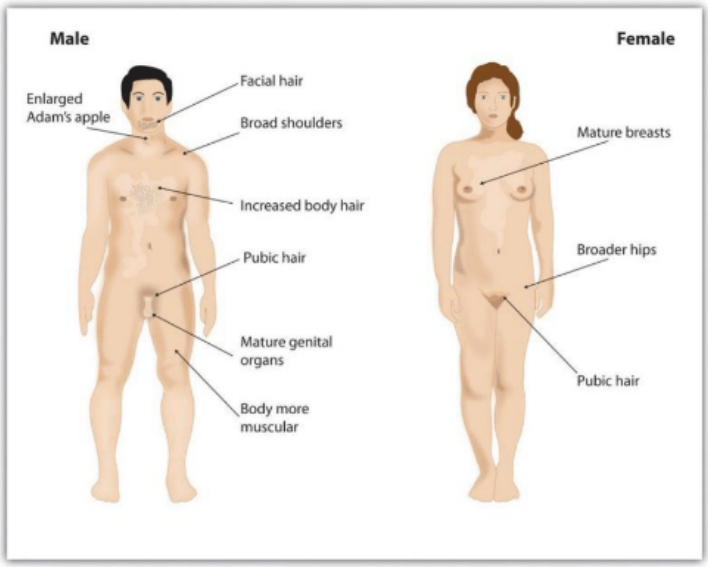



Figure 15.15.3.1: Puberty brings dramatic changes in the body, including the development of primary and secondary sex characteristics. (Image by the Open University of Hong Kong is licensed under CC BY-SA 4.0)

The first phase of puberty begins when the pituitary gland begins to stimulate the production of the male sex hormone **testosterone** in boys and the female sex hormones **estrogen** and **progesterone** in girls. The release of these sex hormones triggers the development of the **primary sex characteristics**, the sex organs concerned with reproduction. It also involves height increases from 20 to 25 percent. Puberty is second to the prenatal period in terms of rapid growth as the long bones stretch to their final, adult size. Girls grow 2–8 inches (5–20 centimeters) taller, while boys grow 4–12 inches (10–30 centimeters) taller.

**Secondary sexual characteristics** are visible physical changes not directly linked to reproduction but signal sexual maturity. The growth spurt for girls usually occurs earlier than that for boys, with some boys continuing to grow into their 20s. For males this includes broader shoulders, an enlarged Adam's apple, and a lower voice as the **larynx** grows. Boys typically begin to grow facial hair between ages 14 and 16, which becomes coarser and darker, and hair growth occurs in the pubic area, under the arms, and on the face.

For females the enlargement of breasts is usually the first sign of puberty and, on average, occurs between ages 10 and 12 (Marshall & Tanner, 1986). Girl's hips broaden and pubic and underarm hair develops and becomes darker and coarser. Both boys and girls experience a rapid growth spurt during this stage. Males and females may begin shaving during this time period as well as showing signs of acne on their faces and bodies.



Figure 15.15.3.2: Males often start shaving during puberty. (Image by Antiporda Productions is licensed under CC BY 2.0)

**Acne** is an unpleasant consequence of the hormonal changes in puberty. **Acne** is defined as pimples on the skin due to overactive sebaceous (oil-producing) glands (Dolgin, 2011). These glands develop at a greater speed than the skin ducts that discharge the oil. Consequently, the ducts can become blocked with dead skin and acne will develop. According to the University of California at Los Angeles Medical Center (2000), approximately 85% of adolescents develop acne, and boys develop acne more than girls because of greater levels of testosterone in their systems (Dolgin, 2011). Hormones that are also responsible for sexual development can also wreak havoc on the teenage skin.12

A major milestone in puberty for girls is **menarche**, the first menstrual period, typically experienced at around 12 or 13 years of age (Anderson, Dannal, & Must, 2003). The age of menarche varies substantially and is determined by genetics, as well as by diet and lifestyle, since a certain amount of body fat is needed to attain menarche. Girls who are very slim, who engage in strenuous athletic activities, or who are malnourished may begin to menstruate later. Even after menstruation begins, girls whose level of body fat drops below the critical level may stop having their periods. The sequence of events for puberty is more predictable than the age at which they occur. Some girls may begin to grow pubic hair at age 10 but not attain menarche until age 15.13

## Male Anatomy

Males have both internal and external genitalia that are responsible for procreation and sexual intercourse. Males produce their sperm on a cycle, and unlike the female's ovulation cycle, the male sperm production cycle is constantly producing millions of sperm daily. The male sex organs are the penis and the testicles, the latter of which produce semen and sperm. The semen and sperm, as a result of sexual intercourse, can fertilize an ovum in the female's body; the fertilized ovum (zygote) develops into a fetus, which is later born as a child.

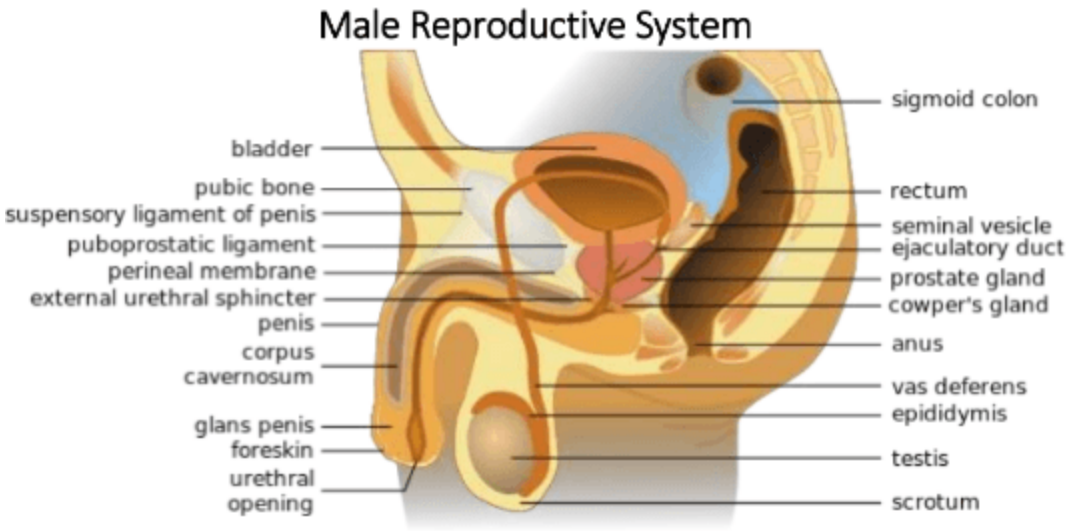



Figure 15.15.3.3: (Image is in the public domain)

## Female Anatomy

Female external genitalia is collectively known as the vulva, which includes the mons veneris, labia majora, labia minora, clitoris, vaginal opening, and urethral opening. Female internal reproductive organs consist of the vagina, uterus, fallopian tubes, and ovaries. The uterus hosts the developing fetus, produces vaginal and uterine secretions, and passes the male's sperm through to the fallopian tubes while the ovaries release the eggs. A female is born with all her eggs already produced. The vagina is attached to the uterus through the cervix, while the uterus is attached to the ovaries via the fallopian tubes. Females have a monthly reproductive cycle; at certain intervals the ovaries release an egg, which passes through the fallopian tube into the uterus. If, in this transit, it meets with sperm, the sperm might penetrate and merge with the egg, fertilizing it. If not fertilized, the egg and the tissue that was lining the uterus is flushed out of the system through **menstruation** (around every 28 days).

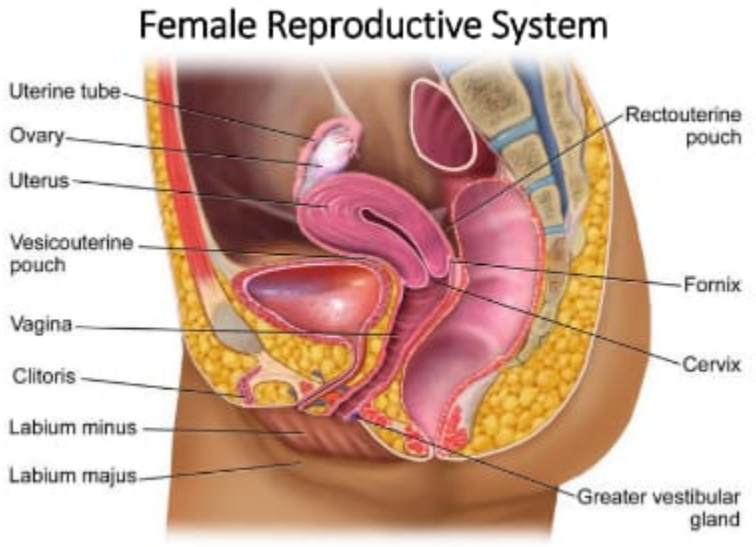



Figure 15.15.3.4: (Image by BruceBlaus is licensed under CC BY-SA 3.0)

## Effects of Puberty on Development

The age of puberty is getting younger for children throughout the world. A century ago the average age of a girl's first period in the United States and Europe was 16, while today it is around 13. Because there is no clear marker of puberty for boys, it is harder to determine if boys are maturing earlier, too. In addition to better nutrition, less positive reasons associated with early puberty

for girls include increased stress, obesity, and endocrine disrupting.

Because rates of physical development vary so widely among teenagers, puberty can be a source of pride or embarrassment. Girls and boys who develop more slowly than their peers may feel self-conscious about their lack of physical development; some research has found that negative feelings are particularly a problem for late maturing boys, who are at a higher risk for depression and conflict with parents (Graber et al., 1997) and more likely to be bullied (Pollack & Shuster, 2000). Additionally, problems are more likely to occur when the child is among the first in his or her peer group to develop. Because the preadolescent time is one of not wanting to appear different, early developing children stand out among their peer group and gravitate toward those who are older (Weir, 2016).

Early maturing boys tend to be physically stronger, taller, and more athletic than their later maturing peers; this can contribute to differences in popularity among peers, which can in turn influence the teenager's confidence. Some studies show that boys who mature earlier tend to be more popular and independent but are also at a greater risk for substance abuse and early sexual activity (Flannery, Rowe, & Gulley, 1993; Kaltiala-Heino, Rimpela, Rissanen, & Rantanen, 2001).

Early maturing girls may face increased teasing and sexual harassment related to their developing bodies, which can contribute to self-consciousness and place them at a higher risk for anxiety, depression, substance abuse, and eating disorders (Ge, Conger, & Elder, 2001; Graber, Lewinsohn, Seeley, & Brooks-Gunn, 1997; Striegel-Moore & Cachelin, 1999).16

## The Brain and Sex

The brain is the structure that translates the nerve impulses from the skin into pleasurable sensations. It controls nerves and muscles used during sexual behavior. The brain regulates the release of hormones, which are believed to be the physiological origin of sexual desire. The cerebral cortex, which is the outer layer of the brain that allows for thinking and reasoning, is believed to be the origin of sexual thoughts and fantasies. Beneath the cortex is the limbic system, which consists of the amygdala, hippocampus, cingulate gyrus, and septal area. These structures are where emotions and feelings are believed to originate, and are important for sexual behavior.

The **hypothalamus** is the most important part of the brain for sexual functioning. This is the small area at the base of the brain consisting of several groups of nerve-cell bodies that receives input from the limbic system. Studies with lab animals have shown that destruction of certain areas of the hypothalamus causes complete elimination of sexual behavior. One of the reasons for the importance of the hypothalamus is that it controls the pituitary gland, which secretes hormones that control the other glands of the body.



Figure 15.15.3.5: Hypothalamus controls the pituitary gland. (Image is in the public domain)

## Hormones

Several important sexual hormones are secreted by the pituitary gland. Oxytocin, also known as the hormone of love, is released during sexual intercourse when an orgasm is achieved. Oxytocin is also released in females when they give birth or are breast-

feeding; it is believed that oxytocin is involved with maintaining close relationships. Both prolactin and oxytocin stimulate milk production in females. Follicle-stimulating hormone (FSH) is responsible for ovulation in females by triggering egg maturity; it also stimulates sperm production in males. Luteinizing hormone (LH) triggers the release of a mature egg in females during the process of ovulation.

In males, testosterone appears to be a major contributing factor to sexual motivation. Vasopressin is involved in the male arousal phase, and the increase of vasopressin during erectile response may be directly associated with increased motivation to engage in sexual behavior.

The relationship between hormones and female sexual motivation is not as well understood, largely due to the overemphasis on male sexuality in Western research. Estrogen and progesterone typically regulate motivation to engage in sexual behavior for females, with estrogen increasing motivation and progesterone decreasing it. The levels of these hormones rise and fall throughout a woman's menstrual cycle. Research suggests that testosterone, oxytocin, and vasopressin are also implicated in female sexual motivation in similar ways as they are in males, but more research is needed to understand these relationships.



Figure 15.15.3.6: By the end of high school, more than half of boys and girls report engaging in sexual behaviors. (Image by Pedro Ribeiro Simoes is licensed under CC BY 2.0)

Sexuality will be discussed in Chapter 15, Adolescence Social Emotional Development. The following section will look at the reasons and the consequences of teenage pregnancy, forms of birth control, and sexually transmitted diseases.

## Adolescent Pregnancy, Birth Control Methods, and Sexually Transmitted Infections

By the end of high school, more than half of boys and girls report having experienced sexual intercourse at least once, though it is hard to be certain of the proportion because of the sensitivity and privacy of the information. (Center for Disease Control, 2004; Rosenbaum, 2006).

## Teen Pregnancy

Although adolescent pregnancy rates have declined since 1991, teenage birth rates in the United States are higher than most industrialized countries. In 2014, females aged 15–19 years experienced a birth rate of 24.2 per 1,000 women. This is a drop of 9% from 2013. Birth rates fell 11% for those aged 15–17 years and 7% for 18–19 year-olds. It appears that adolescents seem to be less sexually active than in previous years, and those who are sexually active seem to be using birth control (CDC, 2016).

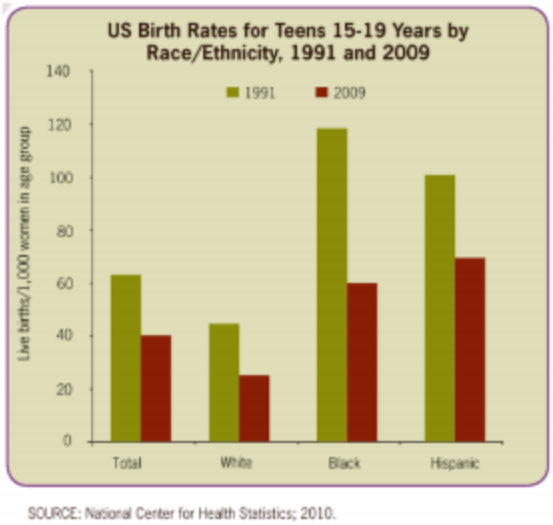



Figure 15.15.3.7: Birth rates for American teenagers. (Image is in the public domain)

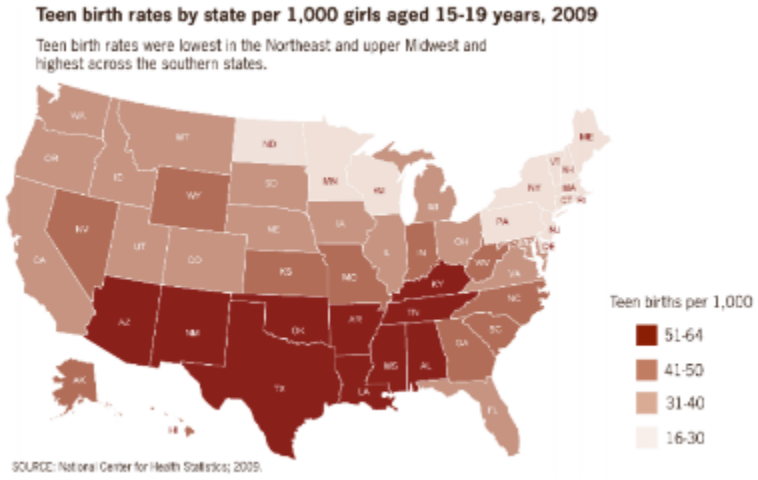



Figure 15.15.3.8: Birth rates by state. (Image is in the public domain)

## Risk Factors for Adolescent Pregnancy

Miller, Benson, and Galbraith (2001) found that parent/child closeness, parental supervision, and parents' values against teen intercourse (or unprotected intercourse) decreased the risk of adolescent pregnancy. In contrast, residing in disorganized/dangerous neighborhoods, living in a lower SES family, living with a single parent, having older sexually active siblings or pregnant/parenting teenage sisters, early puberty, and being a victim of sexual abuse place adolescents at an increased risk of adolescent pregnancy.

## Consequences of Adolescent Pregnancy

After a child is born life can be difficult for a teenage mother. Only 40% of teenagers who have children before age 18 graduate from high school. Without a high school degree, her job prospects are limited and economic independence is difficult. Teen mothers are more likely to live in poverty and more than 75% of all unmarried teen mothers receive public assistance within 5 years of the birth of their first child. Approximately, 64% of children born to an unmarried teenage high-school dropout live in poverty. Further, a child born to a teenage mother is 50% more likely to repeat a grade in school and is more likely to perform poorly on standardized tests and drop out before finishing high school (March of Dimes, 2012).21

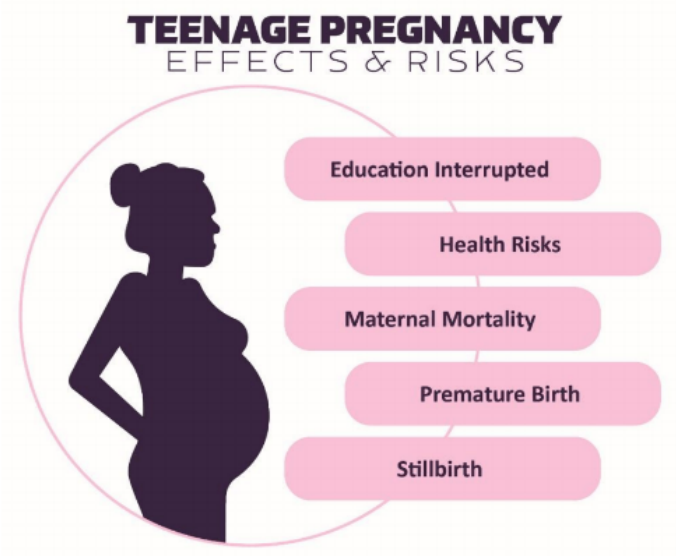



Figure 15.15.3.9: Effects and risks of teenage pregnancy. (Image by Ian Joslin is licensed under CC BY 4.0)

## Sexually Transmitted Infections

**Sexually transmitted infections (STIs)**, also referred to as sexually transmitted diseases (STDs) or venereal diseases (VDs), are illnesses that have a significant probability of transmission by means of sexual behavior, including vaginal intercourse, anal sex, and oral sex. It's important to mention that some STIs can also be contracted by sharing intravenous drug needles with an infected person, through childbirth, or breastfeeding. Common STIs include:

- chlamydia;
- herpes (HSV-1 and HSV-2);
- human papillomavirus (HPV);
- gonorrhea;
- syphilis;
- trichomoniasis;
- HIV (human immunodeficiency virus) and AIDS (acquired immunodeficiency syndrome).

According to the Centers for Disease Control and Prevention (CDC) (2014), there was an increase in the three most common types of STDs in 2014. Those most affected by STDS include younger, gay/bisexual males, and females. The most effective way to prevent transmission of STIs is to practice **abstinence**, (not participating in sexual intercourse), safe sex, and to avoid direct contact of skin or fluids which can lead to transfer with an infected partner. Proper use of safe-sex supplies (such as male condoms, female condoms, gloves, or dental dams) reduces contact and risk and can be effective in limiting exposure; however, some disease transmission may occur even with these barriers.23

Practicing safe sex is important to one's physical health. In the following section we'll look at elements of adolescent health, including sleep, diet, and exercise.

## Contraceptive Methods and Protection from Sexually Transmitted Infection

There are many methods of **contraception** that sexually active adolescents can use to reduce the chances of pregnancy.

*Table 15.15.3.1: Reversible Methods of Birth Control (Contraception by the CDC is in the public domain)*

| Method | Description | Failure Rate |
|---|---|---|
| **Intrauterine Contraception (IUD)** | An IUD is a small device that is shaped in the form of a “T” placed inside the uterus | 0.1-0.8% |
| **Implant** | A single, thin rod that is inserted under the skin of a woman’s upper arm. | 0.01% |
| **Injection** | Injections or shots of hormones to prevent pregnancy are given in the buttocks or arm every three months. | 4% |
| **Oral contraceptives** | Also called “the pill,” contain the hormones to prevent pregnancy. A pill is taken at the same time each day. | 7% |
| **Patch** | This skin patch is worn on the lower abdomen, buttocks, or upper body and releases hormones to prevent pregnancy into the bloodstream. A new patch once a week for three weeks and then left off for a week. | 7% |
| **Hormonal vaginal contraceptive ring** | The ring is placed in the vagina and releases the hormones to prevent pregnancy. It is worn for three weeks. A week after it is removed a new ring is placed. | 7% |
| **Spermicide** | These kill sperm and come in several forms—foam, gel, cream, film, suppository, or tablet. They are placed in the vagina before intercourse. | 21% |
| **Diaphragm or cervical cap** | A cup that is placed inside the vagina to cover the cervix to block sperm. It is inserted with spermicide before sexual intercourse. | 17% |
| **Sponge** | This contains spermicide and is placed in the vagina where it fits over the cervix. | 14-27% |
| **Male condom** | Worn (single use) by the man over the penis to keep sperm from getting into a woman’s body. | 13% |
| **Female condom** | Worn (single use) by the woman inside the vagina to keep sperm from getting into a woman’s body. | 21% |
| **Natural Family Planning** | During a regular menstrual cycle, fertile days can be predicted. Sexual intercourse can be avoided on those days. | 2-23% |
| **Copper IUD** | Can be inserted up to 5 days after sexual intercourse | <1%25 |
| **Emergency contraceptive pills** | Can be taken up to 5 days after sexual intercourse and may be available over-the-counter. | 1-10%26 |

In choosing a birth control method, dual protection from the simultaneous risk for HIV and other STIs also should be considered. Although hormonal contraceptives and IUDs are highly effective at preventing pregnancy, they do not protect against STIs, including HIV. Consistent and correct use of the male latex condom reduces the risk for HIV infection and other STIs, including chlamydial infection, gonococcal infection, and trichomoniasis.

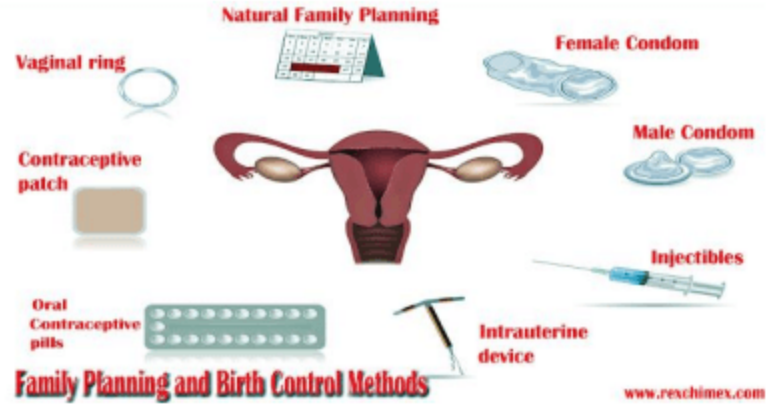



Figure 15.15.3.10: There are many types of birth control methods. (Image by rexchimex is licensed under CC BY 4.0)

## Contributors and Attributions

9. Adolescence: Developing Independence and Identity by Charles Stangor is licensed under CC BY-NC-SA 3.0

12. Lifespan Development: A Psychological Perspective by Martha Lally and Suzanne Valentine-French is licensed under CC BY-NC-SA 3.0

13. Beginning Psychology - Growing and Developing by Charles Stangor is licensed under CC BY-NC-SA 3.0

16. Adolescence Physical Growth by Boundless.com is licensed under CC BY-SA 4.0; Lifespan Development: A Psychological Perspective by Martha Lally and Suzanne Valentine-French is licensed under CC BY-NC-SA 3.0

21. Lifespan Development: A Psychological Perspective by Martha Lally and Suzanne Valentine-French is licensed under CC BY-NC-SA 3.0

23. Lifespan Development: A Psychological Perspective by Martha Lally and Suzanne Valentine-French is licensed under CC BY-NC-SA 3.0

25. How effective is emergency contraception? (2016). Retrieved from https://www.nhs.uk/conditions/contraception/how-effective-emergency-contraception/

26. David G. Weismiller M.D., Sc.M (2004). Emergency Contraception. Retrieved from www.aafp.org/afp/2004/0815/p707.html

This page titled 15.15.3: Physical Changes in Adolescence is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Paris, Ricardo, Rymond, and Johnson (College of the Canyons) via source content that was edited to the style and standards of the LibreTexts platform.

- 13.3: Physical Changes in Adolescence by Paris, Ricardo, Rymond, and Johnson is licensed CC BY 4.0. Original source: https://open.umn.edu/opentextbooks/textbooks/child-growth-and-development.

# 15.15.4: Adolescent Health- Sleep, Diet, and Exercise

## Sleep Health

According to the National Sleep Foundation (NSF) (2016), adolescents need about 8 to 10 hours of sleep each night to function best. The most recent Sleep in America poll in 2006 indicated that adolescents between sixth and twelfth grade were not getting the recommended amount of sleep. For the older adolescents, only about one in ten (9%) get an optimal amount of sleep, and they are more likely to experience negative consequences the following day. These include feeling too tired or sleepy, being cranky or irritable, falling asleep in school, having a depressed mood, and drinking caffeinated beverages (NSF, 2016). Additionally, they are at risk for substance abuse, car crashes, poor academic performance, obesity, and a weakened immune system (Weintraub, 2016).




Figure 15.15.4.1: Most teenagers aren't sleeping enough. (Image by the CDC is in the public domain)

Why don't adolescents get adequate sleep? In addition to known environmental and social factors, including work, homework, media, technology, and socializing, the adolescent brain is also a factor. As adolescents go through puberty, their circadian rhythms change and push back their sleep time until later in the evening (Weintraub, 2016). This biological change not only keeps adolescents awake at night, it makes it difficult for them to get up in the morning. When they are awake too early, their brains do not function optimally. Impairments are noted in attention, behavior, and academic achievement, while increases in tardiness and absenteeism are also demonstrated. Psychologists and other professionals have been advocating for later school times, and they have produced research demonstrating better student outcomes for later start times. More middle and high schools have changed their start times to better reflect the sleep research. 29



Figure 15.15.4.2: If adolescents get too little sleep, their brain doesn't function optimally. (Image by John-Mark Smith on Pexels)

## Eating: Healthy Habits = Healthy Lives

The **Dietary Guidelines** define late adolescence, as the period from ages fourteen to eighteen. After puberty, the rate of physical growth slows down. Girls stop growing taller around age sixteen, while boys continue to grow taller until ages eighteen to twenty. One of the psychological and emotional changes that take place during this life stage includes the desire for independence as adolescents develop individual identities apart from their families. As teenagers make more of their dietary decisions, parents, caregivers, and authority figures should guide them toward appropriate, nutritious choices.



Figure 15.15.4.3: Adolescent food choices may not be healthy. (Image by Garry Knight is licensed under CC BY 2.0)

Some adolescents don't have all the food necessary for proper development and may be food insecure. Most people have access to fresh water in all except the most extreme situations; the need for food is the most fundamental and important human need. More than 1 in 10 U.S. households contain people who live without enough nourishing food and this lack of proper nourishment has profound effects on their abilities to lead lives that will allow them to develop to their fullest potential. (Hunger Notes, n.d.).

When people are extremely hungry, their motivation to attain food completely changes their behavior. Hungry people become listless and apathetic to save energy and then become completely obsessed with food. Ancel Keys and his colleagues (Keys, Brožek, Henschel, Mickelsen, & Taylor, 1950) found that volunteers who were placed on severely reduced-calorie diets lost all interest in sex and social activities, becoming preoccupied with food. According to Maslow, meeting one's basic needs is vital for proper growth and development. 32

### Abraham Maslow's Hierarchy of Needs

Maslow's theory is based on a simple premise: human beings have needs that are hierarchically ranked. There are some needs that are basic to all human beings, and in their absence, nothing else matters. We are ruled by these needs until they are satisfied. After we satisfy our basic needs, they no longer serve as motivators and we can begin to satisfy higher-order needs.

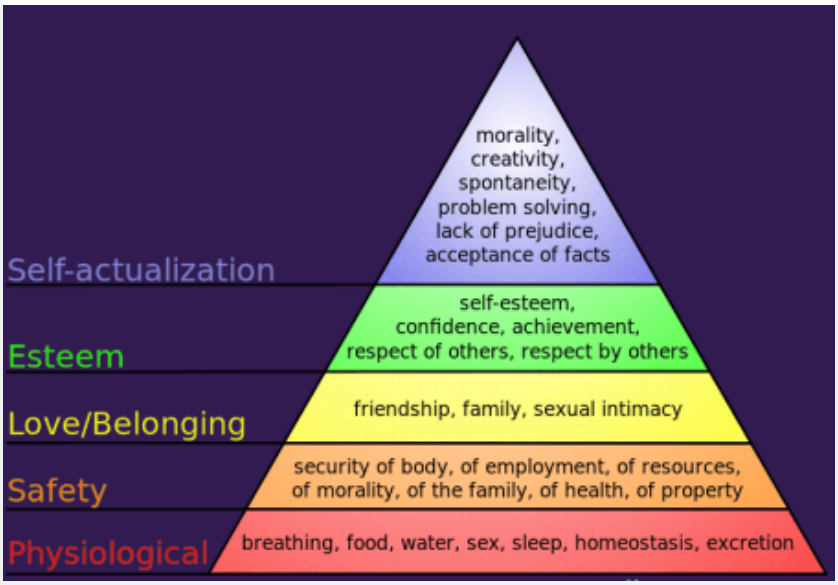



Figure 15.15.4.4: Maslow's Hierarchy of Needs. (Image by J. Finkelstein is licensed under CC BY-SA 3.0)

Maslow organized human needs into a pyramid that includes (from lowest-level to highest-level) physiological, safety, love/belonging, esteem, and self-actualization needs. According to Maslow, one must satisfy lower-level needs before addressing needs that occur higher in the pyramid. For example, if someone is starving, it is quite unlikely that he will spend a lot of time, or any time at all, wondering whether other people think he is a good person. Instead, all of his energies are geared toward finding something to eat. 34

## Weight Management

Forming good eating habits and engaging in fitness or exercise programs will help maintain a healthy weight and develop lifelong habits. Research says that the best way to control weight is: eat less (consume fewer calories) and exercise (burn more calories). To maintain a healthy weight, restricting your diet alone is difficult and can be substantially improved when it is accompanied by increased physical activity.

The energy (calorie) requirements for preteens differ according to gender, growth, and activity level. For ages nine to thirteen, girls should consume about 1,400 to 2,200 calories per day and boys should consume 1,600 to 2,600 calories per day. Physically active preteens who regularly participate in sports or exercise need to eat a greater number of calories to account for increased energy expenditures. 35

People who exercise regularly, and in particular those who combine exercise with dieting, are less likely to be obese (Borer, 2008).Borer, K. T. (2008). Exercise not only improves our waistline, but also improves our overall mental health by lowering stress and improving feelings of well-being. Exercise also increases cardiovascular capacity, lowers blood pressure, and helps improve diabetes, joint flexibility, and muscle strength (American Heart Association, 1998).

For long lasting change, it's important to plan healthy meals, limit snacking, and to schedule exercise into our daily lives. 36

## Diet Extremes - Obesity to Starvation

In this section, we'll learn about the two ends of the spectrum (or extremes) of nutritional outcomes.

## Obesity

Children need adequate caloric intake for growth, and it is important not to impose highly restrictive diets. However, exceeding caloric requirements on a regular basis can lead to childhood obesity, which has become a major problem in North America. Nearly one of three US children and adolescents are overweight or obese. (Let's Move. "Learn the Facts." Accessed March 5, 2012.

www.letsmove.gov/learn-facts/...dhood-obesity.)



Figure 15.15.4.5: Obesity can affect self-esteem, energy, and activity level. (Image by the 59th Medical Wing is in the public domain)

There are a number of reasons behind the problem of obesity, including:

- larger portion sizes
- limited access to nutrient-rich foods
- increased access to fast foods and vending machines
- lack of breastfeeding support
- declining physical education programs in schools
- insufficient physical activity and a sedentary lifestyle
- media messages encouraging the consumption of unhealthy foods

Obesity has a profound effect on self-esteem, energy, and activity level. Even more importantly, it is a major risk factor for a number of diseases later in life, including cardiovascular disease, Type 2 diabetes, stroke, hypertension, and certain cancers.

A percentile for body mass index (BMI) specific to age and sex is used to determine if a child is overweight or obese. If a child gains weight inappropriate to growth, parents and caregivers should limit energy-dense, nutrient-poor snack foods. In addition, it is extremely beneficial to increase a child's physical activity and limit sedentary activities, such as watching television, playing video games, or surfing the Internet. Programs to address childhood obesity can include behavior modification, exercise counseling, psychological support or therapy, family counseling, and family meal-planning advice. 38

## Eating Disorders

Although eating disorders can occur in children and adults, they frequently appear during the teen years or young adulthood (National Institute of Mental Health (NIMH), 2016). Eating disorders affect both genders, although rates among women are 2 1/2 times greater than among men. Similar to women who have eating disorders, men also have a distorted sense of body image, including body dysmorphia or an extreme concern with becoming more muscular. (Hudson, Hiripi, Pope, & Kessler, 2007; Wade, Keski-Rahkonen, & Hudson, 2011).



Figure 15.15.4.6: This image portrays anorexia. No matter how thin she is, she will see herself being heavier. (Image by Flebilis Roxa is licensed under CC BY-NC-SA 2.0)

## Risk Factors for Eating Disorders

Researchers are finding that eating disorders are caused by a complex interaction of genetic, biological, behavioral, psychological, and social factors (NIMH, 2016). Eating disorders appear to run in families, and researchers are working to identify DNA variations that are linked to the increased risk of developing eating disorders. Researchers have also found differences in patterns of brain activity in women with eating disorders in comparison with healthy women.

The main criteria for the most common eating disorders: **Anorexia nervosa**, **bulimia nervosa**, and **binge-eating disorder** are described in the Diagnostic and Statistical Manual of Mental Disorders-Fifth Edition (DSM-5)(American Psychiatric Association, 2013) and listed in Table 15.15.4.1. 40

*Table 15.15.4.1: DSM-5 Eating Disorders*

| Eating Disorder | Description |
|---|---|
| **Anorexia Nervosa** | • Restriction of energy intake leading to a significantly low body weight<br>• Intense fear of gaining weight<br>• Disturbance in one's self-evaluation regarding body weight |
| **Bulimia Nervosa** | • Recurrent episodes of binge eating<br>• Recurrent inappropriate compensatory behaviors to prevent weight gain, including purging, laxatives, fasting or excessive exercise<br>• Self-evaluation is unduly affected by body shape and weight |
| **Binge-Eating Disorder** | • Recurrent episodes of binge eating<br>• Marked distress regarding binge eating<br>• The binge eating is not associated with the recurrent use of inappropriate compensatory behavior |

## Health Consequences of Eating Disorders

For those suffering from anorexia, health consequences include an abnormally slow heart rate and low blood pressure, which increases the risk for heart failure. Additionally, there is a reduction in bone density (osteoporosis), muscle loss and weakness, severe dehydration, fainting, fatigue, and overall weakness. Individuals with this disorder may die from complications associated with Anorexia nervosa, which has the highest mortality rate of any psychiatric disorder.

The binge and purging cycle of bulimia can affect the digestives system and lead to electrolyte and chemical imbalances that can affect the heart and other major organs. Frequent vomiting can cause inflammation and possible rupture of the esophagus, as well as tooth decay and staining from stomach acids. Lastly, binge eating disorder results in similar health risks to obesity, including high blood pressure, high cholesterol levels, heart disease, Type II diabetes, and gall bladder disease (National Eating Disorders Association, 2016).

## Eating Disorders Treatment

The foundations of treatment for eating disorders include adequate nutrition and discontinuing destructive behaviors, such as purging. Treatment plans are tailored to individual needs and include medical care, nutritional counseling, medications (such as antidepressants), and individual, group, and/or family psychotherapy (NIMH, 2016). 41



Figure 15.15.4.7: Counseling is often a form of treatment for eating disorders. (Image is licensed under CC0)

## Drug and Substance Abuse

Drug use and the possibility of abuse and addiction primarily manifest as physical problems. However, the effects of these substances are not only physical, but also have long lasting consequences on cognitive development as well as effect social emotional development in a variety of ways. In the next section we'll learn about what drugs are, the different kinds of drugs, and what the effects are of each.

## Drug Experimentation

Drug use is, in part, the result of socialization. Adolescents may try drugs when their friends convince them to, and these decisions are based on social norms about the risks and benefits of various drugs. Despite the fact that young people have experimented with cigarettes, alcohol, and other dangerous drugs for many generations, it would be better if they did not. All recreational drug use is associated with at least some risks, and those who begin using drugs earlier are also more likely to use more dangerous drugs. They may develop an addiction or substance abuse problem later on. 43



Figure 15.15.4.8: Social norms and peers influence adolescents' drug use. (Image by Find Rehab Centers is licensed under CC BY 2.0)

# What Are Drugs?

A **psychoactive drug** is a chemical that changes our states of consciousness, and particularly our perceptions and moods. These drugs are commonly found in everyday foods and beverages, including chocolate, coffee, and soft drinks, as well as in alcohol and in over-the-counter drugs, such as aspirin, Tylenol, and cold and cough medication. Psychoactive drugs are also frequently prescribed as sleeping pills, tranquilizers, and antianxiety medications, and they may be taken, illegally, for recreational purposes. The four primary classes of psychoactive drugs are stimulants, depressants, opioids, and hallucinogens.

# Stimulants

A **stimulant** is a psychoactive drug that operates by blocking the reuptake of dopamine, norepinephrine, and serotonin in the synapses of the central nervous system (CNS). Because more of these neurotransmitters remain active in the brain, the result is an increase in the activity of the sympathetic division of the autonomic nervous system (ANS). Effects of stimulants include increased heart and breathing rates, pupil dilation, and increases in blood sugar accompanied by decreases in appetite. For these reasons, stimulants are frequently used to help people stay awake and to control weight.

Used in moderation, some stimulants may increase alertness, but used in an irresponsible fashion they can quickly create dependency. A major problem is the “crash” that results when the drug loses its effectiveness and the activity of the neurotransmitters returns to normal. The withdrawal from stimulants can create profound depression and lead to an intense desire to repeat the high.

*Table* 15.15.4.2*: Stimulants*

| Drug | Dangers and Side Effects | Psychological Dependence | Physical Dependence | Addiction Potential |
|---|---|---|---|---|
| **Caffeine** | May create dependence | Low | Low | Low |
| **Nicotine** | Has major negative health effects if smoked or chewed | High | High | High |
| **Cocaine** | Decreased appetite, headache | Low | Low | Moderate |
| **Amphetamines** | Possible dependence, accompanied by severe “crash” with depression as drug effects wear off, particularly if smoked or injected | Moderate | Low | Moderate to High |

## A Closer Look at the Danger of Adolescence Use of Nicotine

**Nicotine** is a psychoactive drug found in the nightshade family of plants, where it acts as a natural pesticide. Nicotine is the main cause for the dependence-forming properties of tobacco use, and tobacco use is a major health threat. Nicotine creates both psychological and physical addiction and it is one of the hardest addictions to break. Nicotine content in cigarettes has slowly increased over the years, making quitting smoking more and more difficult. Nicotine is also found in smokeless (chewing) tobacco and electronic cigarettes (vaping).

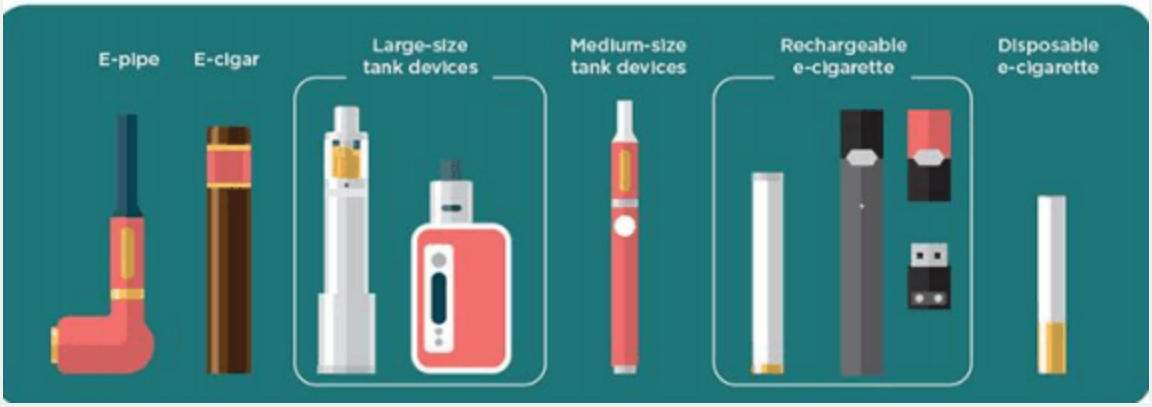



Figure 15.15.4.9: Electronic devices are now common ways to consume nicotine. (Image by the CDC is in the public domain)

Nicotine exposure can harm adolescent brain development by changing the way synapses form, which continues into the early to mid-20s. Using nicotine in adolescence may also increase risk for future addictions to other drugs. E-cigarette aerosol and cigarettes contain chemicals that are harmful to the lungs and chewing tobacco.

In many cases, people are able to get past the physical dependence, allowing them to quit using nicotine containing products at least temporarily. In the long run, however, the psychological enjoyment of smoking may lead to relapse. 46

## Depressants

In contrast to stimulants, which work to increase neural activity, a depressant slows down consciousness. A **depressant** is a psychoactive drug that reduces the activity of the CNS. Depressants are widely used as prescription medicines to relieve pain, to lower heart rate and respiration, and as anticonvulsants. The outcome of depressant use (similar to the effects of sleep) is a reduction in the transmission of impulses from the lower brain to the cortex (Csaky & Barnes, 1984).

*Table 15.15.4.3: Depressants*

| Drug | Dangers and Side Effects | Psychological Dependence | Physical Dependence | Addiction Potential |
|---|---|---|---|---|
| **Alcohol** | Impaired judgment, loss of coordination, dizziness, nausea, and eventually a loss of consciousness | Moderate | Moderate | Moderate |
| **Barbiturates and benzo- diazepines** | Sluggishness, slowed speech, drowsiness, in severe cases, coma or death | Moderate | Moderate | Moderate |
| **Toxic inhalants** | Brain damage and death | High | High | High |

### A Closer Look at the Danger of Adolescent Alcohol Use

**Alcohol** is the most commonly used of the depressants and is a colorless liquid, produced by the fermentation of sugar or starch that is the intoxicating agent in fermented drinks. Alcohol is the oldest and most widely used drug of abuse in the world. In low to moderate doses, alcohol first acts to remove social inhibitions by slowing activity in the sympathetic nervous system. In higher doses, alcohol acts on the cerebellum to interfere with coordination and balance, producing the staggering gait of drunkenness. At high blood levels, further CNS depression leads to dizziness, nausea, and eventually a loss of consciousness. High enough blood levels such as those produced by “guzzling” large amounts of hard liquor at parties can be fatal. Alcohol is not a “safe” drug by any means. 47

**Short-Term Health Risks** Excessive alcohol use has immediate effects that increase the risk of many harmful health conditions. These are most often the result of binge drinking (drinking 4-5 drinks during a single occasion) and include the following:

- Injuries, such as motor vehicle crashes (1 in 5 teen drivers involved in fatal crashes had some alcohol in their system in 2010), falls, drownings, and burns.
- Violence, including homicide, suicide, sexual assault, and intimate partner violence.
- Alcohol poisoning, a medical emergency that results from high blood alcohol levels.
- Risky sexual behaviors, including unprotected sex or sex with multiple partners. These behaviors can result in unintended pregnancy or sexually transmitted diseases, including HIV.
- Miscarriage and stillbirth or fetal alcohol spectrum disorders (FASDs) among pregnant women.

**Long-Term Health Risks**

Over time, excessive alcohol use can lead to the development of chronic diseases and other serious problems including:

- High blood pressure, heart disease, stroke, liver disease, and digestive problems.
- Cancer of the breast, mouth, throat, esophagus, liver, and colon.
- Learning and memory problems, including dementia and poor school performance.
- Mental health problems, including depression and anxiety.
- Social problems, including lost productivity, family problems, and unemployment.
- Alcohol dependence, or alcoholism. 48



Figure 15.15.4.10: Adolescent alcohol use poses many health risks. (Image by Scott Air Force Base is in the public domain)

## Opioids

**Opioids** are chemicals that increase activity in opioid receptor neurons in the brain and in the digestive system, producing euphoria, analgesia, slower breathing, and constipation. Their chemical makeup is similar to the endorphins, the neurotransmitters that serve as the body's "natural pain reducers." Natural opioids are derived from the opium poppy, which is widespread in Eurasia, but they can also be created synthetically.

*Table 15.15.4.4: Opioids*

| Drug | Dangers and Side Effects | Psychological Dependence | Physical Dependence | Addiction Potential |
|---|---|---|---|---|
| **Opium** | Side effects include nausea, vomiting, tolerance, and addiction. | Moderate | Moderate | Moderate |
| **Morphine** | Restlessness,irritability, headache and body aches, tremors, nausea, vomiting, and severe abdominal pain | High | Moderate | Moderate |
| **Heroin** | All side effects of morphine but about twice as addictive as morphine | High | Moderate | High |

## Hallucinogens

The drugs that produce the most extreme alteration of consciousness are the **hallucinogens**, psychoactive drugs that alter sensation and perception and that may create hallucinations. The hallucinogens are frequently known as "psychedelics." Drugs in

this class include lysergic acid diethylamide (LSD, or “Acid”), mescaline, and phencyclidine (PCP), as well as a number of natural plants including cannabis (marijuana), peyote, and psilocybin. The hallucinogens may produce striking changes in perception through one or more of the senses. The precise effects a user experiences are a function not only of the drug itself but also of the user’s preexisting mental state and expectations of the drug experience. In large part, the user tends to get out of the experience what he or she brings to it. The hallucinations that may be experienced when taking these drugs are strikingly different from everyday experience and frequently are more similar to dreams than to everyday consciousness.

*Table* 15.15.4.5*: Hallucinogens*

| Drug | Dangers and Side Effects | Psychological Dependence | Physical Dependence | Addiction Potential |
|---|---|---|---|---|
| **Marijuana** | Mild intoxication; enhanced perception | Low | Low | Low |
| **LSD, mescaline, PCP, and peyote** | Hallucinations; enhanced perception | Low | Low | Low |

## A Closer Look at the Danger of Adolescent Marijuana Use 50

**Marijuana** (cannabis) is the most widely used hallucinogen. Until it was banned in the United States under the Marijuana Tax Act of 1938, it was widely used for medical purposes. While medical and recreational marijuana is now legal in several American states, it is still banned under federal law, putting those states in conflict with the federal government. Marijuana also acts as a stimulant, producing giggling, laughing, and mild intoxication. It acts to enhance perception of sights, sounds, and smells, and may produce a sensation of time slowing down, and is much less likely to lead to antisocial acts than that other popular intoxicant, alcohol.

Using marijuana—can have harmful and long-lasting effects on an adolescent’s health and well-being.

**Marijuana and the teen brain**

Unlike adults, the teen brain is actively developing and often will not be fully developed until the mid 20s. Marijuana use during this period may harm the developing teen brain. Negative effects include:

- Difficulty thinking and problem solving.
- Problems with memory and learning.
- Impaired coordination.
- Difficulty maintaining attention.



Figure 15.15.4.11: Marijuana is a commonly used hallucinogen. (Image by Cannabis Culture is licensed under CC BY 2.0)

**Negative effects on school and social life**

Marijuana use in adolescence or early adulthood can have a serious impact on an adolescent's life.

- **Decline in school performance.** Students who smoke marijuana may get lower grades and may be more likely to drop out of high school than their peers who do not use.
- **Increased risk of mental health issues.** Marijuana use has been linked to a range of mental health problems in teens such as depression or anxiety. Psychosis has also been seen in teens at higher risk like those with a family history.
- **Impaired driving.** Driving while impaired by any substance, including marijuana, is dangerous. Marijuana negatively affects a number of skills required for safe driving, such as reaction time, coordination, and concentration.
- **Potential for addiction.** Research shows that about 1 in 6 teens who repeatedly use marijuana can become addicted, which means that they may make unsuccessful efforts to quit using marijuana or may give up important activities with friends and family in favor of using marijuana.

In some cases, the effects of psychoactive drugs mimic other naturally occurring states of consciousness. For instance, sleeping pills are prescribed to create drowsiness, and benzodiazepines are prescribed to create a state of relaxation. In other cases psychoactive drugs are taken for recreational purposes with the goal of creating states of consciousness that are pleasurable or that help us escape our normal consciousness.

The use of psychoactive drugs, and especially those that are used illegally, has the potential to create very negative side effects. This does not mean that all drugs are dangerous, but rather that all drugs can be dangerous, particularly if they are used regularly over long periods of time. Psychoactive drugs create negative effects not so much through their initial use but through the continued use, accompanied by increasing doses, that ultimately may lead to drug abuse.

## Substance Abuse

Many drugs create **tolerance**: an increase in the dose required to produce the same effect, which makes it necessary for the user to increase the dosage or the number of times per day that the drug is taken. As the use of the drug increases, the user may develop a dependence, defined as a need to use a drug or other substance regularly. Dependence can be psychological, in which the drug is desired and has become part of the everyday life of the user, but no serious physical effects result if the drug is not obtained; or physical, in which serious physical and mental effects appear when the drug is withdrawn. Cigarette smokers who try to quit, for example, experience physical withdrawal symptoms, such as becoming tired and irritable, as well as extreme psychological cravings to enjoy a cigarette in particular situations, such as after a meal or when they are with friends. Users may wish to stop using the drug, but when they reduce their dosage they experience **withdrawal**—negative experiences that accompany reducing or stopping drug use, including physical pain and other symptoms. When the user powerfully craves the drug and is driven to seek it out, over and over again, no matter what the physical, social, financial, and legal cost, we say that he or she has developed an **addiction** to the drug.

It is a common belief that addiction is an overwhelming, irresistibly powerful force, and that withdrawal from drugs is always an unbearably painful experience. But the reality is more complicated and in many cases less extreme. For one, even drugs that we do not generally think of as being addictive, such as caffeine, nicotine, and alcohol, can be very difficult to quit using, at least for some people. On the other hand, drugs that are normally associated with addiction, including amphetamines, cocaine, and heroin, do not immediately create addiction in their users. Even for a highly addictive drug like cocaine, only about 15% of users become addicted (Robinson & Berridge, 2003; Wagner & Anthony, 2002). Furthermore, the rate of addiction is lower for those who are taking drugs for medical reasons than for those who are using drugs recreationally. Patients who have become physically dependent on morphine administered during the course of medical treatment for a painful injury or disease are able to be rapidly weaned off the drug afterward, without becoming addicts.52 People have used, and often abused, psychoactive drugs for thousands of years. Perhaps this should not be surprising, because many people find using drugs to be enjoyable. Even when we know the potential costs of using drugs, we may engage in them anyway because the pleasures of using the drugs are occurring right now, whereas the potential costs are abstract and occur in the future. 53

In the next section we will be looking at various psychological disorders. Learning about and supporting others seeking help when they have a substance abuse problem is just as important as seeking help when one is experiencing negative physical and mental health problems.

## Contributors and Attributions

29. Lifespan Development: A Psychological Perspective by Martha Lally and Suzanne Valentine-French is licensed under CC BY-

NC-SA 3.0

32. Nutrition through the Life Cycle: From Pregnancy to the Toddler Years by Maureen Zimmerman and Beth Snow is licensed under CC BY-NC-SA 3.0 (modified by Dawn Rymond)

34. Education, Society, & the K-12 Learner by Lumen Learning references Maslow's Hierarchy of Needs by Boundless, which is licensed under CC BY-SA 4.0

35. Beginning Psychology - Two Fundamental Human Motivations: Eating and Mating by Charles Stangor is licensed under CC BY-NC-SA 3.0

36. Beginning Psychology - Two Fundamental Human Motivations: Eating and Mating by Charles Stangor is licensed under CC BY-NC-SA 3.0 (modified by Dawn Rymond)

38. An Introduction to Nutrition- Puberty and Nutrition by Maureen Zimmerman and Beth Snow is licensed under CC BY-NC-SA 3.0

40. Lifespan Development: A Psychological Perspective by Martha Lally and Suzanne Valentine-French is licensed under CC BY-NC-SA 3.0

41. Lifespan Development: A Psychological Perspective by Martha Lally and Suzanne Valentine-French is licensed under CC BY-NC-SA 3.0

43. Beginning Psychology - Altering Consciousness With Psychoactive Drugs by Charles Stangor is licensed under CC BY-NC-SA 3.0

46. Altering Consciousness With Psychoactive Drugs by The Open University of Hong Kong is licensed under CC BY-NC-SA 4.0

About Electronic Cigarettes (E-Cigarettes) by the CDC is in the public domain

Quick Facts on the Risks of E-cigarettes for Kids, Teens, and Young Adults by the CDC is in the public domain

47. Altering Consciousness With Psychoactive Drugs by The Open University of Hong Kong is licensed under CC BY-NC-SA 4.0

48. Teen Drinking and Driving by the CDC is in the public domain

Fact Sheets - Alcohol Use and Your Health by the CDC is in the public domain

50. Altering Consciousness With Psychoactive Drugs by The Open University of Hong Kong is licensed under CC BY-NC-SA 4.0

What You Need to Know About Marijuana Use in Teens by the CDC is in the public domain

52. Altering Consciousness With Psychoactive Drugs by The Open University of Hong Kong is licensed under CC BY-NC-SA 4.0

53. Beginning Psychology - Altering Consciousness With Psychoactive Drugs by Charles Stangor is licensed under CC BY-NC-SA 3.0

This page titled 15.15.4: Adolescent Health- Sleep, Diet, and Exercise is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Paris, Ricardo, Rymond, and Johnson (College of the Canyons) via source content that was edited to the style and standards of the LibreTexts platform.

- 13.4: Adolescent Health- Sleep, Diet, and Exercise by Paris, Ricardo, Rymond, and Johnson is licensed CC BY 4.0. Original source: https://open.umn.edu/opentextbooks/textbooks/child-growth-and-development.

# 15.15.5: Maintaining Emotional Health

**Emotional regulation** is the ability to successfully control our emotions, which takes effort, but the ability to do so can have important positive health outcomes. Emotional responses such as the stress reaction are useful in warning us about potential danger and in mobilizing our response to it, so it is a good thing that we have them. However, we also need to learn how to control and regulate our emotions, to prevent them from letting our behavior get out of control. 54

**Stress** may not be a disorder, but if it continues and becomes more intense and debilitating, it may lead to a disorder. We experience stress in our everyday lives, including daily hassles. People who experience strong negative emotions as a result of these hassles, exhibit negative stress responses. Stress can be managed by using coping strategies and by becoming better at emotional regulation. The best antidote for stress is to think positively, have fun, and enjoy the company of others. People who express optimism, self-efficacy, and grit tend to cope better with stress and experience better health overall. 55

## Contributors and Attributions

54. Beginning Psychology - Stress: The Unseen Killer by Charles Stangor is licensed under CC BY-NC-SA 3.0
55. Beginning Psychology - Chapter Summary by Charles Stangor is licensed under CC BY-NC-SA 3.0

This page titled 15.15.5: Maintaining Emotional Health is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Paris, Ricardo, Rymond, and Johnson (College of the Canyons) via source content that was edited to the style and standards of the LibreTexts platform.

- 13.5: Maintaining Emotional Health by Paris, Ricardo, Rymond, and Johnson is licensed CC BY 4.0. Original source: https://open.umn.edu/opentextbooks/textbooks/child-growth-and-development.

# 15.15.6: Disorders and Syndromes

A psychological disorder is an unusual, distressing, and dysfunctional pattern of thought, emotion, or behavior. Psychological disorders are often **co-occurring** or **comorbid**, meaning that a given person suffers from more than one disorder. Psychologists diagnose a disorder using the *Diagnostic and Statistical Manual of Mental Disorders (DSM)*. When diagnosed, people feel that a mental disorder is a stigma, but mental illness is not a "fault," and it is important to work to help overcome the stigma associated with disorder. The following are various disorders that may affect children, adolescence, and adults.

*Table 15.15.6.1: Disorders and Syndromes (Disease Prevention and Healthy Lifestyles – Mental Illness in Children and Adolescents by Lumen Learning references Contemporary Health Issues by: Judy Baker, Ph.D., which is licensed under CC BY-SA 4.0) and their Descriptions*

| Disorder/ Syndrome | Description |
|---|---|
| **Anxiety Disorders** | Psychological disturbances marked by irrational fears, often of everyday objects and situations. They include generalized anxiety disorder (GAD), panic disorder, phobia, obsessive-compulsive disorder (OCD), and posttraumatic stress disorder (PTSD). Anxiety disorders affect about 57 million Americans every year. |
| **Dissociative Disorders** | Conditions that involve disruptions or breakdowns of memory, awareness, and identity. They include dissociative amnesia, dissociative fugue, and dissociative identity disorder. |
| **Mood Disorders** | Psychological disorders in which the person's mood negatively influences his or her physical, perceptual, social, and cognitive processes. They include dysthymia, major depressive disorder, and bipolar disorder. Mood disorders affect about 30 million Americans every year. |
| **Schizophrenia** | A serious psychological disorder marked by delusions, hallucinations, loss of contact with reality, inappropriate affect, disorganized speech, social withdrawal, and deterioration of adaptive behavior. About 3 million Americans have schizophrenia. |
| **Personality Disorder** | A long-lasting but frequently less severe disorder characterized by inflexible patterns of thinking, feeling, or relating to others that causes problems in personal, social, and work situations. They are characterized by odd or eccentric behavior, by dramatic or erratic behavior, or by anxious or inhibited behavior. Two of the most important personality disorders are borderline personality disorder (BPD) and antisocial personality disorder (APD). |
| **Somatization Disorder** | A psychological disorder in which a person experiences numerous long- lasting but seemingly unrelated physical ailments that have no identifiable physical cause. Somatization disorders include conversion disorder, body dysmorphic disorder (BDD), and hypochondriasis. |
| **Factitious Disorder** | When patients fake physical symptoms in large part because they enjoy the attention and treatment that they receive in the hospital. |
| **Sexual Disorders** | A variety of problems revolving around performing or enjoying sex. Sexual dysfunctions include problems relating to loss of sexual desire, sexual response or orgasm, and pain during sex. |
| **Paraphilia** | A sexual deviation where sexual arousal is obtained from a consistent pattern of inappropriate responses to objects or people, and in which the behaviors associated with the feelings are distressing and dysfunctional. |
| **Depression** | When symptoms cause serious distress and negatively influence physical, perceptual, social, and cognitive processes. Teens with depression were often dismissed as being moody or difficult. About 11 percent of adolescents have a depressive disorder by age 18 according to the National Comorbidity Survey-Adolescent Supplement (NCS-A). Depressed teens with coexisting (comorbid) disorders such as substance abuse problems are less likely to respond to treatment for depression. Studies focusing on conditions that frequently co-occur and how they affect one another may lead to more targeted screening tools and interventions. With medication, psychotherapy, or combined treatment, most youth with depression can be effectively treated. Youth are more likely to respond to treatment if they receive it early in the course of their illness. |

# The Importance of Maintaining Mental Health and Wellness

Most people don't think twice before going to a doctor if they have an illness such as bronchitis, asthma, diabetes, or heart disease. However, many people who have a mental illness don't get the treatment that would alleviate their suffering. Studies estimate that two-thirds of all young people with mental health problems are not receiving the help they need and that less than one-third of the children under age 18 who have a serious mental health problem receive any mental health services. Mental illness in adults often goes untreated, too.

## Consequences of Mental Illness

Consequences of Mental Illness The consequences of mental illness in children and adolescents can be substantial. Many mental health professionals speak of accrued deficits that occur when mental illness in children is not treated. To begin with, mental illness can impair a student's ability to learn. Adolescents whose mental illness is not treated rapidly and aggressively tend to fall further and further behind in school. They are more likely to drop out of school and are less likely to be fully functional members of society when they reach adulthood.

We also now know that depressive disorders in young people confer a higher risk for illness and interpersonal and psychosocial difficulties that persist after the depressive episode is over. Furthermore, many adults who suffer from mental disorders have problems that originated in childhood. Depression in youth may predict more severe illness in adult life. Attention deficit hyperactivity disorder, once thought to affect children and adolescents only, may persist into adulthood and may be associated with social, legal, and occupational problems. Mental illness impairs a student's ability to learn.

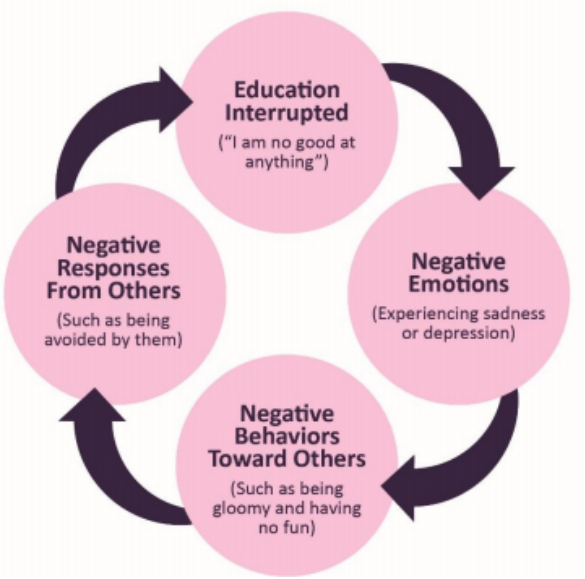



Figure 15.15.6.1: Cycle of Depression: Negative emotions create negative behaviors, which lead people to respond negatively to the individual, creating even more depression. (Image by Ian Joslin is licensed under CC BY 4.0)

## Self-Harm or Self-Injury

Adolescents struggling with their mental health may engage in **self-harm** or thinking about harming themselves. They may be distressed and have difficult feelings as well as the urge to hurt themselves. Some unhealthy ways people may try to relieve emotional pain include cutting, burning, or hitting themselves. These self-harm behaviors can be difficult to detect and are usually kept a secret by covering the wounds with clothing or jewelry. Self-injury is a sign that someone is struggling. People who are anxious, depressed, or have an eating disorder are also more likely to turn to self-injuring behaviors.

Indicators of self-harm include:

- frequent unexplained injuries
- clues like bandages in trash cans.
- clothing inappropriate for the weather (long pants or sleeves when it's hot)

It's important when someone confides in self-harm to try to be as nonreactive and nonjudgmental as possible. At this time there are no medications for treating self-injuring behaviors. But some medications can help treat mental disorders that the person may be dealing with, like depression or anxiety. Mental health counseling or therapy can also help.58



Figure 15.15.6.2: Self-injury can be difficult to detect because it can be hidden under clothing. (Image by Degagebouche is licensed under CC BY-SA 3.0)

## Suicidal Behavior

Adolescence who feel like there is no possible resolution to their mental health struggles may consider, attempt, or commit suicide. **Suicidal behavior** causes immeasurable pain, suffering, and loss to individuals, families, and communities nationwide. On average, 112 Americans die by suicide each day. Suicide is the second leading cause of death among 15-24-year-olds and more than 9.4 million adults in the United States had serious thoughts of suicide within the past 12 months. But suicide is preventable.

**Warning Signs of Suicide**

If someone is showing one or more of the following behaviors, he or she may be thinking about suicide. The following warning signs should not be ignored. Help should be sought immediately.

- Talking about wanting to die or to kill oneself
- Looking for a way to kill oneself
- Talking about feeling hopeless or having no reason to live
- Talking about feeling trapped or in unbearable pain
- Talking about being a burden to others
- Increasing the use of alcohol or drugs
- Acting anxious or agitated
- Behaving recklessly
- Sleeping too little or too much
- Withdrawing or feeling isolated
- Showing rage or talking about seeking revenge
- Displaying extreme mood swings 60

GET HELP

If you or someone you know needs help, call the National Suicide Prevention Lifeline at 1-800-273-TALK (8255). Trained crisis workers are available to talk 24 hours a day, 7 days a week.

## Contributors and Attributions

58. Hurtful Emotions by the NIH is in the public domain

60. Suicidal Behavior by MentalHealth.gov is in the public domain

Disease Prevention and Healthy Lifestyles – Mental Illness in Children and Adolescents by Lumen Learning references Contemporary Health Issues by: Judy Baker, Ph.D., which is licensed under CC BY-SA 4.0

This page titled 15.15.6: Disorders and Syndromes is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Paris, Ricardo, Rymond, and Johnson (College of the Canyons) via source content that was edited to the style and standards of the LibreTexts platform.

- 13.6: Disorders and Syndromes by Paris, Ricardo, Rymond, and Johnson is licensed CC BY 4.0. Original source: https://open.umn.edu/opentextbooks/textbooks/child-growth-and-development.

# 15.15.S: Summary

In this chapter we looked at:

- Physical growth and the changes in the body during puberty
- Weight management, obesity, and eating disorders
- Risk factors, and consequences of adolescent pregnancy and sexual health
- Substance and drug abuse
- Mental health issues for teens

In the next chapter we will look at adolescent cognitive development.

This page titled 15.15.S: Summary is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Paris, Ricardo, Rymond, and Johnson (College of the Canyons) via source content that was edited to the style and standards of the LibreTexts platform.

- 13.S: Summary by Paris, Ricardo, Rymond, and Johnson is licensed CC BY 4.0. Original source: https://open.umn.edu/opentextbooks/textbooks/child-growth-and-development.

# 15.16: ADOLESCENCE - COGNITIVE DEVELOPMENT

learning objectives

After this chapter, you should be able to:

- Describe Piaget's formal operational stage and the characteristics of formal operational thought
- Compare Theories - Lawrence's Kohlberg's Moral Development and Carol Gilligan's Morality of Care
- Explain the Information Processing Theory
- Describe the strategies for memory storage
- Explain the areas of transition for adolescence

During adolescence more complex thinking abilities emerge. Researchers suggest this is due to increases in processing speed and efficiency rather than as the result of an increase in mental capacity—in other words, due to improvements in existing skills rather than development of new ones (Bjorkland, 1987; Case, 1985). Let's explore these improvements.


**15.16.1: Cognitive Development in Adolescence**

**15.16.2: Cognitive Changes in the Brain**

**15.16.3: Cognitive Theorists- Piaget, Elkind, Kohlberg, and Gilligan**

**15.16.4: Information Processing Theory- Memory, Encoding, and Storage**

**15.16.5: Adolescence (A Time of Transitions)**

**15.16.6: Wisdom and Risk-Taking**

**15.16.S: Summary**



This page titled 15.16: Adolescence - Cognitive Development is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Paris, Ricardo, Rymond, and Johnson (College of the Canyons) via source content that was edited to the style and standards of the LibreTexts platform.

- 14: Adolescence - Cognitive Development by Paris, Ricardo, Rymond, and Johnson is licensed CC BY 4.0. Original source: https://open.umn.edu/opentextbooks/textbooks/child-growth-and-development.

# 15.16.1: Cognitive Development in Adolescence

During adolescence, teenagers move beyond concrete thinking and become capable of abstract thought. Teen thinking is also characterized by the ability to consider multiple points of view, imagine hypothetical situations, debate ideas and opinions (e.g., politics, religion, and justice), and form new ideas. In addition, it's not uncommon for adolescents to question authority or challenge established societal norms.

**Cognitive empathy**, also known as **theory-of-mind**, which relates to the ability to take the perspective of others and feel concern for others (Shamay-Tsoory, Tomer, & Aharon-Peretz, 2005). Cognitive empathy begins to increase in adolescence and is an important component of social problem solving and conflict avoidance. According to one longitudinal study, levels of cognitive empathy begin rising in girls around 13 years old, and around 15 years old in boys (Van der Graaff et al., 2013). 1

## Contributors and Attributions

1. Psychology – 9.3 Stages of Development by CNX Psychology is licensed under CC BY 4.0

This page titled 15.16.1: Cognitive Development in Adolescence is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Paris, Ricardo, Rymond, and Johnson (College of the Canyons) via source content that was edited to the style and standards of the LibreTexts platform.

- 14.1: Cognitive Development in Adolescence by Paris, Ricardo, Rymond, and Johnson is licensed CC BY 4.0. Original source: https://open.umn.edu/opentextbooks/textbooks/child-growth-and-development.

# 15.16.2: Cognitive Changes in the Brain

Early in adolescence, changes in **Dopamine**, a chemical in the brain that is a neurotransmitter and produces feelings of pleasure, can contribute to increases in adolescents' sensation-seeking and reward motivation. During adolescence, people tend to do whatever activities produce the most dopamine without fully considering the consequences of such actions. Later in adolescence, the **prefrontal cortex**, the area of the brain responsible for outcomes, forming judgments, controlling impulses and emotions, also continues to develop (Goldberg, 2001). The difference in timing of the development of these different regions of the brain contributes to more risk taking during middle adolescence because adolescents are motivated to seek thrills (Steinberg, 2008). One of the world's leading experts on adolescent development, Laurence Steinberg, likens this to engaging a powerful engine before the braking system is in place. The result is that adolescents are prone to risky behaviors more often than children or adults.



Figure 15.16.2.1: A simulation of the risky behavior of drinking and driving. (Image by the Scott Air Force Base is in the public domain)

Although the most rapid cognitive changes occur during childhood, the brain continues to develop throughout adolescence, and even into the 20s (Weinberger, Elvevåg, & Giedd, 2005). The brain continues to form new neural connections and becomes faster and more efficient because it **prunes**, or casts off unused neurons and connections (Blakemore, 2008), and produces **myelin**, the fatty tissue that forms around axons and neurons, which helps speed transmissions between different regions of the brain (Rapoport et al., 1999). This time of rapid cognitive growth for teens, making them more aware of their potential and capabilities, causes a great amount of disequilibrium for them. Theorists have researched cognitive changes and functions and have formed theories based on this developmental period. 3

## Contributors and Attributions

3. Content by Dawn Rymond is licensed under CC BY 4.0

Adolescent Development by Jennifer Lansford is licensed under CC BY-NC-SA 4.0

This page titled 15.16.2: Cognitive Changes in the Brain is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Paris, Ricardo, Rymond, and Johnson (College of the Canyons) via source content that was edited to the style and standards of the LibreTexts platform.

- 14.2: Cognitive Changes in the Brain by Paris, Ricardo, Rymond, and Johnson is licensed CC BY 4.0. Original source: https://open.umn.edu/opentextbooks/textbooks/child-growth-and-development.

# 15.16.3: Cognitive Theorists- Piaget, Elkind, Kohlberg, and Gilligan

## Jean Piaget: Formal Operational Stage of Cognitive Development

Cognition refers to thinking and memory processes, and **cognitive development** refers to long-term changes in these processes. One of the most widely known perspectives about cognitive development is the cognitive stage theory of a Swiss psychologist named **Jean Piaget**. Piaget created and studied an account of how children and youth gradually become able to think logically and scientifically. Because his theory is especially popular among educators, we focus on it in this chapter.

Piaget was a **psychological constructivist**: in his view, learning was proceeded by the interplay of assimilation (adjusting new experiences to fit prior concepts) and accommodation (adjusting concepts to fit new experiences). The to-and-fro of these two processes leads not only to short-term learning, but also to long-term **developmental change**. The long-term developments are really the main focus of Piaget's cognitive theory.

As you might remember, Piaget proposed that cognition developed through distinct stages from birth through the end of adolescence. By stages he meant a sequence of thinking patterns with four key features:

1. They always happen in the same order.
2. No stage is ever skipped.
3. Each stage is a significant transformation of the stage before it.
4. Each later stage incorporated the earlier stages into itself.

Basically this is the "staircase" model of development. Piaget proposed four major stages of cognitive development, and called them (1) sensorimotor intelligence, (2) preoperational thinking, (3) concrete operational thinking, and (4) formal operational thinking. Each stage is correlated with an age period of childhood, but only approximately. Formal operational thinking appears in adolescence. 4

During the formal operational stage, adolescents are able to understand abstract principles. They are no longer limited by what can be directly seen or heard, and are able to contemplate such constructs as beauty, love, freedom, and morality. Additionally, while younger children solve problems through trial and error, adolescents demonstrate **hypothetical-deductive reasoning**, which is developing hypotheses based on what might logically occur. They are able to think about all the possibilities in a situation beforehand, and then test them systematically, (Crain, 2005) because they are able to engage in true scientific thinking.



Figure 15.16.3.1: Teenage thinking is characterized by the ability to reason logically and solve hypothetical problems such as how to design, plan, and build a structure. (Image by the U.S. Army CCDC is licensed under CC BY 2.0)

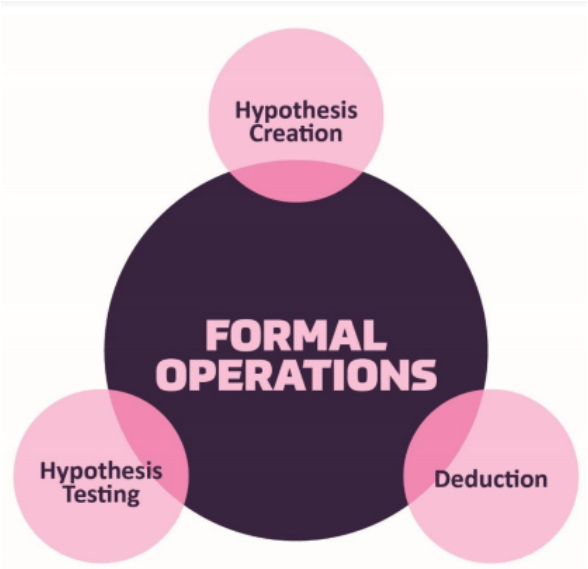



Figure 15.16.3.2: Piaget proposed that formal operational thinking is the last stage in cognitive development. (Image by Ian Joslin is licensed under CC BY 4.0)

## Does everyone reach formal operations?

According to Piaget, most people attain some degree of formal operational thinking, but use formal operations primarily in the areas of their strongest interest (Crain, 2005). In fact, most adults do not regularly demonstrate formal operational thought. A possible explanation is that an individual's thinking has not been sufficiently challenged to demonstrate formal operational thought in all areas.

## Adolescent Egocentrism

Once adolescents can understand abstract thoughts, they enter a world of hypothetical possibilities and demonstrate **egocentrism**, a heightened self-focus. The egocentricity comes from attributing unlimited power to their own thoughts (Crain, 2005). Piaget believed it was not until adolescents took on adult roles that they would be able to learn the limits to their own thoughts.

## David Elkind: On Piaget's Theory

David Elkind (1967) expanded on the concept of Piaget's adolescent egocentricity. Elkind theorized that the physiological changes that occur during adolescence result in adolescents being primarily concerned with themselves. Additionally, since adolescents fail to differentiate between what others are thinking and their own thoughts, they believe that others are just as fascinated with their behavior and appearance. This belief results in the adolescent anticipating the reactions of others, and consequently constructing an imaginary audience. The **imaginary audience** is the adolescent's belief that those around them are as concerned and focused on their appearance as they themselves are (Schwartz, Maynard, & Uzelac, 2008, p. 441). Elkind thought that the imaginary audience contributed to the self-consciousness that occurs during early adolescence. The desire for privacy and the reluctance to share personal information may be a further reaction to feeling under constant observation by others.



Figur 15.16.3.3: This teen is likely thinking, “they must be whispering about me.” (Image by Twentyfour Students is licensed under CC BY-SA 2.0)

Another important consequence of adolescent egocentrism is the **personal fable** or belief that one is unique, special, and invulnerable to harm. Elkind (1967) explains that because adolescents feel so important to others (imaginary audience) they regard themselves and their feelings as being special and unique. Adolescents believe that only they have experienced strong and diverse emotions, and therefore others could never understand how they feel. This uniqueness in one’s emotional experiences reinforces the adolescent’s belief of invulnerability, especially to death. Adolescents will engage in risky behaviors, such as drinking and driving or unprotected sex, and feel they will not suffer any negative consequences. Elkind believed that adolescent egocentricity emerged in early adolescence and declined in middle adolescence, however, recent research has also identified egocentricity in late adolescence (Schwartz, et al., 2008).

## Consequences of Formal Operational Thought

As adolescents are now able to think abstractly and hypothetically, they exhibit many new ways of reflecting on information (Dolgin, 2011). For example, they demonstrate greater **introspection** or thinking about one’s thoughts and feelings. They begin to imagine how the world could be, which leads them to become **idealistic** or insisting upon high standards of behavior. Because of their idealism, they may become critical of others, especially adults in their life. Additionally, adolescents can demonstrate **hypocrisy**, or pretend to be what they are not. Since they are able to recognize what others expect of them, they will conform to those expectations for their emotions and behavior seemingly hypocritical to themselves. Lastly, adolescents can exhibit **pseudostupidity**, which is when they approach problems at a level that is too complex and they fail because the tasks are too simple. Their new ability to consider alternatives is not completely under control and they appear “stupid” when they are in fact bright, just inexperienced. 8

## Lawrence Kohlberg: Moral Development

Kohlberg (1963) built on the work of Piaget and was interested in finding out how our moral reasoning changes as we get older. He wanted to find out how people decide what is right and what is wrong (moral justice). Just as Piaget believed that children’s cognitive development follows specific patterns, Kohlberg argued that we learn our moral values through active thinking and reasoning, and that moral development follows a series of stages. Kohlberg's six stages are generally organized into three levels of moral reasons. To study moral development, Kohlberg posed moral dilemmas to children, teenagers, and adults. You may remember one such dilemma, the Heinz dilemma, that was introduced in Chapter 12: 9

A woman was on her deathbed. There was one drug that the doctors thought might save her. It was a form of radium that a druggist in the same town had recently discovered. The drug was expensive to make, but the druggist was charging ten times what the drug cost him to produce. He paid $200 for the radium and charged $2,000 for a small dose of the drug. The sick woman's husband, Heinz, went to everyone he knew to borrow the money, but he could only get together about $1,000 which is half of what it cost. He told the druggist that his wife was dying and asked him to sell it cheaper or let him pay later. But the druggist said: “No, I discovered the drug and I'm going to make money from it.” So Heinz got desperate and broke into the man's laboratory to steal the drug for his wife. Should Heinz have broken into the laboratory to steal the drug for his wife? Why or why not? 10

Based on their reasoning behind their responses (not whether they thought Heinz made the right choice or not), Kohlberg placed each person in one of the stages as described in the image on the following page:

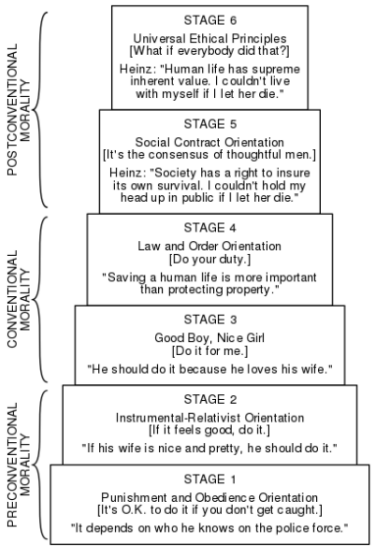



Figure 15.16.3.4: Kohlberg's six stages of moral development. (Image by Lawrence Kohlberg, Em Griffin, and cmglee is licensed under CC BY-SA 4.0)

Although research has supported Kohlberg's idea that moral reasoning changes from an early emphasis on punishment and social rules and regulations to an emphasis on more general ethical principles, as with Piaget's approach, Kohlberg's stage model is probably too simple. For one, children may use higher levels of reasoning for some types of problems, but revert to lower levels in situations where doing so is more consistent with their goals or beliefs (Rest, 1979). Second, it has been argued that this stage model is particularly appropriate for Western countries, rather than non-Western, samples in which allegiance to social norms (such as respect for authority) may be particularly important (Haidt, 2001). In addition, there is little correlation between how children score on the moral stages and how they behave in real life.

Perhaps the most important critique of Kohlberg's theory is that it may describe the moral development of boys better than it describes that of girls. Carol Gilligan has argued that, because of differences in their socialization, males tend to value principles of justice and rights, whereas females value caring for and helping others. Although there is little evidence that boys and girls score differently on Kohlberg's stages of moral development (Turiel, 1998), it is true that girls and women tend to focus more on issues of caring, helping, and connecting with others than do boys and men (Jaffee & Hyde, 2000). 12

## Carol Gilligan: Morality of Care

Carol Gilligan, whose ideas center on a **morality of care**, or system of beliefs about human responsibilities, care, and consideration for others, proposed three moral positions that represent different extents or breadth of ethical care. Unlike Kohlberg, or Piaget, she does not claim that the positions form a strictly developmental sequence, but only that they can be ranked hierarchically according to their depth or subtlety. In this respect her theory is "semi-developmental" in a way similar to Maslow's theory of motivation (Brown & Gilligan, 1992; Taylor, Gilligan, & Sullivan, 1995). The following table summarizes the three moral positions from Gilligan's theory:

*Table 15.16.3.1: Positions of Moral Development According to Gilligan*

| Moral Positions | Definition of What is Morally Good |
|---|---|
| **Position 1: Survival Orientation** | Action that considers one's personal needs only |
| **Position 2: Conventional Care** | Action that considers others' needs or preferences but no one's own |

| Moral Positions | Definition of What is Morally Good |
|---|---|
| **Position 3: Integrated Care** | Action that attempts to coordinate one's own personal needs with those of others |

## Position 1: Caring as Survival

The most basic kind of caring is a **survival orientation**, in which a person is concerned primarily with his or her own welfare. As a moral position, a survival orientation is obviously not satisfactory for classrooms on a widespread scale. If every student only looked out for himself or herself alone, classroom life might become rather unpleasant. Nonetheless, there are situations in which caring primarily about yourself is both a sign of good mental health and also relevant to teachers. For a child who has been bullied at school or sexually abused at home, for example, it is both healthy and morally desirable to speak out about the bullying or abuse—essentially looking out for the victim's own needs at the expense of others', including the bully's or abuser's. Speaking out requires a survival orientation and is healthy because in this case, the child is at least caring about herself.

## Position 2: Conventional Caring

A more subtle moral position is **caring for others**, in which a person is concerned about others' happiness and welfare, and about reconciling or integrating others' needs where they conflict with each other. In classrooms, students who operate from Position 2 can be very desirable in some ways; they can be kind, considerate, and good at fitting in and at working cooperatively with others. Because these qualities are very welcome in a busy classroom, it can be tempting for teachers to reward students for developing and using them for much of their school careers. The problem with rewarding Position 2 ethics, however, is that doing so neglects the student's identity—his or her own academic and personal goals or values. Sooner or later, personal goals, values and identity need attention, and educators have a responsibility for assisting students to discover and clarify them. Unfortunately for teachers, students who know what they want may sometimes be more assertive and less automatically compliant than those who do not.

## Position 3: Integrated Caring

The most developed form of moral caring in Gilligan's model is **integrated caring**, the coordination of personal needs and values with those of others. Now the morally good choice takes account of everyone *including* yourself, not everyone *except* yourself.

In classrooms, integrated caring is most likely to surface whenever teachers give students wide, sustained freedom to make choices. If students have little flexibility about their actions, there is little room for considering anyone's needs or values, whether their own or others'. If the teacher says simply, "Do the homework on page 50 and turn it in tomorrow morning," then compliance becomes the main issue, not moral choice. But suppose instead that she says something like this: "Over the next two months, figure out an inquiry project about the use of water resources in our town. Organize it any way you want—talk to people, read widely about it, and share it with the class in a way that all of us, including yourself, will find meaningful." Although an assignment this general or abstract may not suit some teachers or students, it does pose moral challenges for those who do use it. Why? For one thing, students cannot simply carry out specific instructions, but must decide what aspect of the topic really matters to them. The choice is partly a matter of personal values. For another thing, students have to consider how the topic might be meaningful or important to others in the class. Third, because the time line for completion is relatively far in the future, students may have to weigh personal priorities (like spending time with family on the weekend) against educational priorities (working on the assignment a bit more on the weekend). Some students might have trouble making good choices when given this sort of freedom—and their teachers might therefore be cautious about giving such an assignment. But in a way these hesitations are part of Gilligan's point: integrated caring is indeed more demanding than the caring based on survival or orientation to others, and not all students may be ready for it. 13

We've learned that major changes in the structure and functioning of the brain occur during adolescence and result in the theories about cognitive and behavioral developments (Steinberg, 2008). These cognitive changes include how information is processed, and are fostered by improvements in cognitive function during early adolescence such as in memory, encoding, and storage as well as ability to think about thinking, therefore becoming better at information processing functions. 14

# Contributors and Attributions

4. Educational Psychology – Cognitive Development: The Theory of Jean Piaget by Kelvin Seifert and Rosemary Sutton is licensed under CC BY

8. Lifespan Development: A Psychological Perspective by Martha Lally and Suzanne Valentine-French is licensed under CC BY-NC-SA 3.0

9. Lifespan Development – Module 6: Middle Childhood references Psyc 200 Lifespan Psychology by Laura Overstreet, which is licensed under CC BY

Beginning Psychology – Chapter 6: Growing and Developing by Charles Stangor is licensed under CC BY-NC-SA 3.0

10. Heinz Dilemma by Wikipedia is licensed under CC BY 3.0

12. Beginning Psychology – Chapter 6: Growing and Developing by Charles Stangor is licensed under CC BY-NC-SA 3.0

13. Educational Psychology - 4.5 Moral Development: forming a sense of rights and responsibilities by CNX Psychology is licensed under CC BY 4.0

Contemporary Educational Psychology/Chapter 3: Student Development/Moral Development by Wikibooks is licensed under CC BY-SA 3.0

14. Content by Dawn Rymond is licensed under CC BY 4.0

---

This page titled 15.16.3: Cognitive Theorists- Piaget, Elkind, Kohlberg, and Gilligan is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Paris, Ricardo, Rymond, and Johnson (College of the Canyons) via source content that was edited to the style and standards of the LibreTexts platform.

- 14.3: Cognitive Theorists- Piaget, Elkind, Kohlberg, and Gilligan by Paris, Ricardo, Rymond, and Johnson is licensed CC BY 4.0. Original source: https://open.umn.edu/opentextbooks/textbooks/child-growth-and-development.

# 15.16.4: Information Processing Theory- Memory, Encoding, and Storage



Figure 15.16.4.1: The brain's developments during adolescence allow for greater information processing functions. (Image by Free-Photos on Pixabay)

## Memory

Memory is an information processing system that we often compare to a computer. Memory is the set of processes used to encode, store, and retrieve information over different periods of time.




Figure 15.16.4.2: The memory process. (Image by Ian Joslin is licensed under CC BY 4.0)

Encoding involves the input of information into the memory system. Storage is the retention of the encoded information. Retrieval, or getting the information out of memory and back into awareness, is the third function.

## Encoding (Input of Information to Memory)

We get information into our brains through a process called **encoding**, which is the input of information into the memory system. Once we receive sensory information from the environment, our brains label or code it. We organize the information with other similar information and connect new concepts to existing concepts. Encoding information occurs through both automatic processing and effortful processing. For example, if someone asks you what you ate for lunch today, more than likely you could recall this information quite easily. This is known as **automatic processing**, or the encoding of details like time, space, frequency, and the meaning of words. Automatic processing is usually done without any conscious awareness.

Recalling the last time you studied for a test is another example of automatic processing. But what about the actual test material

you studied? It probably required a lot of work and attention on your part to encode that information; this is known as **effortful processing**. When you first learn new skills such as driving a car, you have to put forth effort and attention to encode information about how to start a car, how to brake, how to handle a turn, and so on. Once you know how to drive, you can encode additional information about this skill automatically.

## Storage (Retaining Information in Memory)

Once the information has been encoded, we have to retain it. Our brains take the encoded information and place it in storage. Storage is the creation of a permanent record of information. In order for a memory to go into storage (i.e., long-term memory), it has to pass through three distinct stages: Sensory Memory, Short-Term Memory, and finally Long-Term Memory. These stages were first proposed by Richard Atkinson and Richard Shiffrin (1968). Their model of human memory, called Atkinson-Shiffrin (A-S), is based on the belief that we process memories in the same way that a computer processes information.

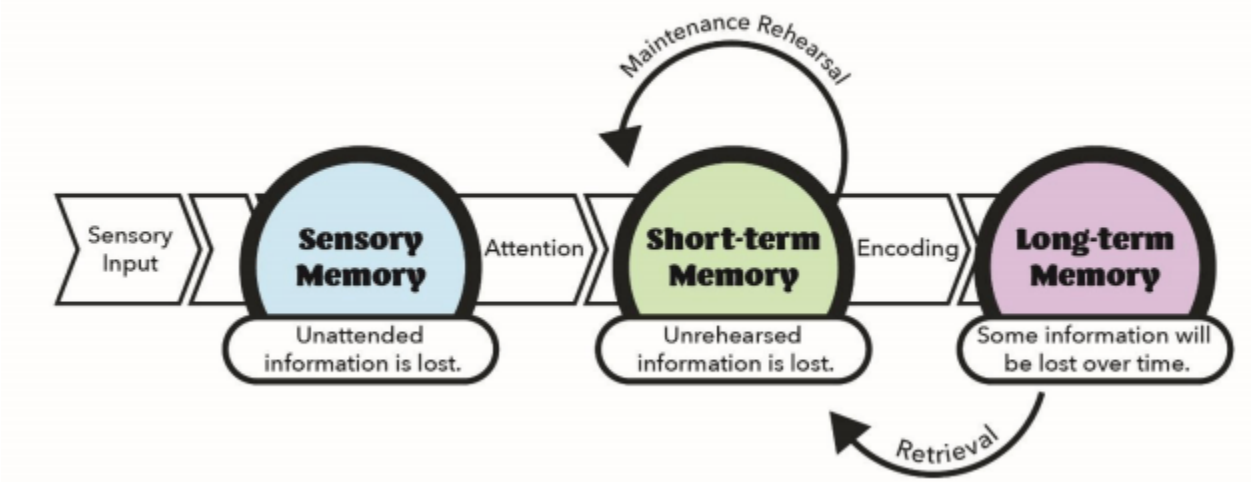



Figure 15.16.4.3: According to the Atkinson-Shiffrin model of memory, information passes through three distinct stages in order for it to be stored in long-term memory. (Image by Educ320 is licensed under CC BY-SA 4.0 (image modified by Ian Joslin from COCOER))

## Sensory Memory (First Stage of Storage)

In the Atkinson-Shiffrin model, stimuli from the environment are processed first in **sensory memory**, storage of brief sensory events, such as sights, sounds, and tastes. It is very brief storage—up to a couple of seconds. We are constantly bombarded with sensory information. We cannot absorb all of it, or even most of it. And most of it has no impact on our lives. For example, what was your professor wearing the last class period? As long as the professor was dressed appropriately, it does not really matter what they were wearing. Sensory information about sights, sounds, smells, and even textures, which we do not view as valuable information, we discard. If we view something as valuable, the information will move into our short-term memory system.

One study of sensory memory researched the significance of valuable information on short-term memory storage. J. R. Stroop discovered a memory phenomenon in the 1930s: you will name a color more easily if it appears printed in that color, which is called the Stroop effect.

The Stroop Effect describes why it is difficult for us to name a color when the word and the color of the word are different. To test this out a person is instructed not to read the words below, but to say the color the word is printed in. For example, upon seeing the word “yellow” in green print, they should say “green,” not “yellow.” This experiment is fun, but it’s not as easy as it seems.

| | | |
|---|---|---|
| Red | Blue | Yellow |
| Orange | Purple | Orange |
| Green | Yellow | Black |
| Yellow | Green | Red |
| Purple | Blue | Purple |

## Short-Term Memory or Working Memory (Second Stage of Storage)

**Short-term memory** is a temporary storage system that processes incoming sensory memory; sometimes it is called working memory. Short-term memory takes information from sensory memory and sometimes connects that memory to something already in long-term memory. Short-term memory storage lasts about 20 seconds. Think of short-term memory as the information you have displayed on your computer screen—a document, a spreadsheet, or a web page. Information in short-term memory either goes to long-term memory (when you save it to your hard drive) or it is discarded (when you delete a document or close a web browser).

George Miller (1956), in his research on the capacity of memory, found that most people can retain about seven items in short-term memory. Some remember five, some nine, so he called the capacity of short-term memory the range of seven items plus or minus two.

To explore the capacity and duration of short-term memory, two people can try this activity. One person reads the strings of random numbers below out loud to the other, beginning each string by saying, "Ready?" and ending each by saying, "Recall." Then the second person should try to write down the string of numbers from memory.

| | | | | | |
|---|---|---|---|---|---|
| 9754 | 68259 | 913825 | 5316842 | 86951372 | 719384273 |
| 6419 | 67148 | 648327 | 5963827 | 51739826 | 163875942 |

This can be used to determine the longest string of digits that you can store. For most people, this will be close to seven, Miller's famous seven plus or minus two. Recall is somewhat better for random numbers than for random letters (Jacobs, 1887) and is also often slightly better for information we hear (**acoustic encoding**, which is the encoding of sounds) rather than what we see (**visual encoding**, which is the encoding of images and words in particular) (Anderson, 1969).

## Long-Term Memory (Third and Final Stage of Storage)

**Long-term memory** is the continuous storage of information. Unlike short-term memory, the storage capacity of long-term memory has no limits. It encompasses all the things you can remember that happened more than just a few minutes ago to all of the things that you can remember that happened days, weeks, and years ago. In keeping with the computer analogy, the information in your long-term memory would be like the information you have saved on the hard drive. It isn't there on your desktop (your short-term memory), but you can pull up this information when you want it, at least most of the time. Not all long-term memories are strong memories. Some memories can only be recalled through prompts. For example, you might easily recall a fact— "What is the capital of the United States?"—or a procedure—"How do you ride a bike?"—but you might struggle to recall the name of the restaurant you had dinner at when you were on vacation in France last summer. A prompt, such as that the restaurant was named after its owner, who spoke to you about your shared interest in soccer, may help you recall (retrieve) the name of the restaurant.

## Retrieval (Finding Memories)

So you have worked hard to encode via effortful processing (a lot of work and attention on your part in order to encode that information) and store some important information for your upcoming final exam. How do you get that information back out of storage when you need it? The act of getting information out of memory storage and back into conscious awareness is known as **retrieval**. This would be similar to finding and opening a paper you had previously saved on your computer's hard drive. Now it's back on your desktop, and you can work with it again. Our ability to retrieve information from long-term memory is vital to our everyday functioning. You must be able to retrieve information from memory in order to do everything from knowing how to brush your hair and teeth, to driving to work, to knowing how to perform your job once you get there.

# Long-Term Memory Retrieval (Storage System): Recall, Recognition, Relearning, and Forgetting

There are three ways you can retrieve information out of your long-term memory storage system: recall, recognition, and relearning. **Recall** is what we most often think about when we talk about memory retrieval: it means you can access information without cues. For example, you would use recall for an essay test. **Recognition** happens when you identify information that you have previously learned after encountering it again. It involves a process of comparison. When you take a multiple-choice test, you are relying on recognition to help you choose the correct answer. The third form of retrieval is **relearning**, and it's just what it sounds like, it involves learning information that you previously learned. Whitney took Spanish in high school, but after high school she did not have the opportunity to speak Spanish. Whitney is now 31, and her company has offered her an opportunity to work in their Mexico City office. In order to prepare herself, she enrolls in a Spanish course at the local community college. She's surprised at how quickly she's able to pick up the language after not speaking it for 13 years; this is an example of relearning.

## Forgetting (It Wasn't Locked In)

As we just learned, your brain must do some work (effortful processing) to encode information and move it into short-term, and ultimately long-term memory. This has strong implications for a student, as it can impact their learning – if one doesn't work to encode and store information, it will likely be forgotten. Research indicates that people forget 80 percent of what they learn only a day later. This statistic may not sound very encouraging, given all that you're expected to learn and remember as a college student. Really, though, it points to the importance of a study strategy other than waiting until the night before a final exam to review a semester's worth of readings and notes. When you learn something new, the goal is to "lock it in" sooner rather than later, and move it from short-term memory to long-term memory, where it can be accessed when you need it (like at the end of the semester for your final exam or maybe years from now). The next section will explore a variety of strategies that can be used to process information more deeply and help improve retrieval. 18

### Memory Strategies 19

**Knowing What to Know** How can you decide what to study and what you need to know? The answer is to prioritize what you're trying to learn and memorize, rather than trying to tackle all of it. Below are some strategies to help you do this:

- **Think about concepts rather than facts:** Most of the time instructors are concerned about you learning about the key concepts in a subject or course rather than specific facts.
- **Take cues from your instructor:** Pay attention to what your instructor writes on the board, mentions repeatedly in class, or includes in study guides and handouts, they are likely core concepts that you'll want to focus on.
- **Look for key terms:** Textbooks will often put key terms in bold or italics.
- **Use summaries:** Read end of chapter summaries, or write your own, to check your understanding of the main elements of the reading.

**Transferring Information from Short-Term Memory to Long-Term Memory** In the previous discussion of how memory works, the importance of making intentional efforts to transfer information from short-term to long-term memory was noted. Below are some strategies to facilitate this process:

- **Start reviewing new material immediately**: Remember that people typically forget a significant amount of new information within 24 hours of learning it.
- **Study frequently for shorter periods of time**: If you want to improve the odds of recalling course material by the time of an exam or in future class, try reviewing it a little bit every day.

**Strengthening your Memory** How can you work to strengthen your overall memory? Some people have stronger memories than others but memorizing new information takes work for anyone. Below are some strategies that can aid memory:

- **Rehearsal:** One strategy is rehearsal, or the conscious repetition of information to be remembered (Craik & Watkins, 1973). Academic learning comes with time and practice, and at some point the skills become second nature.
- **Incorporate visuals:** Visual aids like note cards, concept maps, and highlighted text are ways of making information stand out. These aids make the information to be memorized seem more manageable and less daunting.

- **Create mnemonics:** Memory devices known as mnemonics can help you retain information while only needing to remember a unique phrase or letter pattern that stands out. They are especially useful when we want to recall larger bits of information such as steps, stages, phases, and parts of a system (Bellezza, 1981). There are different types of mnemonic devices:
  - **Acronym:** An acronym is a word formed by the first letter of each of the words you want to remember. Such as HOMES for the Great Lakes (Huron, Ontario, Michigan, Erie, and Superior)
  - **Acrostic:** In an acrostic, you make a phrase of all the first letters of the words. For example, if you need to remember the order of mathematical operations, recalling the sentence "Please Excuse My Dear Aunt Sally" will help you, because the order of mathematical operations is Parentheses, Exponents, Multiplication, Division, Addition, Subtraction.
  - **Jingles:** Rhyming tunes that contain key words related to the concept, such as "i before e, except after c" are jingles.
  - **Visual:** Using a visual to help you remember is also useful. Such as the knuckle mnemonic shown in the image below to help you remember the number of days in each month. Months with 31 days are represented by the protruding knuckles and shorter months fall in the spots between knuckles.

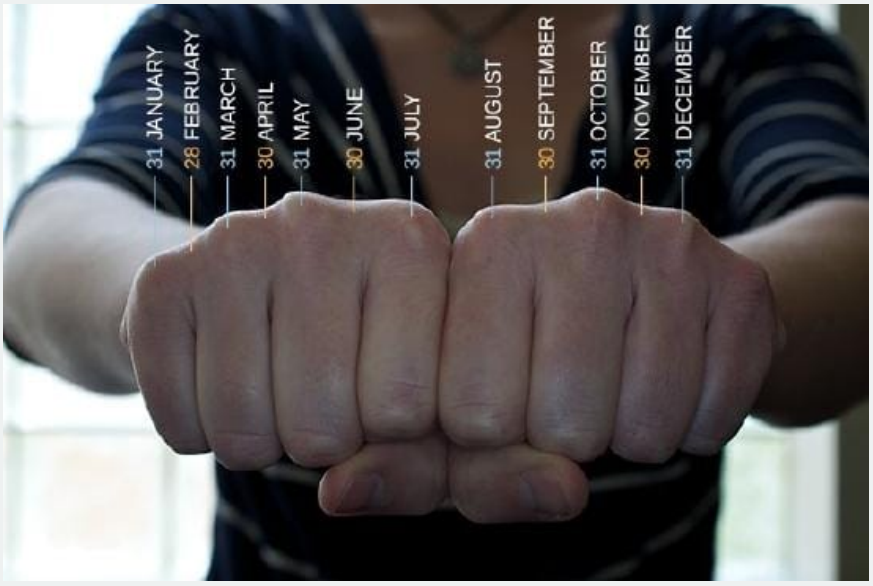



Figure 15.16.4.4: You might use a mnemonic device to help you remember someone's name, a mathematical formula, or the six levels of Bloom's taxonomy. (Image by Laura Lucas is licensed under CC BY 4.0)

- **Chunking:** Another strategy is chunking, where you organize information into manageable bits or chunks, such as turning a phone number you remember into chunks.
- **Connect new information to old information:** It's easier to remember new information if you can connect it to old information, a familiar frame of reference, or a personal experience.
- **Get quality sleep:** Although some people require more or less sleep than the recommended amount, most people should aim for six to eight hours every night.

## Contributors and Attributions

18. Memory and Information Processing by Laura Lucas is licensed under CC BY 4.0

19. Memory and Information Processing by Laura Lucas is licensed under CC BY 4.0

---

This page titled 15.16.4: Information Processing Theory- Memory, Encoding, and Storage is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Paris, Ricardo, Rymond, and Johnson (College of the Canyons) via source content that was edited to the style and standards of the LibreTexts platform.

- 14.4: Information Processing Theory- Memory, Encoding, and Storage by Paris, Ricardo, Rymond, and Johnson is licensed CC BY 4.0. Original source: https://open.umn.edu/opentextbooks/textbooks/child-growth-and-development.

# 15.16.5: Adolescence (A Time of Transitions)

Cognitive growth and a new found sense of freedom and independence makes it both easier and more difficult for teens when making choices and coping with upcoming transitions and life decisions.

## Academic Achievement, High School Dropouts, and Gap Years

As Adolescents grow older, they encounter age-related transition points that require them to progress into a new role, such as go to college, take a year off or Gap Year, or start to work towards a career. Educational expectations vary not only from culture to culture but also from class to class. While middle- or upper-class families may expect their daughter or son to attend a four-year university after graduating from high school, other families may expect their child to immediately begin working full-time, as many within their families have done before. 21

## Academic Achievement

Adolescents spend more waking time in school than in any other context (Eccles & Roeser, 2011). Academic achievement during adolescence is predicted by interpersonal (e.g., parental engagement in adolescents' education), intrapersonal (e.g., intrinsic motivation), and institutional (e.g., school quality) factors. Academic achievement is important in its own right as a marker of positive adjustment during adolescence but also because academic achievement sets the stage for future educational and occupational opportunities. The most serious consequence of school failure, particularly dropping out of school, is the high risk of unemployment or underemployment in adulthood that follows. High achievement can set the stage for college or future vocational training and opportunities. 22

## High School Dropouts

The **status dropout rate** refers to the percentage of 16 to 24 year-olds who are not enrolled in school and do not have high school credentials (either a diploma or an equivalency credential such as a General Educational Development [GED] certificate). The dropout rate is based on sample surveys of the civilian, non- institutionalized population, which excludes persons in prisons, persons in the military, and other persons not living in households. 23 The dropout rate among high school students has declined from a rate of 9.7% in 2006 to 5.4% in 2017. 24

## Gap Year: How: different Societies Socialize Young Adults

Age transition points require socialization into new roles that can vary widely between societies. For example, in the United Kingdom, when teens finish their secondary schooling (aka high school in the United States), they often take a year "off" before entering college. Frequently, they might take a job, travel, or find other ways to experience another culture. Prince William, the Duke of Cambridge, spent his gap year practicing survival skills in Belize, teaching English in Chile, and working on a dairy farm in the United Kingdom (Prince of Wales 2012a). His brother, Prince Harry, advocated for AIDS orphans in Africa and worked as a jackeroo (a novice ranch hand) in Australia (Prince of Wales 2012b).



Figure 15.16.5.1: Prince William. (Image is in the public domain)



Figure 15.16.5.2: Prince Harry. (Image by Carfax2 is licensed under CC BY-SA 3.0)

In the United States, this life transition point is socialized quite differently, and taking a year off is generally frowned upon. Instead, U.S. youth are encouraged to pick career paths by their mid-teens, to select a college and a major by their late teens, and to have completed all collegiate schooling or technical training for their career by their early twenties.

In other nations, this phase of the life course is tied into **conscription**, a term that describes compulsory military service. Egypt, Switzerland, Turkey, and Singapore all have this system in place. Youth in these nations (often only the males) are expected to undergo a number of months or years of military training and service. 27

## Adolescents and Independence: Career, Work Experience, and Driving

## Adolescents in the Workforce

Many adolescents work either summer jobs, or during the school year, or may work in lieu of college. Holding a job may offer teenagers extra funds, provide the opportunity to learn new skills, foster ideas about future careers, and perhaps shed light on the true value of money. However, there are numerous concerns about teenagers working, especially during the school year. Several studies have found that working more than 20 hours per week can lead to declines in grades, a general disengagement from school (Staff, Schulenberg, & Bachman, 2010; Lee & Staff, 2007; Marsh & Kleitman, 2005), an increase in substance abuse (Longest & Shanahan, 2007), engaging in earlier sexual behavior, and pregnancy (Staff et al., 2011). Like many employee groups, teens have seen a drop in the number of jobs. The summer jobs of previous generations have been on a steady decline, according to the United States Department of Labor, Bureau of Labor Statistics (2016).



Figure 15.16.5.3: How many hours and the reasons why this teen works, will influence the effects of her job. (Image by Brooke Cagle on Unsplash)

## The Working Poor

A major concern in the United States is the rising number of young people who choose to work rather than continue their education and are growing up or continuing to grow up in poverty. Growing up poor or entering the workforce too soon, can cut off access to the education and services people need to move out of poverty and into stable employment. Research states that education was often a key to stability, and those raised in poverty are the ones least able to find well-paying work, perpetuating a cycle. Those who work only part-time, may it be teens or whomever, are more likely to be classified as working poor than are those with full-time employment; higher levels of education lead to less likelihood of being among the working poor. 29 In 2017, the working poor included 6.9 million Americans, down from 7.6 million in 2011 (U.S. Bureau of Labor Statistics, 2019). 30

## Teenage Drivers

Driving gives teens a sense of freedom and independence from their parents. It can also free up time for parents as they are not shuttling teens to and from school, activities, or work. The National Highway Traffic Safety Administration (NHTSA) reports that in 2014 young drivers (15 to 20 year-olds) accounted for 5.5% (11.7 million) of the total number of drivers (214 million) in the US (National Center for Statistics and Analysis (NCSA), 2016). However, almost 9% of all drivers involved in fatal crashes that year were young drivers (NCSA, 2016), and according to the National Center for Health Statistics (2014), motor vehicle accidents are the leading cause of death for 15 to 20 year-olds. “In all motorized jurisdictions around the world, young, inexperienced drivers have much higher crash rates than older, more experienced drivers” (NCSA, 2016, p. 1).

The rate of fatal crashes is higher for young males than for young females, although for both genders the rate was highest for the 15-20-year-old age group. For young males, the rate for fatal crashes was approximately 46 per 100,000 drivers, compared to 20 per 100,000 drivers for young females. The NHTSA (NCSA, 2016) reported that of the young drivers who were killed and who had alcohol in their system, 81% had a blood alcohol count past what was considered the legal limit. Fatal crashes involving alcohol use were higher among young men than young women. The NHTSA also found that teens were less likely to use seat belt restraints if they were driving under the influence of alcohol, and that restraint use decreased as the level of alcohol intoxication increased.

AAA completed a study in 2014 that showed that the following are risk factors for accidents for teen drivers:

- Following cars too closely
- Driving too fast for weather and road conditions
- Distraction from fellow passengers
- Distraction from cell phones

According to the NHTSA, 10% of drivers aged 15 to 19 years involved in fatal crashes were reported to be distracted at the time of the crash; the highest figure for any age group (NCSA, 2016). Distraction coupled with inexperience has been found to greatly increase the risk of an accident (Klauer et al., 2014).

The NHTSA did find that the number of accidents has been on a decline since 2005. They attribute this to greater driver training,

more social awareness to the challenges of driving for teenagers, and to changes in laws restricting the drinking age. The NHTSA estimates that the raising of the legal drinking age to 21 in all 50 states and the District of Columbia has saved 30,323 lives since 1975. 31



Figure 15.16.5.4: This teen needs to have solid driver training and awareness of driving challenges. (Image by State Farm is licensed under CC BY 2.0)

## Contributors and Attributions

21. Content by Dawn Rymond is licensed under CC BY 4.0

Introduction to Sociology 2e – Chapter 5.4: Socialization Across the Life Course by OpenStax is licensed under CC BY 4.0

22. Adolescent Development by Jennifer Lansford is licensed under CC BY-NC-SA 4.0

23. U.S. Department of Education, National Center for Education Statistics. (2015). *The Condition of Education 2015* (NCES 2015-144), Status Dropout Rates.; Lifespan Development: A Psychological Perspective by Martha Lally and Suzanne Valentine-French is licensed under CC BY-NC-SA 3.0

24. The Condition of Education by the National Center for Education Statistics is in the public domain

27. Introduction to Sociology 2e – Chapter 5.4: Socialization Across the Life Course by OpenStax is licensed under CC BY 4.0

29. Lifespan Development: A Psychological Perspective by Martha Lally and Suzanne Valentine-French is licensed under CC BY-NC-SA 3.0

Work in the United States by OpenStax is licensed under CC BY 4.0

30. A profile of the working poor, 2017 by the BLS is in the public domain

31. Lifespan Development: A Psychological Perspective by Martha Lally and Suzanne Valentine-French is licensed under CC BY-NC-SA 3.0

---

This page titled 15.16.5: Adolescence (A Time of Transitions) is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Paris, Ricardo, Rymond, and Johnson (College of the Canyons) via source content that was edited to the style and standards of the LibreTexts platform.

- 14.5: Adolescence (A Time of Transitions) by Paris, Ricardo, Rymond, and Johnson is licensed CC BY 4.0. Original source: https://open.umn.edu/opentextbooks/textbooks/child-growth-and-development.

# 15.16.6: Wisdom and Risk-Taking

Whether it is a sense heightened of ability (we've learned a lot about the egocentrism, personal fable, imaginary audience, or the lack of development of prefrontal cortex), or just poor decision making, many teens tend to take unnecessary risks. **Wisdom**, or the capacity for insight and judgment that is developed through experience, increases between the ages of 14 and 25 and increases with maturity, life experiences, and cognitive development. Wisdom increases gradually and is not the same as intelligence, and adolescents do not improve substantially on IQ tests since their scores are relative to others in their age group, as everyone matures at approximately the same rate. Adolescents must be monitored because they are more likely to take risks than adults. The behavioral decision-making theory proposes that adolescents and adults both weigh the potential rewards and consequences of an action. However, adolescents seem to give more weight to rewards, particularly social rewards, than do adults. Scaffolding adolescents until they show consistent and appropriate judgment will likely allow for fewer negative consequences. 33

## Contributors and Attributions

33. Boundless Psychology – Human Development by Boundless.com is licensed under CC BY-SA 4.0

This page titled 15.16.6: Wisdom and Risk-Taking is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Paris, Ricardo, Rymond, and Johnson (College of the Canyons) via source content that was edited to the style and standards of the LibreTexts platform.

- 14.6: Wisdom and Risk-Taking by Paris, Ricardo, Rymond, and Johnson is licensed CC BY 4.0. Original source: https://open.umn.edu/opentextbooks/textbooks/child-growth-and-development.

# 15.16.S: Summary

In this chapter we looked at:

- Piaget's formal operational stage
- Moral Development and Morality of Care theories
- Memories in the Information Processing Theory
- Adolescent transitions and independence

In the next chapter we will be examining adolescent social emotional development.

This page titled 15.16.S: Summary is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Paris, Ricardo, Rymond, and Johnson (College of the Canyons) via source content that was edited to the style and standards of the LibreTexts platform.

- 14.S: Summary by Paris, Ricardo, Rymond, and Johnson is licensed CC BY 4.0. Original source: https://open.umn.edu/opentextbooks/textbooks/child-growth-and-development.

# 15.17: ADOLESCENCE - SOCIAL EMOTIONAL DEVELOPMENT

## learning objectives

After this chapter, you should be able to:

1. Compare Erikson and Marcia's Theories
2. Explain Identity and Self-concept
3. Summarize the Stages of Ethnic Identity Development
4. Explain the Development of Gender Identity
5. Summarize Sexuality Identity and Orientation
6. Describe Antisocial Behaviors
7. Explain the Developmental Stage of Emerging Adulthood

Adolescents continue to refine their sense of self as they relate to others. Adolescent's main questions are "Who am I?" and "Who do I want to be?" Some adolescents adopt the values and roles that their parents expect of them. Other teens develop identities that align more with the peer groups rather than their parents' expectations. This is common as adolescents work to form their identities. They pull away from their parents and the peer group becomes very important (Shanahan, McHale, Osgood, & Crouter, 2007). Despite spending less time with their parents, most teens report positive feelings toward them (Moore, Guzman, Hair, Lippman, & Garrett, 2004). Warm and healthy parent-child relationships have been associated with positive outcomes for the adolescent, such as better grades and fewer school behavior problems, in the United States as well as in other countries (Hair et al., 2005). 1


**15.17.1: Erik Erikson – Theory of Psychosocial Development**

**15.17.2: James Marcia – Theory of Identity Development**

**15.17.3: Development of Identity and Self Concept - Who am I?**

**15.17.4: Development of Gender Identity**

**15.17.5: Socialization Agents During Adolescence**

**15.17.6: Community, Society, and Culture**

**15.17.7: Media- Influences on Teens**

**15.17.8: Development of Sexual Identity**

**15.17.9: Antisocial Behavior in Adolescence**

**15.17.10: Antisocial Behaviors, Violence, and Child Abuse**

**15.17.11: Violence and Abuse**

**15.17.12: Emerging Adulthood - The Bridge Between Adolescence and Adulthood**

**15.17.S: Summary**



This page titled 15.17: Adolescence - Social Emotional Development is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Paris, Ricardo, Rymond, and Johnson (College of the Canyons) via source content that was edited to the style and standards of the LibreTexts platform.

- 15: Adolescence - Social Emotional Development by Paris, Ricardo, Rymond, and Johnson is licensed CC BY 4.0. Original source: https://open.umn.edu/opentextbooks/textbooks/child-growth-and-development.

# 15.17.1: Erik Erikson – Theory of Psychosocial Development

Erikson proposed that each period of life has a unique challenge or crisis that a person must face. This is referred to as a **psychosocial development**. According to Erikson, successful development involves dealing with and resolving the goals and demands of each of these crises in a positive way. These crises are usually called stages, although that is not the term Erikson used. If a person does not resolve a crisis successfully, it may hinder their ability to deal with later crises. For example, an individual who does not develop a clear sense of purpose and identity (Erikson's fifth crisis - Identity vs. Role Confusion) may become self-absorbed and stagnate rather than working toward the betterment of others (Erikson's seventh crisis -Generativity vs. Stagnation). However, most individuals are able to successfully complete the eight crises of his theory. 3

## Identity vs. Role Confusion

**Identity vs. Role Confusion** is a major stage of development where the child has to learn the roles he will occupy as an adult. In adolescence, children (ages 12–18) face the task of identity vs. role confusion. Success in this stage will lead to the virtue of **fidelity**. Fidelity involves being able to commit one's self to others on the basis of accepting others, even when there may be ideological differences. According to Erikson, an adolescent's main task is developing a sense of self. Adolescents struggle with questions such as "Who am I?" and "What do I want to do with my life?" Along the way, most adolescents try on many different selves to see which ones fit; they explore various roles and ideas, set goals, and attempt to discover their "adult" selves. Adolescents who are successful at this stage have a strong sense of identity and are able to remain true to their beliefs and values in the face of problems and other people's perspectives. When adolescents are apathetic, do not make a conscious search for identity, or are pressured to conform to their parents' ideas for the future, they may develop a weak sense of self and experience role confusion. They will be unsure of their identity and confused about the future. Teenagers who struggle to adopt a positive role will likely struggle to "find" themselves as adults. 4

Erikson saw this as a period of confusion and experimentation regarding identity and how one navigates along life's path. During adolescence, we experience **psychological moratorium**, where teens put their current identity on hold while they explore their options for identity. The culmination of this exploration is a more coherent view of oneself. Those who are unsuccessful at resolving this stage may either withdraw further into social isolation or become lost in the crowd. However, more recent research suggests, that few leave this age period with identity achievement and that most identity formation occurs during young adulthood (Côté, 2006). 5

## Contributors and Attributions

3. Introduction to Psychology by Martha Lally and Suzanne Valentine-French is licensed under CC BY-NC-SA 3.0

4. Education, Society, & the K-12 Learner – Part II: Educational Psychology references Modification of Erickson's Stages of Psychosocial Development by Boundless, which is licensed under CC BY-SA 4.0

5. Lifespan Development: A Psychological Perspective by Martha Lally and Suzanne Valentine-French is licensed under CC BY-NC-SA 3.0

This page titled 15.17.1: Erik Erikson – Theory of Psychosocial Development is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Paris, Ricardo, Rymond, and Johnson (College of the Canyons) via source content that was edited to the style and standards of the LibreTexts platform.

- 15.1: Erik Erikson – Theory of Psychosocial Development by Paris, Ricardo, Rymond, and Johnson is licensed CC BY 4.0. Original source: https://open.umn.edu/opentextbooks/textbooks/child-growth-and-development.

# 15.17.2: James Marcia – Theory of Identity Development

One approach to assessing identity development was proposed by James Marcia. In his approach, adolescents are asking questions regarding their exploration of and commitment to issues related to occupation, politics, religion, and sexual behavior. Studies assessing how teens pass through Marcia's stages show that although most teens eventually succeed in developing a stable identity, the path to it is not always easy and there are many routes that can be taken. Some teens may simply adopt the beliefs of their parents or the first role that is offered to them, perhaps at the expense of searching for other more promising possibilities (foreclosure status). Other teens may spend years trying on different possible identities (moratorium status) before finally choosing one. 6

Marcia identified four identity statuses that represent the four possible combinations of the dimension of commitment and exploration. 7

*Table* 15.17.2.1*: Identity Status*

| Identity Status | Description 8 |
|---|---|
| **Identity-Diffusion** status is a status that characterizes those who have neither explored the options, nor made a commitment to an identity. | The individual does not have firm commitments regarding the issues in question and is not making progress toward them. Those who persist in this identity may drift aimlessly with little connection to those around them or have little sense of purpose in life. |
| **Identity-Foreclosure status** is the status for those who have made a commitment to an identity without having explored the options. | The individual has not engaged in any identity experimentation and has established an identity based on the choices or values of others. Some parents may make these decisions for their children and do not grant the teen the opportunity to make choices. In other instances, teens may strongly identify with parents and others in their life and wish to follow in their footsteps. |
| **Identity-Moratorium status** is a status that describes those who are exploring in an attempt to establish an identity but have yet to have made any commitment. | The individual is exploring various choices but has not yet made a clear commitment to any of them. This can be an anxious and emotionally tense time period as the adolescent experiments with different roles and explores various beliefs. Nothing is certain and there are many questions, but few answers. |
| **Identity-Achievement status** refers to the status for those who, after exploration, have made a commitment. | The individual has attained a coherent and committed identity based on personal decisions. This is a long process and is not often achieved by the end of adolescence |

The least mature status, and one common in many children, is identity diffusion. During high school and the college years, teens and young adults move from identity diffusion and foreclosure toward moratorium and achievement. The biggest gains in the development of identity are in college, as college students are exposed to a greater variety of career choices, lifestyles, and beliefs. This is likely to spur on questions regarding identity. A great deal of the identity work we do in adolescence and young adulthood is about values and goals, as we strive to articulate a personal vision or dream for what we hope to accomplish in the future (McAdams, 2013). 9

To help them work through the process of developing an identity, teenagers may try out different identities in different social situations. They may maintain one identity at home and a different type of persona when they are with their peers. Eventually, most teenagers do integrate the different possibilities into a single self-concept and a comfortable sense of identity (identity-achievement status). For teenagers, the peer group provides valuable information about the self-concept. For instance, in response to the question "What were you like as a teenager? (e.g., cool, nerdy, awkward?)," posed on the website Answerbag, one teenager replied in this way:

> I'm still a teenager now, but from 8th -9th grade I didn't really know what I wanted at all. I was smart, so I hung out with the nerdy kids. I still do; my friends mean the world to me. But in the middle of 8th grade I started hanging out with which you may call the "cool" kids...and I also hung out with some stoners, just for variety. I pierced various parts of my body and kept my grades up. Now, I'm just trying to find who I am. I'm even doing my sophomore year in China so I can get a better view of what I want. (Answerbag, 2007). What were you like as a teenager? (e.g., cool, nerdy,

awkward?). (Quoted from dojokills on http://www.answerbag.com/q_view/171753)

A big part of what the adolescent is learning is **social identity**, the part of the self-concept that is derived from one's group memberships. Adolescents define their social identities according to how they are similar to and different from others, finding meaning in the sports, religious, school, gender, and ethnic categories they belong to. 10




Figure 15.17.2.1: (Image on Pixabay)



Figure 15.17.2.2: (Imageon Pixabay)



Figure 15.17.2.3: (Image by Valerie Everett is licensed under CC BY-SA 2.0)



Figure 15.17.2.4: (Image by Adi Rahman on Unsplash)

Adolescents search for stable attachments through the development of social identities.

## Contributors and Attributions

6. Introduction to Psychology by Martha Lally and Suzanne Valentine-French is licensed under CC BY-NC-SA 3.0

7. Lifespan Development: A Psychological Perspective by Martha Lally and Suzanne Valentine-French is licensed under CC BY-NC-SA 3.0

8. Lifespan Development: A Psychological Perspective by Martha Lally and Suzanne Valentine-French is licensed under CC BY-NC-SA 3.0

9. Lifespan Development: A Psychological Perspective by Martha Lally and Suzanne Valentine-French is licensed under CC BY-NC-SA 3.0; Table adapted from Marcia, J. (1980). Identity in adolescence. *Handbook of adolescent psychology, 5*, 145

10. Introduction to Psychology by Martha Lally and Suzanne Valentine-French is licensed under CC BY-NC-SA 3.0

This page titled 15.17.2: James Marcia – Theory of Identity Development is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Paris, Ricardo, Rymond, and Johnson (College of the Canyons) via source content that was edited to the style and standards of the LibreTexts platform.

- 15.2: James Marcia – Theory of Identity Development by Paris, Ricardo, Rymond, and Johnson is licensed CC BY 4.0. Original source: https://open.umn.edu/opentextbooks/textbooks/child-growth-and-development.

# 15.17.3: Development of Identity and Self Concept - Who am I?

Developmental psychologists have researched several different areas of identity development for adolescence and some of the main areas include:

## Religious Identity

The religious views of teens are often similar to those of their families (Kim- Spoon, Longo, & McCullough, 2012). Most teens may question specific customs, practices, or ideas in the faith of their parents, but few completely reject the religion of their families.



Figure 15.17.3.1: A Muslim teen (Image on Pixabay)




Figure 15.17.3.2: A Jewish teen (Image by Eli is licensed under CC BY 2.0)

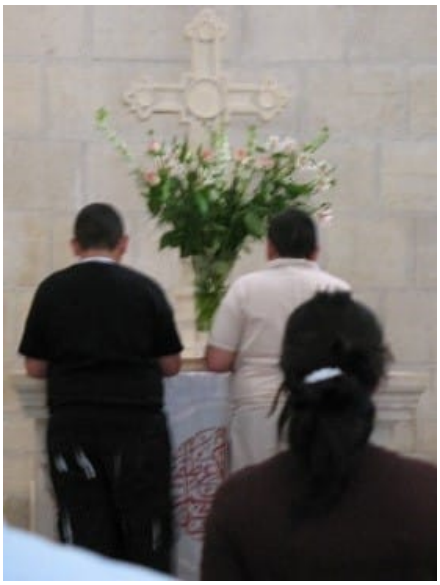


Figure 15.17.3.3: A Catholic teen (Image by James Emery is licensed under CC BY 2.0)



Figure 15.17.3.4: A Buddhist teen (Image is licensed under CC0 1.0)

## Political Identity

The political ideology of teens is also influenced by their parents' political beliefs. A new trend in the 21st century is a decrease in party affiliation among adults. Many adults do not align themselves with either the democratic or republican party, but view themselves as more of an "independent". Their teenage children are often following suit or becoming more apolitical (Côté, 2006).

## Vocational Identity

While adolescents in earlier generations envisioned themselves as working in a particular job and often worked as an apprentice or part-time, this is rarely the case today. Vocational identity takes longer to develop, as most of today's occupations require specific skills and knowledge that will require additional education or are acquired on the job itself. In addition, many of the jobs held by teens are not in professions that most teens will seek as adults.

## Gender Identity

This is also becoming an increasingly prolonged task as attitudes and norms regarding gender keep changing. The roles appropriate for males and females are evolving. Some teens may foreclose on a gender identity as a way of dealing with this uncertainty, and they may adopt more stereotypic male or female roles (Sinclair & Carlsson, 2013). We will be looking more closely at gender identity later in the chapter. 19

## Self-Concept and Self-Esteem

In adolescence, teens continue to develop their self-concept. Their ability to think of the possibilities and to reason more abstractly may explain the further differentiation of the self during adolescence. However, the teen's understanding of self is often full of contradictions. Young teens may see themselves as outgoing but also withdrawn, happy yet often moody, and both smart and completely clueless (Harter, 2012). These contradictions, along with the teen's growing recognition that their personality and behavior seem to change depending on who they are with or where they are, can lead the young teen to feel like a fraud. With their parents they may seem angrier and sullen, with their friends they are more outgoing and goofy, and at work they are quiet and cautious. "Which one is really me?" may be the refrain of the young teenager. Harter (2012) found that adolescents emphasize traits such as being friendly and considerate more than do children, highlighting their increasing concern about how others may see them. Harter also found that older teens add values and moral standards to their self-descriptions.



Figure 15.17.3.5: An adolescent's understanding of themself is often full of contradictions. (Image on Pixabay)



Figure 15.17.3.6: Adolescents are more likely to emphasize values in their self-descriptions. (Image is licensed under CC0 1.0)

As self-concept develops, so does self-esteem. In addition to the academic, social, appearance, and physical/athletic dimensions of self-esteem in middle and late childhood, teens also add perceptions of their competency in romantic relationships, on the job, and in close friendships (Harter, 2006). Self-esteem often decreases when children transition from one school setting to another, such as shifting from elementary to middle school, or junior high to high school (Ryan, Shim, & Makara, 2013). These decreases are usually temporary, unless there are additional stressors such as parental conflict, or other family disruptions (De Wit, Karioja, Rye, & Shain, 2011). Self-esteem rises from mid to late adolescence for most teenagers, especially if they feel confident in their

peer relationships, their appearance, and athletic abilities (Birkeland, Melkivik, Holsen, & Wold, 2012).

## Contributors and Attributions

19. Lifespan Development: A Psychological Perspective by Martha Lally and Suzanne Valentine-French is licensed under CC BY-NC-SA 3.0

This page titled 15.17.3: Development of Identity and Self Concept - Who am I? is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Paris, Ricardo, Rymond, and Johnson (College of the Canyons) via source content that was edited to the style and standards of the LibreTexts platform.

- 15.3: Development of Identity and Self Concept - Who am I? by Paris, Ricardo, Rymond, and Johnson is licensed CC BY 4.0. Original source: https://open.umn.edu/opentextbooks/textbooks/child-growth-and-development.

# 15.17.4: Development of Gender Identity

From birth, children are assigned a gender and are socialized to conform to certain gender roles based on their biological sex. "**Sex**," refers to physical or physiological differences between males, females, and intersex persons, including both their primary and secondary sex characteristics. "**Gender**," on the other hand, refers to social or cultural distinctions associated with a given sex.

When babies are born, they are assigned a gender based on their biological sex—male babies are assigned as boys, female babies are assigned as girls, and **intersex** babies are born with sex characteristics that do not fit the typical definitions for male or female bodies, and are usually relegated into one gender category or another. Scholars generally regard gender as a **social construct**, meaning that it doesn't exist naturally but is instead a concept that is created by cultural and societal norms. From birth, children are socialized to conform to certain gender roles based on their biological sex and the gender to which they are assigned.22

A person's subjective experience of their own gender and how it develops, or **gender identity**, is a topic of much debate. It is the extent to which one identifies with a particular gender; it is a person's individual sense and subjective experience of being a man, a woman, or other gender. It is often shaped early in life and consists primarily of the acceptance (or non-acceptance) of one's membership into a gender category. In most societies, there is a basic division between gender attributes assigned to males and females. In all societies, however, some individuals do not identify with some (or all) of the aspects of gender that are assigned to their biological sex.

Those that identify with the gender that corresponds to the sex assigned to them at birth (for example, they are assigned female at birth and continue to identify as a girl, and later a woman) are called **cisgender**. In many Western cultures, individuals who identify with a gender that is different from their biological sex (for example, they are assigned female at birth but feel inwardly that they are a boy or a gender other than a girl) are called **transgender**. Some transgender individuals, if they have access to resources and medical care, choose to alter their bodies through medical interventions such as surgery and hormonal therapy so that their physical being is better aligned with their gender identity.



Figure 15.17.4.1: This person identifies as genderqueer. (Image by Franziska Neumeister is licensed under CC BY 2.0)

Recent terms such as "genderqueer," "genderfluid," "gender variant," "androgynous," "agender," and "gender nonconforming" are used by individuals who do not identify within the gender binary as either a man or a woman. Instead they identify as existing somewhere along a spectrum or continuum of genders, or outside of the spectrum altogether, often in a way that is continuously evolving.

## The Gender Continuum

Viewing gender as a continuum allows us to perceive the rich diversity of genders, from trans-and cisgender to gender queer and agender. Most Western societies operate on the idea that gender is a **binary**, that there are essentially only two genders (men and women) based on two sexes (male and female), and that everyone must fit one or the other. This social dichotomy enforces conformance to the ideals of masculinity and femininity in all aspects of gender and sex—gender identity, gender expression, and biological sex.

According to supporters of **queer theory**, gender identity is not a rigid or static identity but can continue to evolve and change over time. Queer theory developed in response to the perceived limitations of the way in which identities are thought to become consolidated or stabilized (for instance, gay or straight) and theorists constructed *queerness* in an attempt to resist this. In this way, the theory attempts to maintain a critique rather than define a specific identity. While “queer” defies a simple definition, the term is often used to convey an identity that is not rigidly developed but is instead fluid and changing. 24

## The Genderbread Person

In 2012, Sam Killerman created the Genderbread Person as an infographic to break down gender identity, gender expression, biological sex, and sexual orientation. 25 In 2018, he updated it to version 2.0 to be more accurate, and inclusive. 26

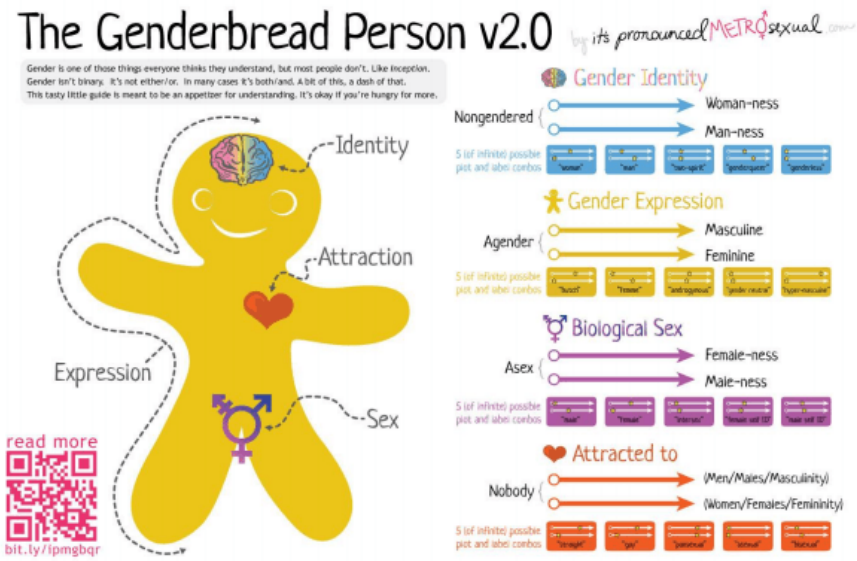



Figure 15.17.4.2: The Genderbread Person explains gender identity, gender expression, biological sex, and sexual orientation. (Image by it's pronounced METROsexual)

### Gender Pronouns

Pronouns are a part of language used to refer to someone or something without using proper nouns. In standard English, some singular third-person pronouns are "he" and "she," which are usually seen as gender-specific pronouns, referring to a man and a woman, respectively. A gender-neutral pronoun or gender-inclusive pronoun is one that gives no implications about gender, and could be used for someone of any gender.

Some languages only have gender-neutral pronouns, whereas other languages have difficulty establishing any that aren't gender-specific. People with non-binary gender identities often choose new third-person pronouns for themselves as part of their transition. They often choose gender-neutral pronouns so that others won't see them as female or male. 28

Here is a table based on the Rainbow Coalition of Yellowknife's *Handy Guide to Pronouns:*

*Table 15.17.4.1: Guide to Pronouns (Rainbow Coalition of Yellowknife. (n.d). Handy Guide to Pronouns [PDF files]. Retrieved from http://www.rainbowcoalitionyk.org/resources/)*

| Pronouns | Example |
|---|---|
| **He/His/Him** (masculine pronouns) | He is going to the store to buy himself a hat. I saw him lose his old hat yesterday. |
| **She/Her/Her** (feminine pronouns) | She is going to the store to buy herself a hat. I saw her lose her old hat yesterday. |
| **They/Them/Their** (gender-neutral pronouns) | They are going to the store to buy themselves a hat. I saw them lose their old hat yesterday. |

## Factors that Influence Gender Identity

Although the formation of gender identity is not completely understood, many factors have been suggested as influencing its development. Biological factors that may influence gender identity include pre- and post-natal hormone levels and genetic makeup. Social factors include ideas regarding gender roles conveyed by family, authority figures, mass media, and other influential people in a child's life. According to social-learning theory, children develop their gender identity through observing and imitating the gender-linked behaviors of others; they are then "rewarded" for imitating the behaviors of people of the same gender and "punished" for imitating the behaviors of another gender. For example, male children will often be rewarded for imitating their father's love of baseball but punished or redirected in some way if they imitate their older sister's love of dolls. Children are shaped and molded by the people surrounding them, who they try to imitate and follow.

## Gender Roles

The term "gender role" refers to society's concept of how men and women are expected to act. As we grow, we learn how to behave from those around us. In this socialization process, children are introduced to certain roles that are typically linked to their biological sex. The term "gender role" refers to society's concept of how men and women are expected to act and behave. Gender roles are based on norms, or standards, created by society. In American culture, masculine roles have traditionally been associated with strength, aggression, and dominance, while feminine roles have traditionally been associated with passivity, nurturing, and subordination.

## Gender Socialization

The socialization process in which children learn these gender roles begins at birth. Today, our society is quick to outfit male infants in blue and girls in pink, even applying these color-coded gender labels while a baby is in the womb. It is interesting to note that these color associations with gender have not always been what they are today. Up until the beginning of the 20th century, pink was actually more associated with boys, while blue was more associated with girls—illustrating how socially constructed these associations really are.

Gender socialization occurs through four major agents: family, education, peer groups, and mass media. Each agent reinforces gender roles by creating and maintaining normative expectations for gender-specific behavior. Exposure also occurs through secondary agents, such as religion and the workplace. Repeated exposure to these agents over time leads people into a false sense that they are acting naturally based on their gender rather than following a socially constructed role.

## Gender Stereotypes, Sexism, and Gender-Role Enforcement

The attitudes and expectations surrounding gender roles are not typically based on any inherent or natural gender differences, but on **gender stereotypes**, or oversimplified notions about the attitudes, traits, and behavior patterns of males and females. We engage in gender stereotyping when we do things like making the assumption that a teenage babysitter is female.

While it is somewhat acceptable for women to take on a narrow range of masculine characteristics without repercussions (such as dressing in traditionally male clothing), men are rarely able to take on more feminine characteristics (such as wearing skirts) without the risk of harassment or violence. This threat of punishment for stepping outside of gender norms is especially true for those who do not identify as male or female.



Figure 15.17.4.3: Would girls likely pose this way for an image? What does this say about gender stereotypes? (Image on Pixabay)

Gender stereotypes form the basis of sexism or the prejudiced beliefs that value males over females. Common forms of sexism in modern society include gender-role expectations, such as expecting women to be the caretakers of the household. Sexism also includes people's expectations of how members of a gender group should behave. For example, girls and women are expected to be friendly, passive, and nurturing; when she behaves in an unfriendly or assertive manner, she may be disliked or perceived as aggressive because she has violated a gender role (Rudman, 1998). In contrast, a boy or man behaving in a similarly unfriendly or assertive way might be perceived as strong or even gain respect in some circumstances. 31

## Contributors and Attributions

24. Boundless Psychology - Gender and Sexuality references Curation and Revision by Boundless Psychology, which is licensed under CC BY-SA 4.0

25. The Genderbread Person by Sam Killermann is in the public domain

26. The Genderbread Person v2.0 by Sam Killermann is in the public domain

28. Pronouns by Nonbinary Wiki is licensed under CC BY-SA 4.0

31. Lifespan Development: A Psychological Perspective by Martha Lally and Suzanne Valentine-French is licensed under CC BY-NC-SA 3.0

This page titled 15.17.4: Development of Gender Identity is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Paris, Ricardo, Rymond, and Johnson (College of the Canyons) via source content that was edited to the style and standards of the LibreTexts platform.

- 15.4: Development of Gender Identity by Paris, Ricardo, Rymond, and Johnson is licensed CC BY 4.0. Original source: https://open.umn.edu/opentextbooks/textbooks/child-growth-and-development.

# 15.17.5: Socialization Agents During Adolescence

Adolescence is a crucial period in social development, research shows there are four main types of relationships that influence an adolescent: parents, peers, community, and society.

## Parents and Teens: Autonomy and Attachment

While most adolescents get along with their parents, they do spend less time with them (Smetana, 2011). This decrease in the time spent with families may be a reflection of a teenager's greater desire for independence or **autonomy**. It can be difficult for many parents to deal with this desire for autonomy. However, it is normal for teenagers to increasingly distance themselves and establish relationships outside of their families in preparation for adulthood.

Children in middle and late childhood are increasingly given greater freedom regarding basic decision making. This continues in adolescence, as teens demand more and more control over the decisions that affect their daily lives. Teens believe they should manage the areas that parents previously had considerable control over, which can increase tension between parents and their teenagers. Their arguments often center on issues of a power struggle or conflict in areas such as chores, homework, curfew, dating, personal appearance, and the right to privacy.



Figure 15.17.5.1: Teenagers report more conflicts with their mothers. (Image by Wikivisual is licensed under CC BY-NC-SA 3.0)

As teens grow older, more compromise is reached between parents and teenagers (Smetana, 2011). Teens report more conflict with their mothers, as many mothers believe they should still have some control over many of these areas, yet often report their mothers to be more encouraging and supportive (Costigan, Cauce, & Etchison, 2007). Parents are more controlling of daughters, especially early maturing girls, than they are sons (Caspi, Lynam, Moffitt, & Silva, 1993). In addition, culture and ethnicity also play a role in how restrictive parents are with the daily lives of their children (Chen, Vansteenkiste, Beyers, Soensens, & Van Petegem, 2013). 33

Having supportive, less conflict ridden relationships with parents also benefits teenagers. Research on attachment in adolescence finds that teens who are still securely attached to their parents have less emotional problems (Rawatlal, Kliewer & Pillay, 2015), are less likely to engage in drug abuse and other criminal behaviors (Meeus, Branje & Overbeek, 2004), and have more positive peer relationships (Shomaker & Furman, 2009). This means that both parents and teenagers need to strike a balance between autonomy, while still maintaining close and caring familial relationships. 34

## The Parent-Child Relationship

The relationship with parents may be a mitigating factor of the negative influence by peers. Communicating family rules and parental style have been inversely associated to substance, alcohol, and tobacco consumption during adolescence. This influence is essential for adolescents' development up to adulthood. Communication between parents and adolescents emerges as a protective factor for alcohol, tobacco, and substance use (Newman, Harrison & Dashiff, 2008).

Sen (2010) observed that family meals could lead to creating a closer relation between parents and adolescents, by strengthening a positive relationship and avoiding certain risk behaviors, such as substance use amongst girls and alcohol consumption, physical violence, and robberies, amongst boys. These differences between genders may be due to a greater importance that girls attribute to family activities but they do not reveal that boys are indifferent to them, only that the relation between genders may differ. Huebner and Howell (2003) verified that parental monitoring and communication with parents protected adolescents of both genders from being involved in risk behaviors.



Figure 15.17.5.2: if this father monitors and communicates with his son, he can reduce the teen's risky behaviors. (Image by moodboard is licensed under CC BY 2.0)

Parental monitoring can be defined as parents' knowledge about their children's activities, who they hang out with and what they do. It has been associated to protection of various risk behaviors throughout adolescence, such as substance use or sexual behaviors. The greater the parental monitoring, the lower the adolescents' involvement in risk behavior. It may vary according to age, gender or ethnicity and it generally decreases with age (Westling, Andrews, Hampson & Peterson, 2008). 36

## Relationships with Peers and Peer Groups

## Peer Relationships

In addition, peers also serve as an important source of social support and companionship during adolescence. As children become adolescents, they usually begin spending more time with their peers and less time with their families, and these peer interactions are increasingly unsupervised by adults. The level of influence that peers can have over an adolescent makes these relationships particularly important in their personal development. Adolescents with positive peer relationships are happier and better adjusted than those who are socially isolated or have conflictual peer relationships.

Adolescents' notions of friendship increasingly focus on intimate exchanges of thoughts and feelings, which are important to forming friendships; these high quality friendships may enhance a child's development regardless of the particular characteristics of those friends. In addition, peers also serve as an important source of social support and companionship during adolescence.

The peer group may serve as a model and influence behaviors and attitudes and also provide easy access, encouragement and an appropriate social setting for consumption (Glaser, Shelton & Bree, 2010). Social Learning Theory suggests that it is not necessary for adolescents to observe a given behavior and adopt it; it is sufficient to perceive that the peer group accepts it, in order to be able to opt for similar behaviors (Petraitis, Flay & Miller, 1995). 37

Peers can serve both positive and negative functions during adolescence. Relationships with peers are valuable opportunities for adolescents to practice their social and conflict resolution skills. But negative peer pressure can lead adolescents to make riskier decisions or engage in more problematic behavior than they would alone or in the presence of their family. One of the most widely studied aspects of adolescent peer influence is known as **deviant peer contagion** (Dishion & Tipsord, 2011), which is the process by which peers reinforce problem behavior by laughing or showing other signs of approval that then increase the likelihood of future problem behavior. 38

Peers may strongly determine preference in the way of dressing, speaking, using illicit substances, sexual behavior, adopting and accepting violence, adopting criminal and anti-social behaviors, and in many other areas of the adolescent's life (Padilla, Walker & Bean, 2009; Tomé, Matos & Diniz, 2008). An example of this is that the main motives for alcohol consumption given by adolescents are related to social events, which usually take place in the company of friends, namely: drinking makes holidays more fun, it facilitates approaching others, it helps relaxing or facilitates sharing experiences and feelings (Kuntsche, Knibbe,

Gmel & Engels, 2005). Also, mimicking risk behaviors may be greater when consumption begins in the context of a social event (Larsen, Engels, Souren, Granic & Overbeek, 2010).



Figure 15.17.5.3: Adolescent boys drinking at a party. (Image by theopie is licensed under CC BY 2.0)

On the other hand, having friends allows to share experiences and feelings and to learn how to solve conflicts. Not having friends, on the other hand, leads to social isolation and limited social contacts, as there are fewer opportunities to develop new relations and social interactional skills.

Friendship is also positively associated to psychological well-being (Ueno, 2004), Stronger friendships may provide adolescents with an appropriate environment to development in a healthy way and to achieve good academic results. Adolescents with reciprocal friendships mention high levels of feelings of belonging in school; at the same time, reciprocity and feelings of belonging have positive effects in academic results (Vaquera & Kao, 2008).

School is a setting where interpersonal relations are promoted, which are important for youngsters' personal and social development (Ruini et al., 2009); it is responsible for the transmission of behavioral norms and standards and it represents an essential role in the adolescent's socialization process. The school is able to gather different peer communities and to promote self-esteem and a harmonious development between adolescents, which makes it a privileged space for meetings and interactions (Baptista, Tomé, Matos, Gaspar & Cruz, 2008). Adolescents spend a great part of their time at school, which also makes it a privileged context for involvement in or protection from risk behaviors (Piko & Kovács, 2010). Camacho, Tomé, Matos, Gamito and Diniz (2010) confirmed that adolescents who like school were those that more often were part of a peer group without involvement in risk behaviors; while those that mentioned they did not have any friends reported that they liked school less and those in conflict with their peers had more negative health outcomes.



15.17.5.4: These teens are at a concert together. (Image by Eva Rinaldi is licensed under CC BY-SA 2.0)

Despite the positive influence of the peer group during adolescence, the higher the adolescent's autonomy from the peer group, the higher their resilience against its influence. This resilience seems to increase with age, which may mean that it is associated with youngsters' maturity; and girls emerge in several studies as more resilient than boys (Sumter, Bokhorst, Steinberg & Westenberg, 2009).

Another factor that may be found in the influence of the peer group is the type of friendship, which adolescents maintain with their peer group: if friends are close they have a greater influence on the other's behaviors (Glaser, Shelton & Bree, 2010). When the friendship is perceived as reciprocal and of quality, exerts greater influence (Mercken, Snijders, Steglich, Vartiainen & Vries,

2010). Another factor, which has been identified as a possible way of decreasing peer influence, is assertive refusal. Adolescents that are able to maintain an assertive refusal are less susceptible to the group's influence (Glaser, Shelton & Bree, 2010). These are only some variables identified as possible factors decreasing peer influence. 41

## Peers in Groups

During adolescence, it is common to have friends of the opposite sex much more than in childhood, peer groups evolve from primarily single-sex to mixed-sex. Teens within a peer group tend to be similar to one another in behavior and attitudes, which has been explained as a function of **homophily**, that is, adolescents who are similar to one another choose to spend time together in a "birds of a feather flock together" way. Adolescents who spend time together also shape each other's behavior.

Crowds are an emerging level of peer relationships in adolescence. In contrast to friendships, which are reciprocal dyadic relationships, and cliques, which refer to groups of individuals who interact frequently, crowds are characterized by shared reputations or images (who people think they are). Crowds refer to different collections of people, like the "theater kids" or the "environmentalists." In a way, they are kind of like clothing brands that label the people associated with that crowd. 42



Figure 15.17.5.5: Clique (Image by leonardo samrani is licensed under CC BY 2.0)



Figure 15.17.5.6: Crowd (Image by Garry Knight is licensed under CC BY 2.0)

# Contributors and Attributions

33. Lifespan Development: A Psychological Perspective by Martha Lally and Suzanne Valentine-French is licensed under CC BY-NC-SA 3.0

34. Lifespan Development: A Psychological Perspective by Martha Lally and Suzanne Valentine-French is licensed under CC BY-NC-SA 3.0

36. How Can Peer Group Influence the Behavior of Adolescents: Explanatory Model by Gina Tomé, Margarida Matos, Celeste Simões, José Diniz, and Inês Camacho is licensed under CC BY 4.0

37. How Can Peer Group Influence the Behavior of Adolescents: Explanatory Model by Gina Tomé, Margarida Matos, Celeste Simões, José Diniz, and Inês Camacho is licensed under CC BY 4.0

38. Boundless Psychology - Adolescence references Curation and Revision by Boundless Psychology, which is licensed under CC BY-SA 4.0

41. How Can Peer Group Influence the Behavior of Adolescents: Explanatory Model by Gina Tomé, Margarida Matos, Celeste Simões, José Diniz, and Inês Camacho is licensed under CC BY 4.0

42. Lifespan Development – Module 7: Adolescence by Lumen Learning is licensed under CC BY 4.0

This page titled 15.17.5: Socialization Agents During Adolescence is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Paris, Ricardo, Rymond, and Johnson (College of the Canyons) via source content that was edited to the style and standards of the LibreTexts platform.

- 15.5: Socialization Agents During Adolescence by Paris, Ricardo, Rymond, and Johnson is licensed CC BY 4.0. Original source: https://open.umn.edu/opentextbooks/textbooks/child-growth-and-development.

# 15.17.6: Community, Society, and Culture

There are certain characteristics of adolescent development that are more rooted in culture than in human biology or cognitive structures. Culture is learned and socially shared, and it affects all aspects of an individual's life. Social responsibilities, sexual expression, and belief-system development, for instance, are all likely to vary based on culture. Furthermore, many distinguishing characteristics of an individual (such as dress, employment, recreation, and language) are all products of culture.



Figure 15.17.6.1: Culture is learned and socially shared. (Image by Sgt. Matthew Coleman-Foster is in the public domain)

Many factors that shape adolescent development vary by culture. For instance, the degree to which adolescents are perceived as autonomous, or independent beings varies widely in different cultures, as do the behaviors that represent this emerging autonomy. The lifestyle of an adolescent in a given culture is also profoundly shaped by the roles and responsibilities he or she is expected to assume. The extent to which an adolescent is expected to share family responsibilities, for example, is one large determining factor in normative adolescent behavior. Adolescents in certain cultures are expected to contribute significantly to household chores and responsibilities, while others are given more freedom or come from families with more privilege where responsibilities are fewer. Differences between families in the distribution of financial responsibilities or provision of allowance may reflect various socioeconomic backgrounds, which are further influenced by cultural norms and values.

Adolescents begin to develop unique belief systems through their interaction with social, familial, and cultural environments. These belief systems encompass everything from religion and spirituality to gender, sexuality, work ethics, and politics. The range of attitudes that a culture embraces on a particular topic affects the beliefs, lifestyles, and perceptions of its adolescents, and can have both positive and negative impacts on their development.

## Development of Ethnic Identity

Adolescent development does not necessarily follow the same pathway for all individuals. Certain features of adolescence, particularly with respect to biological changes associated with puberty and cognitive changes associated with brain development, are relatively universal. But other features of adolescence depend largely on circumstances that are more environmentally variable. For example, adolescents growing up in one country might have different opportunities for risk-taking than adolescents in a different country, and supports and sanctions for different behaviors in adolescence depend on laws and values that might be specific to where adolescents live.



Figure 15.17.6.2: These values of these adolescent girls' families and communities will influence their development. (Image is licensed under CC0)

Different cultural norms regarding family and peer relationships shape adolescents' experiences in these domains. For example, in some countries, adolescents' parents are expected to remain in control over major decisions, whereas in other countries, adolescents are expected to begin sharing in or taking control of decision making . Even within the same country, adolescents' gender, ethnicity, immigrant status, religion, sexual orientation, socioeconomic status, and personality can shape both how adolescents behave and how others respond to them, creating diverse developmental contexts for different adolescents. 47

**Ethnic Identity** refers to how people come to terms with who they are based on their ethnic or racial ancestry. "The task of ethnic identity formation involves sorting out and resolving positive and negative feelings and attitudes about one's own ethnic group and about other groups and identifying one's place in relation to both" (Phinney, 2006, p. 119). When groups differ in status in a culture—those from the non-dominant group have to be cognizant of the customs and values of those from the dominant culture. The reverse is rarely the case. This makes ethnic identity far less important for members of the dominant culture.

In the United States, those of European ancestry engage in less exploration of ethnic identity, than do those of non-European ancestry (Phinney, 1989). However, according to the U.S. Census (2012) more than 40% of Americans under the age of 18 are from ethnic minorities. For many ethnic minority teens, discovering one's ethnic identity is an important part of identity formation. Phinney's model of ethnic identity formation is based on Erikson and Marcia's model of identity formation (Phinney, 1990; Syed & Juang, 2014). Through the process of exploration and commitment, individual's come to understand and create an ethnic identity.

## Phinney's Three Stages or Statuses of Ethnic Identity

Phinney's model of ethnic identity formation is based on Erikson's and Marcia's model of identity formation (Phinney, 1990; Syed & Juang, 2014). Through the process of exploration and commitment, individual's come to understand and create an ethic identity. Phinney suggests three stages or statuses with regard to ethnic identity:

*Table 15.17.6.1: Phinney's Three Stages of Ethnic Identity*

| Stage | Descriptions |
|---|---|
| **Stage 1: Unexamined Ethnic Identity** | Adolescents and adults who have not been exposed to ethnic identity issues may be in the first stage, unexamined ethnic identity. This is often characterized with a preference for the dominant culture, or where the individual has given little thought to the question of their ethnic heritage. This is similar to diffusion in Marcia's model of identity. Included in this group are also those who have adopted the ethnicity of their parents and other family members with little thought about the issues themselves, similar to Marcia's foreclosure status (Phinney, 1990). |
| **Stage 2: Ethnic Identity Search** | Adolescents and adults who are exploring the customs, culture, and history of their ethnic group are in the ethnic identity search stage, similar to Marcia's moratorium status (Phinney, 1990). Often some event "awakens" a teen or adult to their ethnic group; either a personal experience with prejudice, a highly profiled case in the media, or even a more positive event that recognizes the contribution of someone from the individual's ethnic group. Teens and adults in this stage will immerse themselves in their ethnic culture. For some, "it may lead to a rejection of the values of the dominant culture" (Phinney, 1990, p. 503). |

| Stage | Descriptions |
|---|---|
| **Stage 3: Achieved Ethnic Identity** | Those who have actively explored their culture are likely to have a deeper appreciation and understanding of their ethnic heritage, leading to progress toward an achieved ethnic identity (Phinney, 1990). An achieved ethnic identity does not necessarily imply that the individual is highly involved in the customs and values of their ethnic culture. One can be confident in their ethnic identity without wanting to maintain the language or other customs. |

The development of ethnic identity takes time, with about 25% of tenth graders from ethnic minority backgrounds having explored and resolved the issues (Phinney, 1989). The more ethnically **homogeneous** the high school, the less identity exploration and achievement (Umana-Taylor, 2003). Moreover, even in more ethnically diverse high schools, teens tend to spend more time with their own group, reducing exposure to other ethnicities. This may explain why, for many, college becomes the time of ethnic identity exploration. "[The] transition to college may serve as a consciousness-raising experience that triggers exploration" (Syed & Azmitia, 2009, p. 618).

It is also important to note that those who do achieve ethnic identity may periodically reexamine the issues of ethnicity. This cycling between exploration and achievement is common not only for ethnic identity formation, but in other aspects of identity development (Grotevant, 1987) and is referred to (from Marcia's Theory: Stages of Identity) as **MAMA cycling** or moving back and forth between moratorium and achievement. 48

## Bicultural/Multiracial Identity

Ethnic minorities must wrestle with the question of how, and to what extent, they will identify with the culture of their surroundings, thus society and with the culture of their family. Phinney (2006) suggests that people may handle it in different ways. Some may keep the identities separate, others may combine them in some way, while others may reject some of them.

**Bicultural identity** means individuals sees themselves as part of both the ethnic minority group and the larger society. Those who are **multiracial**, that is whose parents come from two or more ethnic or racial groups, have a more challenging task. In some cases their appearance may be ambiguous. This can lead to others constantly asking them to categorize themselves.

Phinney (2006) notes that the process of identity formation may start earlier and take longer to accomplish in those who are not **monoracial** or a single ethnicity. 49



Figure 15.17.6.3: A bicultural family. (Image (taken from video) by ISSH is licensed under CC BY 3.0)

## Contributors and Attributions

47. Adolescent Development by Jennifer Lansford is licensed under CC BY-NC-SA 4.0

48. Lifespan Development: A Psychological Perspective by Martha Lally and Suzanne Valentine-French is licensed under CC BY-

NC-SA 3.0

49. Lifespan Development: A Psychological Perspective by Martha Lally and Suzanne Valentine-French is licensed under CC BY-NC-SA 3.0

This page titled 15.17.6: Community, Society, and Culture is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Paris, Ricardo, Rymond, and Johnson (College of the Canyons) via source content that was edited to the style and standards of the LibreTexts platform.

- 15.6: Community, Society, and Culture by Paris, Ricardo, Rymond, and Johnson is licensed CC BY 4.0. Original source: https://open.umn.edu/opentextbooks/textbooks/child-growth-and-development.

# 15.17.7: Media- Influences on Teens

Media is another agent of socialization that influences our political views; our tastes in popular culture; our views of women, people of color, and the LGBTQ+ community; and many other beliefs and practices. In an ongoing controversy, the media is often blamed for youth violence and many other of society's ills. The average child sees thousands of acts of violence on television and in the movies before reaching young adulthood. Rap lyrics often seemingly extol ugly violence, including violence against women. Commercials can greatly influence our choice of soda, shoes, and countless other products. The mass media may also reinforce racial and gender stereotypes, including the belief that women are sex objects and suitable targets of male violence. In the General Social Survey (GSS), about 28% of respondents said that they watch four or more hours of television every day, while another 46% watch 2-3 hours daily (see "Average Number of Hours of Television Watched Daily"). The media certainly are an important source of socialization that was unimaginable a half-century ago.

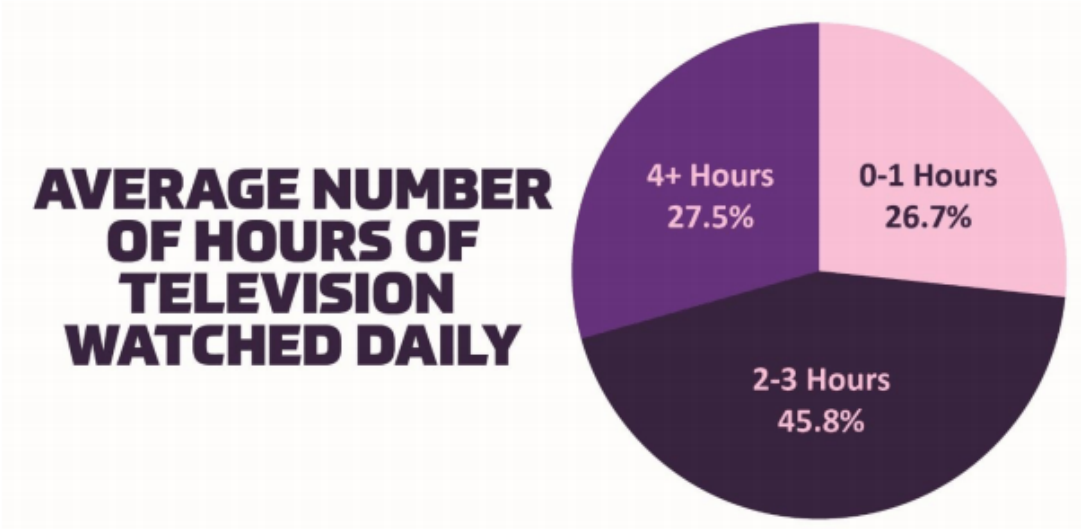



Figure 15.17.7.1: Daily television viewing time. (Data from General Social Survey, 2008. Image by Ian Joslin is licensed under CC BY 4.0)

As the media socializes children, adolescents, and even adults, a key question is the extent to which media violence causes violence in our society. Studies consistently uncover a strong correlation between watching violent television shows and movies and committing violence. However, this does not necessarily mean that watching the violence actually causes violent behavior: perhaps people watch violence because they are already interested in it and perhaps even committing it. Scholars continue to debate the effect of media violence on youth violence. In a free society, this question is especially important, as the belief in this effect has prompted calls for monitoring the media and the banning of certain acts of violence. Civil libertarians argue that such calls smack of censorship that violates the First Amendment to the Constitution, while others argue that they fall within the First Amendment and would make for a safer society. Certainly, the concern and debate over mass media violence will continue for years to come. 52

## Contributors and Attributions

52. Sociology: Brief Edition – Agents of Socialization by Steven E. Barkan is licensed under CC BY-NC-SA 3.0

This page titled 15.17.7: Media- Influences on Teens is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Paris, Ricardo, Rymond, and Johnson (College of the Canyons) via source content that was edited to the style and standards of the LibreTexts platform.

- 15.7: Media- Influences on Teens by Paris, Ricardo, Rymond, and Johnson is licensed CC BY 4.0. Original source: https://open.umn.edu/opentextbooks/textbooks/child-growth-and-development.

# 15.17.8: Development of Sexual Identity

## Dating and Romantic Relationships

Adolescence is the developmental period during which romantic relationships typically first emerge. By the end of adolescence, most American teens have dated others and have had at least one romantic relationship (Dolgin, 2011). However, culture does play a role as Asian Americans and Latinas are less likely to date than other ethnic groups (Connolly, Craig, Goldberg, & Pepler, 2004). Dating serves many purposes for teens, including having fun, companionship, status, socialization, intimacy, sexual experimentation, and partner selection for those in late adolescence (Dolgin, 2011). There are several stages in the dating process, beginning with engaging in mixed-sex group activities in early adolescence (Dolgin, 2011).

*Table* 15.17.8.1*: Romantic Relationships in Adolescence*

| Age | Relationship |
|---|---|
| **Early Adolescence** | Romantic relationships often form in the context of these mixed-sex peer groups (Connolly, Furman, & Konarski, 2000). Interacting in mixed-sex groups is easier for teens as they are among a supportive group of friends, can observe others interacting, and are kept safe from becoming intimate too soon. |
| **Middle Adolescence** | By middle adolescence, teens are engaging in brief, casual dating, or in group dating with other couples (Dolgin, 2011). |
| **Late Adolescence** | In late adolescence, dating involves exclusive, intense relationships that are short-lived or are long-term committed partnerships, either way their importance should not be minimized. Adolescents spend a great deal of time focused on romantic relationships or lack thereof. Their positive and negative emotions are tied to this intense interest more than they are to friendships, family relationships, or school (Furman & Shaffer, 2003). |

Furthermore, romantic relationships are centrally connected to adolescents' emerging sexuality. Parents, policymakers, and researchers have devoted a great deal of attention to adolescents' sexuality, in large part because of concerns related to sexual intercourse, contraception, and preventing teen pregnancies. However, sexuality involves more than this narrow focus, for example, adolescence is often when individuals who are lesbian, gay, bisexual, or transgender come to understand and define what their sexual identity is (Russell, Clarke, & Clary, 2009). Thus, romantic relationships are a domain in which adolescents experiment with new behaviors and identities. 53



Figure 15.17.8.1: Romantic relationships emerge in adolescence. (Image by Djim Loic on Unsplash)

### Violence by Someone You Know

Violence can be committed against someone that the victim knows well, referred to as an intimate, in many ways: an intimate can hit with their fists, slap with an open hand, throw an object, push or shove, or use or threaten to use a weapon. While we can never be certain of the exact number of intimates that are attacked, the U.S. Department of Justice estimates from its National Crime Victimization Survey that almost 600,000 acts of violence (2008 data) are committed annually by one intimate against another intimate. 55

According to a fact sheet from the National Coalition Against Domestic Violence that compiled the results of several studies:

- In 2013, 35% of 10th graders reported that they had been physically or verbally abused and 31% reported having perpetrated such abuse
- In 2014, 10% of teenage students in dating relationships reported being coerced into sexual intercourse in the previous year
- In 2015, 20.9% of female and 13.4% of male high school students reported being physically or sexually assaulted by a dating partner
- But only 33% of teenage dating abuse victims reported having ever told anyone about it (according to a 2005 study) 56

A 2010 report by the CDC shows the larger pictures of intimate partner violence

- 1 in 3 women and 1 in 4 women have been victims of some form of physical violence by an intimate partner in their lifetime
- 1 in 7 women and 1 in 18 men have been stalked by an intimate partner to the point that they were fearful for their safety 57



Figure 15.17.8.2: Almost a quarter of U.S. women have been physically assaulted by a spouse or partner. (Image by Kat J on Unsplash)

This topic is an important one because “domestic violence is prevalent in every community, and affects all people regardless of age, socio-economic status, sexual orientation, gender, race, religion, or nationality. Physical violence is often accompanied by emotionally abusive and controlling behavior as part of a much larger, systematic pattern of dominance and control. Domestic violence can result in physical injury, psychological trauma, and even death. The devastating consequences of domestic violence can cross generations and last a lifetime.” 59

## Sexual Orientation

A person's **sexual orientation** is their emotional and sexual attraction to a particular sex or gender. A continuing pattern of romantic or sexual attraction (or a combination of these) to persons of a given sex or gender. According to the American Psychological Association (APA) (2016), sexual orientation also refers to a person's sense of identity based on those attractions, related behaviors, and membership in a community of others who share those attractions. Some specific orientation is defined in many ways, including **heterosexuality** (attraction to the opposite sex/gender), **same-sex attraction** (previously referred to as **homosexuality**, which is an outdated term that many people find offensive because it was previously classified as a mental illness), **bisexuality**, **polysexuality**, or **pansexuality** (attraction to two, multiple, or all sexes/genders respectively), and **asexuality** (no sexual attraction to any sex/gender).

# Sexual Orientation on a Continuum

Sexuality researcher Alfred Kinsey was among the first to conceptualize sexuality as a continuum rather than a strict dichotomy of gay or straight. To classify this continuum of heterosexuality and homosexuality, Kinsey et al. (1948) created a seven-point rating scale that ranged from exclusively heterosexual to exclusively homosexual. Research done over several decades has supported this idea that sexual orientation ranges along a continuum, from exclusive attraction to the opposite sex/gender to exclusive attraction to the same sex/gender (Carroll, 2016).

A more contemporary look at sexual orientation as infinite variations of attraction. A closer examination of The Genderbread Person v2.0 introduced earlier in the chapter illustrates this:

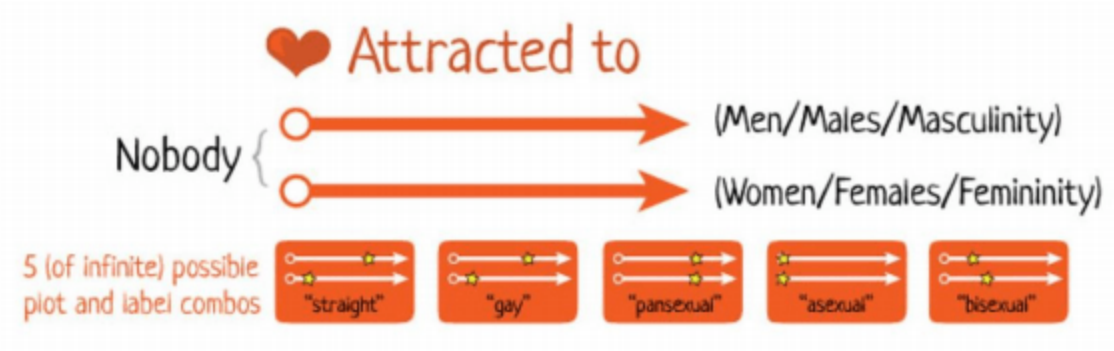



Figure 15.17.8.3: A spectrum of sexual orientation. (Image by it's pronounced METROsexual)

## Development of Sexual Orientation

According to current scientific understanding, individuals are usually aware of their sexual orientation between middle childhood and early adolescence. However, this is not always the case, and some do not become aware of their sexual orientation until much later in life. It is not necessary to participate in sexual activity to be aware of these emotional, romantic, and physical attractions; people can be celibate and still recognize their sexual orientation. Some researchers argue that sexual orientation is not static and inborn, but is instead fluid and changeable throughout the lifespan.



Figure 15.17.8.4: This teen couple is at an LGBTQIA pride event. (Image by Beatrice Murch is licensed under CC BY 2.0)

There is no scientific consensus regarding the exact reasons why an individual holds a particular sexual orientation. Research has examined possible biological, developmental, social, and cultural influences on sexual orientation, but there has been no evidence that links sexual orientation to one factor (APA, 2016). Biological explanations, that include genetics, hormones, and birth order, will be explored further. Excess or deficient exposure to hormones during prenatal development has also been theorized as an explanation for sexual orientation. One-third of females exposed to abnormal amounts of prenatal androgens, a condition called congenital adrenal hyperplasia (CAH), identify as bisexual or lesbian (Cohen-Bendahan, van de Beek, & Berenbaum, 2005). In contrast, too little exposure to prenatal androgens may affect male sexual orientation (Carlson, 2011).

**Sexual Orientation Discrimination**: The United States is **heteronormative**, meaning that society supports heterosexuality as the norm. Consider, for example, that homosexuals are often asked, "When did you know you were gay?" but heterosexuals are rarely asked, "When did you know you were straight?" (Ryle, 2011). Living in a culture that privileges heterosexuality has a significant impact on the ways in which non-heterosexual people are able to develop and express their sexuality.

### Understanding the Acronyms: LGBT, LGBTQ, LGBTQ+

The letters LGBT refer to a group of individuals that identify as Lesbian, Gay, Bisexual, and Transgender. This community includes a diverse group of people from all backgrounds, races, ethnicities, ages, and socioeconomic statuses.

**A Little History** LGB was used to replace the term, “Gay,” in the mid-1980s, but the acronym LGBT became common in the 1990s. However, recently the term has evolved with the preferred acronym to LGBTQ. The added “Q” means Questioning or Queer. The addition of “Q” as a term of questioning includes people that are in the process of exploring their gender or sexual orientation.

Additionally, the term, “Queer,” can be used as an umbrella term, as the community has accepted this word to represent anything outside of the dominant narrative. Queer is not specific to sexual orientation or gender identity and can be used to refer to the community as a whole. While Queer was used as a derogatory term for decades, it was reclaimed by the LGBTQ community in the 1990s with the rise of an organization called Queer Nation. As an activist group out of New York, Queer Nation opposed discrimination of the LGBTQ community and rejected the heteronormative ideals of society.

**What does the plus sign mean?** Recently LGBTQ is also used as **LGBTQ+.** The plus sign, “+” accounts for many additional identifications in the community, including transsexual, two-spirit, intersex, asexual, pansexual, and gender queer. Gender Queer is an umbrella term that can be used for all gender identities not exclusive to masculine or feminine, including gender fluid, agender, bigender, pan gender, gender free, genderless, gender variant, and gender non-conforming. The plus also includes allies or people in support of the LGBTQ community.

While LGBTQ+ or Queer are currently the most common terms, additionally the term, Rainbow Community, may be used. The important takeaway is that the community will **continue to evolve, and the terminology will evolve with it. 62**

Open identification of one's sexual orientation may be hindered by **homophobia**, which encompasses a range of negative attitudes and feelings toward homosexuality or people who are identified or perceived as being lesbian, gay, bisexual, or transgender (LGBT). It can be expressed as antipathy, contempt, prejudice, aversion, or hatred; it may be based on irrational fear and is sometimes related to religious beliefs (Carroll, 2016). Homophobia is observable in critical and hostile behavior, such as discrimination and violence on the basis of sexual orientations that are non- heterosexual. Recognized types of homophobia include **institutionalized homophobia**, such as religious and state-sponsored homophobia, and **internalized homophobia** in which people with same-sex attractions internalize, or believe, society's negative views and/or hatred of themselves.

Gay, lesbian, and bisexual people regularly experience stigma, harassment, discrimination, and violence based on their sexual orientation (Carroll, 2016). Research has shown that gay, lesbian, and bisexual teenagers are at a higher risk of depression and suicide due to exclusion from social groups, rejection from peers and family, and negative media portrayals of homosexuals (Bauermeister et al., 2010). Discrimination can occur in the workplace, in housing, at schools, and in numerous public settings. Much of this discrimination is based on stereotypes and misinformation. Major policies to prevent discrimination based on sexual orientation have only come into effect in the United States in the last few years. 63




Figure 15.17.8.5: This is an example of discrimination that is portrayed in a high school play. These students from Mercer Island High School are playing Westboro Baptist Church protestors in the play The Laramie Project that tells the story of the murder of a gay college student, Matthew Shephard. (Image by Jeff Hitchcock is licensed under CC BY 2.0)

## Adolescent Sexuality

**Human sexuality** refers to people's sexual interest in and attraction to others, as well as their capacity to have erotic experiences and responses. Sexuality may be experienced and expressed in a variety of ways, including thoughts, fantasies, desires, beliefs, attitudes, values, behaviors, practices, roles, and relationships. These may manifest themselves in biological, physical, emotional, social, or spiritual aspects. The biological and physical aspects of sexuality largely concern the human reproductive functions,

including the human sexual-response cycle and the basic biological drive that exists in all species. Emotional aspects of sexuality include bonds between individuals that are expressed through profound feelings or physical manifestations of love, trust, and care. Social aspects deal with the effects of human society on one's sexuality, while spirituality concerns an individual's spiritual connection with others through sexuality. Sexuality also impacts, and is impacted by cultural, political, legal, philosophical, moral, ethical, and religious aspects of life.

**The Human Sexual Response Cycle:** Sexual motivation, often referred to as **libido**, is a person's overall sexual drive or desire for sexual activity. This motivation is determined by biological, psychological, and social factors. In most mammalian species, sex hormones control the ability to engage in sexual behaviors. However, sex hormones do not directly regulate the ability to *have sexual intercourse* or to **copulate** in primates (including humans); rather, they are only one influence on the motivation to engage in sexual behaviors. Social factors, such as work and family also have an impact, as do internal psychological factors like personality and stress. Sex drive may also be affected by hormones, medical conditions, medications, lifestyle stress, pregnancy, and relationship issues.

The **human sexual response cycle** is a model that describes the physiological responses that take place during sexual activity. According to Kinsey, Pomeroy, and Martin (1948), the cycle consists of four phases: excitement, plateau, orgasm, and resolution.

*Table* 15.17.8.2*: Human Sexual Response Cycle*

| Phase | Description |
|---|---|
| **Excitement Phase** | the phase in which the intrinsic (inner) motivation to pursue sex arises |
| **Plateau Phase** | the period of sexual excitement with increased heart rate and circulation that sets the stage for orgasm |
| **Orgasm Phase** | the climax |
| **Resolution Phase** | the un-arousal state before the cycle begins again |

**Societal Views on Sexuality:** Society's views on sexuality are influenced by everything from religion to philosophy, and they have changed throughout history and are continuously evolving. Historically, religion has been the greatest influence on sexual behavior in the United States; however, in more recent years, peers and the media have emerged as two of the strongest influences, particularly among American teens (Potard, Courtois, & Rusch, 2008).

**Media Influences on Sexuality:** Media in the form of television, magazines, movies, music, online, etc., continues to shape what is deemed appropriate or normal sexuality, targeting everything from body image to products meant to enhance sex appeal. Media serves to perpetuate a number of social scripts about sexual relationships and the sexual roles of men and women, many of which have been shown to have both empowering and problematic effects on people's (especially women's) developing sexual identities and sexual attitudes.

**Cultural Differences with Sexuality:** In the West, premarital sex is normative by the late teens, more than a decade before most people enter marriage. In the United States and Canada, and in northern and Eastern Europe, cohabitation is also normative; most people have at least one cohabiting partnership before marriage. In southern Europe, cohabiting is still taboo, but premarital sex is tolerated in emerging adulthood. In contrast, both premarital sex and cohabitation remain rare and forbidden throughout Asia. Even dating is discouraged until the late twenties, when it would be a prelude to a serious relationship leading to marriage. In cross-cultural comparisons, about three fourths of emerging adults in the United States and Europe report having had premarital sexual relations by age 20, versus less than one fifth in Japan and South Korea (Hatfield & Rapson, 2006). 65

## Contributors and Attributions

53. Lifespan Development: A Psychological Perspective by Martha Lally and Suzanne Valentine-French is licensed under CC BY-NC-SA 3.0; Lifespan Development – Module 7: Adolescence by Lumen Learning is licensed under CC BY 4.0

55. Lifespan Development: A Psychological Perspective by Martha Lally and Suzanne Valentine-French is licensed under CC BY-NC-SA 3.0

Lifespan Development – Module 7: Adolescence by Lumen Learning is licensed under CC BY 4.0

56. Dating Abuse and Teen Violence (n.d.). Retrieved from https://www.speakcdn.com/assets/2497/dating_abuse_and_teen_violence_ncadv.pdf

57. Who is Doing What to Whom? Determining the Core Aggressor in Relationships Where Domestic Violence Exists. (n.d.). Retrieved from https://www.speakcdn.com/assets/2497/who_is_doing_what_to_whom.pdf

59. National Child Traumatic Stress Network. (n.d.). *National Domestic Violence Awareness Month*. Retrieved from https://www.nctsn.org/resources/public-awareness/national-domestic-violence-awareness-month

62. Understanding the Acronyms: LGBT, LGBTQ, LGBTQ+. (2019). Retrieved from https://www.horizon-health.org/blog/2019/01/understanding-the-acronym-lgbtq/.

63. Lifespan Development: A Psychological Perspective by Martha Lally and Suzanne Valentine-French is licensed under CC BY-NC-SA 3.0

Boundless Psychology - Gender and Sexuality references Curation and Revision by Boundless Psychology, which is licensed under CC BY-SA 4.0

65. Lifespan Development: A Psychological Perspective by Martha Lally and Suzanne Valentine-French is licensed under CC BY-NC-SA 3.0

This page titled 15.17.8: Development of Sexual Identity is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Paris, Ricardo, Rymond, and Johnson (College of the Canyons) via source content that was edited to the style and standards of the LibreTexts platform.

- 15.8: Development of Sexual Identity by Paris, Ricardo, Rymond, and Johnson is licensed CC BY 4.0. Original source: https://open.umn.edu/opentextbooks/textbooks/child-growth-and-development.

# 15.17.9: Antisocial Behavior in Adolescence

## Bullies, Victims, and the Bystander

**Bullying** is defined as unwanted, aggressive behavior among school aged children that involves a real or perceived power imbalance. Further, the aggressive behavior happens more than once or has the potential to be repeated. There are different types of bullying. They are detailed in the table below.

*Table* 15.17.9.1*: Types of Bullying*

| Type of Bullying | Description |
|---|---|
| **Verbal Bullying** | Includes saying or writing mean things, teasing, name calling, taunting, threatening, or making inappropriate sexual comments. |
| **Social bullying (also referred to as relational bullying)** | Includes spreading rumors, purposefully excluding someone from a group, or embarrassing someone on purpose. |
| **Physical Bullying** | Includes hurting a person's body or possessions. |
| **Cyberbullying** | Involves electronic technology. Examples of cyberbullying include sending mean text messages or emails, creating fake profiles, and posting embarrassing pictures, videos or rumors on social networking sites. |




Figure 15.17.9.1: Cyberbullying. (Image by Vivianlee2005 is licensed under CC BY-SA 3.0)

## The Bystander Effect

The discussion of bullying highlights the problem of witnesses not intervening to help a victim. Researchers Latané and Darley (1968) described a phenomenon called the **bystander effect**. The bystander effect is a phenomenon in which a witness or bystander does not volunteer to help a victim or person in distress. Instead, they just watch what is happening. Social psychologists hold that we make these decisions based on the social situation, not our own personality variables. Why do you think bystanders don't get help? What are the benefits to helping? What are the risks? It is very likely you listed more costs than benefits to helping. In many situations, bystanders likely feared for their own lives—if they went to help, the attacker might harm them. However, how difficult would it be to make a phone call to the police? Social psychologists claim that diffusion of responsibility is the likely explanation. Diffusion of responsibility is the tendency for no one in a group to help because the responsibility to help is spread throughout the group (Bandura, 1999). Have you ever passed an accident on the freeway and assumed that a victim or certainly another motorist has already reported the accident? In general, the greater the number of bystanders, the less likely any one person will help. 67

# Contributors and Attributions

67. Psychology – 12.6 Aggression by OpenStax is licensed under CC BY 4.0

This page titled 15.17.9: Antisocial Behavior in Adolescence is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Paris, Ricardo, Rymond, and Johnson (College of the Canyons) via source content that was edited to the style and standards of the LibreTexts platform.

- 15.9: Antisocial Behavior in Adolescence by Paris, Ricardo, Rymond, and Johnson is licensed CC BY 4.0. Original source: https://open.umn.edu/opentextbooks/textbooks/child-growth-and-development.

# 15.17.10: Antisocial Behaviors, Violence, and Child Abuse

## Antisocial Behaviors

According to the American Academy of Psychiatry (2018),

> Most kids will act up or become disruptive or defiant sometimes. Disruptive and conduct disorders, however, involve much more severe and longer-lasting behaviors than typical, short-lived episodes. Disruptive, impulse-control and conduct disorders refer to a group of disorders that include oppositional defiant disorder, conduct disorder, intermittent explosive disorder, kleptomania and pyromania. These disorders can cause people to behave angrily or aggressively toward people or property. They may have difficulty controlling their emotions and behavior and may break rules or laws. An estimated 6 percent of children are affected by oppositional defiant disorder or conduct disorder. 68

**Oppositional Defiant Disorder (ODD):** There is a recurrent pattern of negative, defiant, disobedient, and hostile behavior toward authority figures. It is important to remember that this is toward authority figures and not their peers. This occurs outside of normal developmental levels and leads to impairment in functioning (Lack, 2010). 69

**Conduct Disorder (CD):** Children with Conduct Disorder (CD) show acts of aggression towards others and animals. Children with conduct disorder (CD) usually show little to no compassion or concern for others or their feelings. Also, concern for the well-being of others is at a minimum. Children also perceive the actions and intentions of others as more harmful and threatening than they actually are and respond with what they feel is reasonable and justified aggression. They may lack feelings of guilt or remorse. Since these individuals learn that expressing guilt or remorse may help in avoiding or lessening punishment, it may be difficult to evaluate when their guilt or remorse is genuine. Individuals will also try and place blame on others for the wrong doings that they had committed.



Figure 15.17.10.1: Children with conduct disorders show acts of aggression towards others and animals. (Image by AnnaKovalchuck on Pixabay)

Children with **conduct disorders** (CD) tend to have lower levels of self-esteem. Children diagnosed with conduct disorders (CD) are typically characterized as being easily irritable and often reckless, as well as having many temper tantrums despite their projected “tough” image portrayed to society. Conduct Disorder (CD) often accompanies early onset of sexual behavior, drinking, smoking, use of illegal drugs, and reckless acts. Illegal drug use may increase the risk of the disorder persisting. The disorder may lead to school suspension or expulsion, problems at work, legal difficulties, STD’s, unplanned pregnancy, and injury from fights or accidents. Suicidal ideation and attempts occur at a higher rate than expected. 71

## Contributors and Attributions

68. What Are Disruptive, Impulse-Control and Conduct Disorders? (n.d.). Retrieved from https://www.psychiatry.org/patients-families/disruptive-impulse-control-and-conduct-disorders/what-are-disruptive-impulse-control-and-conduct-disorders.

69. Abnormal Psychology – Child Psychology references Abnormal Psychology: An e-text! by Caleb Lack, which is licensed under CC BY-NC-SA 4.0

71. Abnormal Psychology – Child Psychology references Abnormal Psychology: An e-text! by Caleb Lack, which is licensed under CC BY-NC-SA 4.0

This page titled 15.17.10: Antisocial Behaviors, Violence, and Child Abuse is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Paris, Ricardo, Rymond, and Johnson (College of the Canyons) via source content that was edited to the style and standards of the LibreTexts platform.

- 15.10: Antisocial Behaviors, Violence, and Child Abuse by Paris, Ricardo, Rymond, and Johnson is licensed CC BY 4.0. Original source: https://open.umn.edu/opentextbooks/textbooks/child-growth-and-development.

# 15.17.11: Violence and Abuse

Violence and abuse are among the most disconcerting of the challenges that today's families face. Abuse can occur between spouses, between parent and child, as well as between other family members. The frequency of violence among families is difficult to determine because many cases of spousal abuse and child abuse go unreported. In any case, studies have shown that abuse (reported or not) has a major impact on families and society as a whole. 72

## Adolescent Child Abuse

Children and teens are among the most helpless victims of abuse. In 2010, there were more than 3.3 million reports of child abuse involving an estimated 5.9 million children (Child Help 2011). Three-fifths of child abuse reports are made by professionals, including teachers, law enforcement personnel, and social services staff. The rest are made by anonymous sources, other relatives, parents, friends, and neighbors. Child abuse may come in several forms, the most common is neglect (78.3 %), followed by physical abuse (10.8 %), sexual abuse (7.6 %), psychological maltreatment (7.6 %), and medical neglect (2.4 %) (Child Help 2011). Some children suffer from a combination of these forms of abuse. The majority (81.2 %) of perpetrators are parents; 6.2 percent are other relatives. 73




Figure 15.17.11.1: Children and teens are among the most helpless victims of abuse. (Image by Bruce Tuten is licensed under CC BY 2.0)

### Does Corporal Punishment Constitute Child Abuse?

Physical abuse in children may come in the form of beating, kicking, throwing, choking, hitting with objects, burning, or other methods. Injury inflicted by such behavior is considered abuse even if the parent or caregiver did not intend to harm the child. Other types of physical contact that are characterized as discipline (spanking, for example) are not considered abuse as long as no injury results (Child Welfare Information Gateway 2008).

This issue is rather controversial among modern-day people in the United States. While some parents feel that physical discipline, or corporal punishment, is an effective way to respond to bad behavior, others feel that it is a form of abuse. According to a poll conducted by ABC News, 65 percent of respondents approve of spanking and 50 percent said that they sometimes spank their child. But in the U.S., the majority of mental health professionals, as well as other professionals such as physicians and child welfare personnel, do not support the use of physical punishment.

Tendency toward physical punishment may be affected by culture and education. Those who live in the South are more likely than those who live in other regions to spank their child. Those who do not have a college education are also more likely to spank their child (Crandall 2011). Currently, 23 states officially allow spanking in the school system; however, many parents may object and school officials must follow a set of clear guidelines when administering this type of punishment (Crandall 2011).

> Decades of research have yielded more than 500 studies examining the impact of physical punishment on children (Gershoff & Grogan-Kaylor, 2016). Within the past 15 years, several meta-analyses have attempted to synthesize this body of research. In a highly publicized meta-analysis, Gershoff (2002) concluded that physical punishment is not only ineffective, but also harmful. It may lead to aggression by the victim, particularly in those who are spanked at a young age (Berlin 2009).
>
> Debates about parental use of physical punishment have been ongoing in the USA for decades. Calls to “move beyond” the research, or to “end the debate,” have become commonplace (e.g., Durrant & Ensom, 2017; MacMillan & Mikton, 2017). Three questions, it seems, sit at the center of these debates. Is physical punishment of children a Human Rights Issue? Is physical punishment effective? Is physical punishment harmful? 75

## Contributors and Attributions

72. Lifespan Development – Module 7: Adolescence by Lumen Learning is licensed under CC BY 4.0

73. Introduction to Sociology 2e by OpenStax is licensed under CC BY 4.0

75. Challenges Families Face by OpenStax is licensed under CC BY 4.0

Physical punishment of children by US parents: moving beyond debate to promote children’s health and well-being by Cindy Miller Perrin and Robin Perrin is licensed under CC BY 4.0

This page titled 15.17.11: Violence and Abuse is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Paris, Ricardo, Rymond, and Johnson (College of the Canyons) via source content that was edited to the style and standards of the LibreTexts platform.

- 15.11: Violence and Abuse by Paris, Ricardo, Rymond, and Johnson is licensed CC BY 4.0. Original source: https://open.umn.edu/opentextbooks/textbooks/child-growth-and-development.

# 15.17.12: Emerging Adulthood - The Bridge Between Adolescence and Adulthood

The next stage of development is **emerging adulthood** and is characterized as an in-between time where identity exploration is focused on work and love, which occurs from approximately 18 years of age to the mid to late 20s.

When does a person become an adult? There are many ways to answer this question. In the United States, you are legally considered an adult at 18 years old, but other definitions of adulthood vary widely; in sociology, for example, a person may be considered an adult when they become self-supporting, choose a career, get married, or start a family. The ages at which we achieve these milestones vary from person to person as well as from culture to culture. For example, 50 years ago, a young adult with a high school diploma could immediately enter the workforce and climb the corporate ladder. That is no longer the case, a Bachelor's and even graduate degrees are required more and more often—even for entry-level jobs (Arnett, 2000). In addition, many students are taking longer (five or six years) to complete a college degree as a result of working and going to school at the same time. After graduation, many young adults return to the family home because they have difficulty finding a job.



Figure 15.17.12.1: Emerging adulthood. (Image by City Year is licensed under CC BY-NC-ND 2.0)

This is a relatively newly defined period of lifespan development, Jeffrey Arnett (2000) explains that emerging adulthood is neither adolescence nor is it young adulthood. Individuals in this age period have left behind the relative dependency of childhood and adolescence, but have not yet taken on the responsibilities of adulthood. "Emerging adulthood is a time of life when many different directions remain possible when little about the future is decided for certain when the scope of independent exploration of life's possibilities is greater for most people than it will be at any other period of the life course" (Arnett, 2000, p. 469). 77

## Contributors and Attributions

77. Psychology – 9.3: Stages of Development by OpenStax is licensed under CC BY 4.0 ; Lifespan Development: A Psychological Perspective by Martha Lally and Suzanne Valentine-French is licensed under CC BY-NC-SA 3.0

This page titled 15.17.12: Emerging Adulthood - The Bridge Between Adolescence and Adulthood is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Paris, Ricardo, Rymond, and Johnson (College of the Canyons) via source content that was edited to the style and standards of the LibreTexts platform.

- 15.12: Emerging Adulthood - The Bridge Between Adolescence and Adulthood by Paris, Ricardo, Rymond, and Johnson is licensed CC BY 4.0. Original source: https://open.umn.edu/opentextbooks/textbooks/child-growth-and-development.

# 15.17.S: Summary

In this chapter we finished our exploration of childhood and adolescence having looked at:

- Theories from Erikson and Marcia
- Self -concept and identity
- Gender identity
- Ethnic identity
- Sexuality
- Parent and adolescent relationships
- Peers and peer groups
- Antisocial behaviors
- Emerging adulthood

This page titled 15.17.S: Summary is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Paris, Ricardo, Rymond, and Johnson (College of the Canyons) via source content that was edited to the style and standards of the LibreTexts platform.

- 15.S: Summary by Paris, Ricardo, Rymond, and Johnson is licensed CC BY 4.0. Original source: https://open.umn.edu/opentextbooks/textbooks/child-growth-and-development.

# 15.18: Education

In early adolescence, the transition from elementary school to middle school can be difficult for many students, both academically and socially. Crosnoe and Benner (2015) found that some students became disengaged and alienated during this transition which resulted in negative long-term consequences in academic performance and mental health. This may be because middle school teachers are seen as less supportive than elementary school teachers (Brass et al., 2019). Similarly, the transition to high school can be difficult. For example, high schools are larger, more bureaucratic, less personal, and there are less opportunities for teachers to get to know their students (Eccles & Roeser, 2016).

## Peers:

Certainly, the beliefs and expectations about academic success supported by an adolescent's family play a significant role in the student's achievement and school engagement. However, research has also focused on the importance of peers in an adolescent's school experience. Specifically, having friends who are high-achieving, academically motivated and engaged promotes motivation and engagement in the adolescent, while those whose friends are unmotivated, disengaged, and low achieving promotes the same feelings (Shin & Ryan, 2014; Vaillancourt et al., 2019).

## Gender:

Crosnoe and Benner (2015) found that female students earn better grades, try harder, and are more intrinsically motivated than male students. Further, Duchesne et al. (2019) described how female students were more oriented toward skill mastery, used a variety of learning strategies, and persevered more than males. However, more females exhibit worries and anxiety about school, including feeling that they must please teachers and parents. These worries can heighten their effort but lead to fears of disappointing others. In contrast, males are more confident and do not value adult feedback regarding their academic performance (Brass et al., 2019). There is a subset of female students who identify with sexualized gender stereotypes (SGS), however, and they tend to underperform academically. These female students endorse the beliefs that "girls" should be sexy and not smart. Nelson and Brown (2019) found that female students who support SGS reported less desire to master skills and concepts, were more skeptical of the usefulness of an education, and downplayed their intelligence.

## Life of a high school student:

On average, high school teens spend approximately 7 hours each weekday and 1.1 hours each day on the weekend on educational activities. This includes attending classes, participating in extracurricular activities (excluding sports), and doing homework (Office of Adolescent Health, 2018). High school males and females spend about the same amount of time in class, doing homework, eating and drinking, and working. However, they do spend their time outside of these activities in different ways.

- **High school males.** On average, high school males spend about one more hour per day on media and communications activities than females on both weekdays (2.9 vs. 1.8 hours) and weekend days (4.8 vs. 3.8 hours). They also spend more time playing sports on both weekdays (0.9 vs. 0.5 hours) and weekend days (1.2 vs. 0.5 hours). On weekdays, high school males get an hour more of sleep than females (9.2 vs. 8.2 hours, on average).
- **High school females.** On an average weekday, high school females spend more time than boys on both leisure activities (1.7 vs. 1.1 hours) and religious activities (0.1 vs. 0.0 hours). High school females also spend more time on grooming on both weekdays and weekend days (1.1 vs. 0.7 hours, on average for both weekdays and weekend days).

## High School Dropouts:

The **status dropout rate** *refers to the percentage of 16 to 24 year-olds who are not enrolled in school and do not have high school credentials* (either a diploma or an equivalency credential such as a General Educational Development [GED] certificate). The dropout rate is based on sample surveys of the civilian, noninstitutionalized population, which excludes persons in prisons, persons in the military, and other persons not living in households. The dropout rate among high school students has declined from a rate of 12% in 1990 , to 6.1% in 2016 (U.S. Department of Education, 2018). The rate is lower for Whites than for Blacks, and the rates for both Whites and Blacks are lower than the rate for Hispanics. However, the gap between Whites, Blacks, and

Hispanics have narrowed (see Figure 15.18.1).

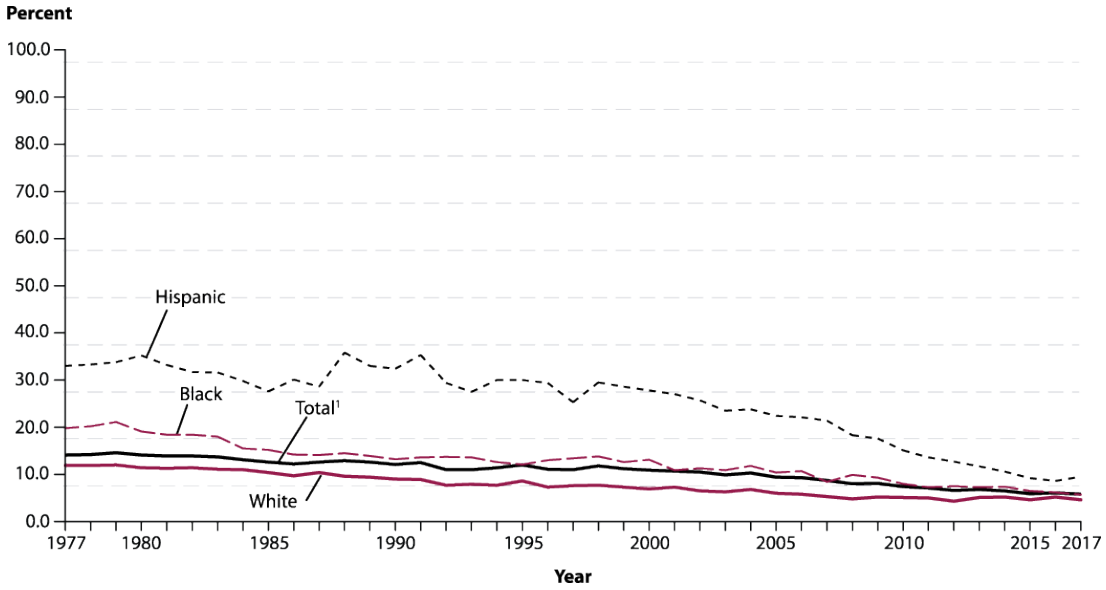



Figure 15.18.1. Percentage of high school dropouts among persons 16 through 24 years old (status dropout rate), by race/ethnicity: October 1977 through 2017. Image source.

The dropout rate for males in 1990 was 12%, where it stayed until 2000. Thereafter the rate has dropped to 7.1% in 2016. The dropout rate for females in 1990 was 12%, and it has dropped to 5.1% in 2016 (U.S. Department of Education, 2018).

## Reasons for Dropping Out of School:

Garcia et al. (2018) reviewed the research on why students dropped out of school and identified several major obstacles to school completion. These included:

- Residing in foster care or being part of the juvenile justice system. In fact, being confined in a juvenile detention facility practically guaranteed that a student would not complete school.
- Having a physical or mental health condition, or the need for special educational services, adversely affected school completion.
- Being maltreated due to abuse or neglect and/or being homeless also contributed to dropping out of school.
- Adolescent-specific factors, including race, ethnicity and age, as well as family-specific characteristics, such as poverty, single parenting, large family size, and stressful transitions, all contributed to an increased likelihood of dropping-out of school.
- Community factors, such as unsafe neighborhoods, gang activity, and a lack of social services increased the number of school dropouts.

## School-Based Preparatory Experiences

According to the U. S. Department of Labor (2019), to perform at optimal levels in all education settings, all youth need to participate in educational programs grounded in standards, clear performance expectations and graduation exit options based upon meaningful, accurate, and relevant indicators of student learning and skills. These should include:

- Academic programs that are based on clear state standards
- Career and technical education programs that are based on professional and industry standards
- Curricular and program options based on universal design of school, work, and community-based learning experiences
- Learning environments that are small and safe, including extra supports such as tutoring, as necessary
- Supports from and by highly qualified staff
- Access to an assessment system that includes multiple measures
- Graduation standards that include options.

This page titled 15.18: Education is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Martha Lally & Suzanne Valentine-French via source content that was edited to the style and standards of the LibreTexts platform.

- 6.7: Education by Martha Lally & Suzanne Valentine-French is licensed CC BY-NC-SA 4.0. Original source: http://dept.clcillinois.edu/psy/LifespanDevelopment.pdf.

# 15.18.1: School During Adolescence

**Learning Outcomes**

- Describe the role of secondary education in adolescent development

## Secondary Education



Figure 1. The transition to middle school typically includes more freedom and responsibility along with more social pressures.

Adolescents spend more waking time in school than in any other context (Eccles & Roeser, 2011). **Secondary education** is traditionally grades 7-12 and denotes the school years after elementary school (known as primary education) and before college or university (known as tertiary education). Adolescents who complete primary education (learning to read and write) and continue on through secondary and tertiary education tend to also have better health, wealth, and family life (Rieff, 1998).[1] Because the average age of puberty has declined over the years, **middle schools** were created for grades 5 or 6 through 8 as a way to distinguish between early adolescence and late adolescence, especially because these adolescents different biologically, cognitively and emotionally and definitely have different needs.

Transition to middle school is stressful and the transition is often complex. When students transition from elementary to middle school, many students are undergoing physical, intellectual, social, emotional, and moral changes (Parker, 2013). [2] Research suggests that early adolescence is an especially sensitive developmental period (McGill et al., 2012).[3] Some students mature faster than others. Students who are developmentally behind typically experience more stress than their counterparts (U.S. Department of Education, 2008).[4] Consequently, they may earn lower grades and display decreased academic motivation, which may increase the rate of dropping out of school (U.S. Department of Education, 2008). For many middle school students, academic achievement slows down and behavioral problems can increase.

## Specific Middle School Issues

Regardless of a student's gender or ethnicity, middle school is challenging. Although young adolescents seem to desire independence, they also need protection, security, and structure (Brighton, 2007).[5] Baly, Cornell, & Lovegrove (2014) found that bullying increases in middle school, particularly in the first year.[6] Additionally, unlike elementary school, concerns arise regarding procedural changes. Just when egocentrism is at it's height, students are worried about being thrown into an environment of independence and responsibility. They are expected to get to and from classes on their own, manage time wisely,

organize and keep up with materials for multiple classes, be responsible for all classwork and homework from multiple teachers, and at the same time develop and maintain a social life (Meece & Eccles, 2010).[7] Students are trying to build new friendships and maintain ones they already have. As noted throughout this module, peer acceptance is particularly important.

Another aspect to consider is technology. Typically, adolescents get their first cell phone at about age 11 and, simultaneously, they are also expected to research items on the Internet. Social media use and texting increase dramatically and the research finds both harm and benefits to this use (Coyne et al., 2018).[8]

## Teens, Technology, and Bullying

Bullying is unwanted, aggressive behavior among school aged children that involves a real or perceived power imbalance. The behavior is repeated, or has the potential to be repeated, over time. Both kids who are bullied and who bully others may have serious, lasting problems. It is a prevalent problem during the middle and high school years, exacerbated by access to technology and the means to easily spread damaging information online. These are some key statistics about bullying from StopBullying.gov:

- **Been Bullied**
  - The 2017 School Crime Supplement (National Center for Education Statistics and Bureau of Justice) indicates that, nationwide, about 20% of students ages 12-18 experienced bullying.
  - The 2017 Youth Risk Behavior Surveillance System (Centers for Disease Control and Prevention) indicates that, nationwide, 19% of students in grades 9–12 report being bullied on school property in the 12 months preceding the survey.
- **Bullied Others**
  - Approximately 30% of young people admit to bullying others in surveys.
- **Seen Bullying**
  - 70.6% of young people say they have seen bullying in their schools.
  - 70.4% of school staff have seen bullying. 62% witnessed bullying two or more times in the last month and 41% witness bullying once a week or more.
  - When bystanders intervene, bullying stops within 10 seconds 57% of the time.

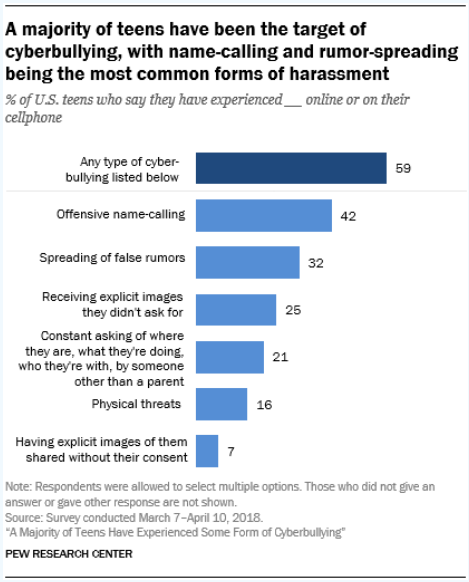



Figure 1. Cyberbullying comes in many forms.

- **Been Cyberbullied**
  - The 2017 School Crime Supplement (National Center for Education Statistics and Bureau of Justice) indicates that, among students ages 12-18 who reported being bullied at school during the school year, 15% were bullied online or by

text.
- The 2017 Youth Risk Behavior Surveillance System (Centers for Disease Control and Prevention) indicates that an estimated 14.9% of high school students were electronically bullied in the 12 months prior to the survey.
- Pew Center Research reports a much higher number, stating that 59% of teens have experienced cyberbullying.

- **How Often Bullied**
  - In one large study, about 49% of children in grades 4–12 reported being bullied by other students at school at least once during the past month, whereas 30.8% reported bullying others during that time.
  - Defining "frequent" involvement in bullying as occurring two or more times within the past month, 40.6% of students reported some type of frequent involvement in bullying, with 23.2% being the youth frequently bullied, 8.0% being the youth who frequently bullied others, and 9.4% playing both roles frequently.

- **Types of Bullying**
  - The most common types of bullying are verbal and social. Physical bullying happens less often. Cyberbullying happens the least frequently.
  - According to one large study, the following percentages of middle schools students had experienced these various types of bullying: name calling (44.2 %); teasing (43.3 %); spreading rumors or lies (36.3%); pushing or shoving (32.4%); hitting, slapping, or kicking (29.2%); leaving out (28.5%); threatening (27.4%); stealing belongings (27.3%); sexual comments or gestures (23.7%); e-mail or blogging (9.9%).

- **Where Bullying Occurs**
  - Most bullying takes place in school, outside on school grounds, and on the school bus. Bullying also happens wherever kids gather in the community. And of course, cyberbullying occurs on cell phones and online.
  - According to one large study, the following percentages of middle schools students had experienced bullying in these various places at school: classroom (29.3%); hallway or lockers (29.0%); cafeteria (23.4%); gym or PE class (19.5%); bathroom (12.2%); playground or recess (6.2%).[9]

Many organizations, schools, teachers, parents, and lawmakers are working to address the issue of bullying. One example is that of ReThink, a technology designed by teenager Trisha Prabhu to recognize bullying online and encourage posters to reconsider their behavior (watch Trisha Prabhu's TED talk)

## High School

As adolescents enter into high school, their continued cognitive development allows them to think abstractly, analytically, hypothetically, and logically, which is all formal operational thought. High school emphasizes formal thinking in attempt to prepare graduates for college where analysis is required. Overall, high school graduation rates in the United States have increased steadily over the past decade, reaching 83.2 percent in 2016 after four years in high school (Gewertz, 2017).[10] Additionally, many students in the United States do attend college. Unfortunately, though, about half of those who go to college leave without a degree (Kena et al., 2016).[11] Those that do earn a degree, however, do make more money and have an easier time finding employment. The key here is understanding adolescent development and supporting teens in making decisions about college or alternatives to college after high school.

**Link to learning**

What do you think, is college necessary? Is it worth the investment? Read the article "Is College Necessary?" from Psychology Today geared towards parents who can help their teenager decide if college is right for them.

## Academic Achievement

Academic achievement during adolescence is predicted by interpersonal (e.g., parental engagement in adolescents' education), intrapersonal (e.g., intrinsic motivation), and institutional (e.g., school quality) factors. Academic achievement is important in its own right as a marker of positive adjustment during adolescence but also because academic achievement sets the stage for

future educational and occupational opportunities. The most serious consequence of school failure, particularly dropping out of school, is the high risk of unemployment or underemployment in adulthood that follows. High achievement can set the stage for college or future vocational training and opportunities.

**Try It**

https://assessments.lumenlearning.co...essments/16615

**glossary**

*middle school available at the end of this section.*

*secondary education available at the end of this section.*

---


1. Rieff, M.I. (1998). Adolescent school failure: Failure to thrive in adolescence. Pediatrics in Review, 19 (6). mailto:/Sandboxes/lhrli@ucdavis.edu
2. Parker, A. K. (2013). Understanding and supporting young adolescents during the transition into middle school. In P. G. Andrews (Ed.), Research to guide practice in middle grades education (pp. 495-510). Westerville, OH: Association for Middle Level Education. mailto:/Sandboxes/lhrli@ucdavis.edu
3. McGill, R.K., Hughes, D., Alicea, S., & Way, N. (2012). Academic adjustment across middle school: The role of public regard and parenting. Developmental Psychology, 48 (4), 1003-1008. mailto:/Sandboxes/lhrli@ucdavis.edu
4. U.S. Department of Education Mentoring Resource Center (2008). Making the transition to middle school: How mentoring can help. MRC: Mentoring Resource Center Fact Sheet, No. 24. Retrieved from http://fbmentorcenter.squarespace.com/storage/MiddleSchoolTransition.pdfmailto:/Sandboxes/lhrli@ucdavis.edu
5. Brighton, K. L. (2007). Coming of age: The education and development of young adolescents. Westerville, OH: National Middle School Association. mailto:/Sandboxes/lhrli@ucdavis.edu
6. Baly, M.W., Cornell, D.G., & Lovegrove, P. (2014). A longitudinal investigation of self and peer reports of bullying victimization across middle school. Psychology in the Schools, 51 (3), 217-240. mailto:/Sandboxes/lhrli@ucdavis.edu
7. Meece, J.L. & Eccles, J.S. (Eds.). (2010). Handbook on research on schools, schooling, and human development. New York, NY: Routledge. mailto:/Sandboxes/lhrli@ucdavis.edu
8. Coyne, S.M., Padilla-Walker, L.M., & Holmgren, H.G. (2018). A six-year longitudinal study of texting trajectories during adolescence. Child Development, 89 (1), 58-65. mailto:/Sandboxes/lhrli@ucdavis.edu
9. Stopbullying.gov. "Facts About Bullying". Retrieved from https://www.stopbullying.gov/media/facts/index.html#ftn3mailto:/Sandboxes/lhrli@ucdavis.edu
10. Gewertz, C. (2017, May 3). Is the high school graduation rate inflated? No, study says (Web log post). Education Week. mailto:/Sandboxes/lhrli@ucdavis.edu
11. Kena, G., Hussar, W., McFarland, J., de Brey, C., Musu-Gillette, L., Wang, X., & Dunlop Velez, E. (2016). The condition of education 2016, Washington, DC: U.S. Department of Education, National Center for Education Statistics. mailto:/Sandboxes/lhrli@ucdavis.edu


## Contributors and Attributions


CC licensed content, Original

- Modification, adaptation, and original content. **Authored by**: Tera Jones for Lumen Learning. **Provided by**: Lumen Learning. **License**: *CC BY-NC-SA: Attribution-NonCommercial-ShareAlike*

CC licensed content, Shared previously

- Adolescent Development . **Authored by**: Jennifer Lansford. **Located at**: http://nobaproject.com/modules/adolescent-development?r=LDE2MjU3. **Project**: The Noba Project. **License**: *CC BY-NC-SA: Attribution-NonCommercial-ShareAlike*
- Middle School lunch. **Authored by**: woodleywonderworks. **Provided by**: Flickr. **Located at**: https://www.flickr.com/photos/wwworks/22263040962. **License**: *CC BY: Attribution*

All rights reserved content

- A Majority of Teens Have Experienced Some Form of Cyberbullyingu2014graphic. **Provided by**: Pew Research Center. **Located at**: https://www.pewinternet.org/2018/09/27/a-majority-of-teens-have-experienced-some-form-of-cyberbullying/. **License**: *All Rights Reserved*

Public domain content

- Statistics on Bullying. **Provided by**: StopBullying.org. **Located at**: https://www.stopbullying.gov/media/facts/index.html. **License**: *Public Domain: No Known Copyright*

## Answers

**glossary**

a school for children in the grades between elementary school and high school. Middle school usually begins with grade 6 and ends with grade 8

**glossary**

the period after primary education (elementary or grade school) and before tertiary education (college). It usually occurs from about ages 12 to 18, although there is some variation by school and by nation

This page titled 15.18.1: School During Adolescence is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 7.8: School During Adolescence by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.19: Identity Formation

**Learning Outcomes**

- Describe changes in self-concept and identity development during adolescence
- Explain Marcia's four identity statuses

## Psychosocial Development

### Identity Development



Figure 1. Adolescents simultaneously struggle to fit in with their peers and to form their own unique identities.

Identity development is a stage in the adolescent life cycle. For most, the search for identity begins in the adolescent years. During these years, adolescents are more open to 'trying on' different behaviors and appearances to discover who they are. In an attempt to find their identity and discover who they are, adolescents are likely to cycle through a number of identities to find one that suits them best. Developing and maintaining identity (in adolescent years) is a difficult task due to multiple factors such as family life, environment, and social status. Empirical studies suggest that this process might be more accurately described as identity development, rather than formation, but confirms a normative process of change in both content and structure of one's thoughts about the self.

### Self-Concept

Two main aspects of identity development are self-concept and self-esteem. The idea of **self-concept** is known as the ability of a person to have opinions and beliefs that are defined confidently, consistently and with stability. Early in adolescence, cognitive developments result in greater self-awareness, greater awareness of others and their thoughts and judgments, the ability to think about abstract, future possibilities, and the ability to consider multiple possibilities at once. As a result, adolescents experience a significant shift from the simple, concrete, and global self-descriptions typical of young children; as children they defined themselves by physical traits whereas adolescents define themselves based on their values, thoughts, and opinions.

Adolescents can conceptualize multiple "possible selves" that they could become and long-term possibilities and consequences of their choices. Exploring these possibilities may result in abrupt changes in self-presentation as the adolescent chooses or rejects qualities and behaviors, trying to guide the actual self toward the ideal self (who the adolescent wishes to be) and away from the feared self (who the adolescent does not want to be). For many, these distinctions are uncomfortable, but they also

appear to motivate achievement through behavior consistent with the ideal and distinct from the feared possible selves.

Further distinctions in self-concept, called "differentiation," occur as the adolescent recognizes the contextual influences on their own behavior and the perceptions of others, and begin to qualify their traits when asked to describe themselves. Differentiation appears fully developed by mid-adolescence. Peaking in the 7th-9th grades, the personality traits adolescents use to describe themselves refer to specific contexts, and therefore may contradict one another. The recognition of inconsistent content in the self-concept is a common source of distress in these years, but this distress may benefit adolescents by encouraging structural development.

## Self-Esteem

Another aspect of identity formation is self-esteem. **Self-esteem** is defined as one's thoughts and feelings about one's self-concept and identity. Most theories on self-esteem state that there is a grand desire, across all genders and ages, to maintain, protect and enhance their self-esteem. Contrary to popular belief, there is no empirical evidence for a significant drop in self-esteem over the course of adolescence. "Barometric self-esteem" fluctuates rapidly and can cause severe distress and anxiety, but baseline self-esteem remains highly stable across adolescence. The validity of global self-esteem scales has been questioned, and many suggest that more specific scales might reveal more about the adolescent experience. Girls are most likely to enjoy high self-esteem when engaged in supportive relationships with friends, the most important function of friendship to them is having someone who can provide social and moral support. When they fail to win friends' approval or can't find someone with whom to share common activities and common interests, in these cases, girls suffer from low self-esteem.

In contrast, boys are more concerned with establishing and asserting their independence and defining their relation to authority. As such, they are more likely to derive high self-esteem from their ability to successfully influence their friends; on the other hand, the lack of romantic competence, for example, failure to win or maintain the affection of the opposite or same-sex (depending on sexual orientation), is the major contributor to low self-esteem in adolescent boys.

# Identity Formation: Who am I?

Adolescents continue to refine their sense of self as they relate to others. Erik Erikson referred to life's fifth psychosocial task as one of **identity versus role confusion** when adolescents must work through the complexities of finding one's own identity. Individuals are influenced by how they resolved all of the previous childhood psychosocial crises and this adolescent stage is a bridge between the past and the future, between childhood and adulthood. Thus, in Erikson's view, an adolescent's main questions are "Who am I?" and "Who do I want to be?" Identity formation was highlighted as the primary indicator of successful development during adolescence (in contrast to role confusion, which would be an indicator of not successfully meeting the task of adolescence). This crisis is resolved positively with **identity achievement** and the gain of fidelity (ability to be faithful) as a new virtue, when adolescents have reconsidered the goals and values of their parents and culture. Some adolescents adopt the values and roles that their parents expect for them. Other teens develop identities that are in opposition to their parents but align with a peer group. This is common as peer relationships become a central focus in adolescents' lives.

Try It

https://assessments.lumenlearning.co...essments/16617

https://assessments.lumenlearning.co...essments/16618

Expanding on Erikson's theory, Marcia (1966)[1]) described identify formation during adolescence as involving both decision points and commitments with respect to ideologies (e.g., religion, politics) and occupations. **Foreclosure** occurs when an individual commits to an identity without exploring options. **Identity confusion/diffusion** occurs when adolescents neither explore nor commit to any identities. **Moratorium** is a state in which adolescents are actively exploring options but have not yet made commitments. As mentioned earlier, individuals who have explored different options, discovered their purpose, and have made identity commitments are in a state of **identity achievement.**

Developmental psychologists have researched several different areas of identity development and some of the main areas include:

- **Religious identity**: The religious views of teens are often similar to those of their families (Kim-Spoon, Longo, & McCullough,

2012) [2] Most teens may question specific customs, practices, or ideas in the faith of their parents, but few completely reject the religion of their families.

- **Political identity**: An adolescent's political identity is also influenced by their parents' political beliefs. A new trend in the 21st century is a decrease in party affiliation among adults. Many adults do not align themselves with either the democratic or republican party and their teenage children reflect their parents' lack of party affiliation. Although adolescents do tend to be more liberal than their elders, especially on social issues (Taylor, 2014) [3], like other aspects of identity formation, adolescents' interest in politics is predicted by their parents' involvement and by current events (Stattin et al., 2017). [4]
- **Vocational identity:** While adolescents in earlier generations envisioned themselves as working in a particular job, and often worked as an apprentice or part-time in such occupations as teenagers, this is rarely the case today. Vocational identity takes longer to develop, as most of today's occupations require specific skills and knowledge that will require additional education or are acquired on the job itself. In addition, many of the jobs held by teens are not in occupations that most teens will seek as adults.

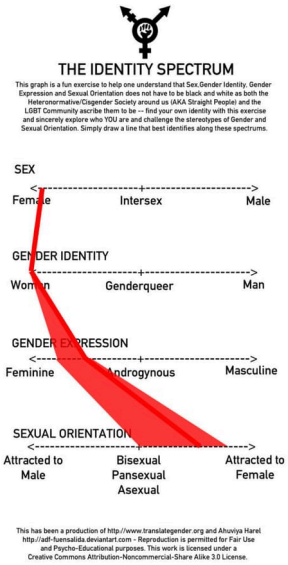
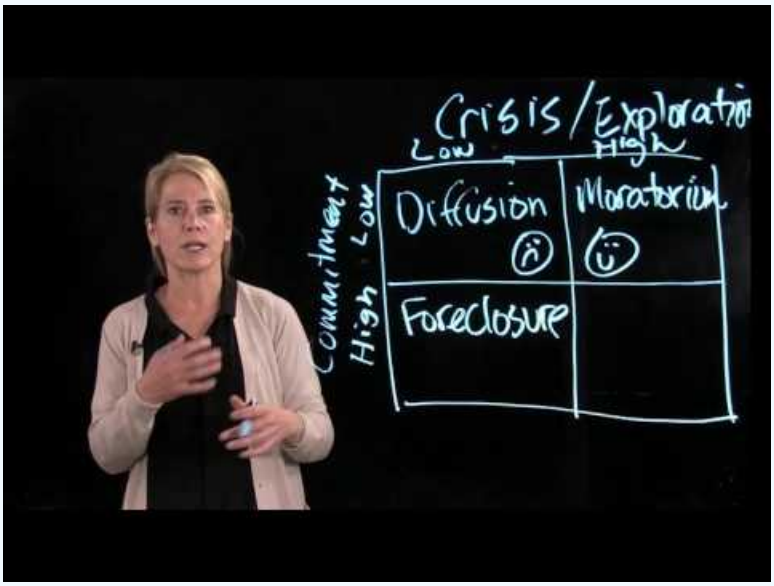



Figure 2. This identity spectrum shows the fluidity between sex, gender identity, gender expression, and sexual orientation.

- **Ethnic identity:** Ethnic identity refers to how people come to terms with who they are based on their ethnic or racial ancestry. According to the U.S. Census (2012) more than 40% of Americans under the age of 18 are from ethnic minorities. For many ethnic minority teens, discovering one's ethnic identity is an important part of identity formation. Phinney (1989)[5] proposed a model of ethnic identity development that included stages of unexplored ethnic identity, ethnic identity search, and achieved ethnic identity.
- **Gender identity:** A person's sex, as determined by his or her biology, does not always correspond with his or her gender. **Sex** refers to the biological differences between males and females, such as the genitalia and genetic differences. **Gender**refers to the socially constructed characteristics of women and men, such as norms, roles, and relationships between groups of women and men. Many adolescents use their analytic, hypothetical thinking to question traditional gender roles and expression. If their genetically assigned sex does not line up with their gender identity, they may refer to themselves as transgender, non-binary, or gender-nonconforming.
    - **Gender identity**refers to a person's self-perception as male, female, both, genderqueer, or neither. **Cisgender** is an umbrella term used to describe people whose sense of personal identity and gender corresponds with their birth sex, while **transgender** is a term used to describe people whose sense of personal identity does not correspond with their birth sex. **Genderexpression**, or how one demonstrates gender (based on traditional gender role norms related to clothing, behavior, and interactions) can be feminine, masculine, androgynous, or somewhere along a spectrum.
    - Fluidity and uncertainty regarding sex and gender are especially common during early adolescence, when hormones increase and fluctuate creating difficulty of self-acceptance and identity achievement (Reisner et al., 2016).[6] Gender identity, like vocational identity, is becoming an increasingly prolonged task as attitudes and norms regarding gender keep changing. The roles appropriate for males and females are evolving and some adolescents may foreclose on a gender identity as a way of dealing with this uncertainty by adopting more stereotypic male or female roles (Sinclair & Carlsson, 2013) [7]. Those that identify as transgender or other face even bigger challenges.

## WAtch It

This video takes a deeper look at Marcia's theory of identity development and relates the four identity statuses to college students figuring out their major.




A YouTube element has been excluded from this version of the text. You can view it online here: http://pb.libretexts.org/lsdm/?p=284

You can view the transcript for "James Marcia's Adolescent Identity Development" here (opens in new window).

## Try It

https://assessments.lumenlearning.co...essments/16619

## Gender Identity and Transgender Individuals

Individuals who identify with the role that is different from their biological sex are called transgender. Approximately 1.4 million U.S. adults or .6 percent of the population are transgender according to a 2016 report.[8]

Transgender individuals may choose to alter their bodies through medical interventions such as surgery and hormonal therapy so that their physical being is better aligned with gender identity. They may also be known as male-to-female (MTF) or female-to-male (FTM). Not all transgender individuals choose to alter their bodies; many will maintain their original anatomy but may present themselves to society as another gender. This is typically done by adopting the dress, hairstyle, mannerisms, or other characteristic typically assigned to another gender. It is important to note that people who cross-dress, or wear clothing that is traditionally assigned to a different gender is not the same as identifying as trans. Cross-dressing is typically a form of self-expression, entertainment, or personal style, and it is not necessarily an expression against one's assigned gender (APA 2008).

After years of controversy over the treatment of sex and gender in the *American Psychiatric Association Diagnostic and Statistical Manual for Mental Disorders* (Drescher 2010), the most recent edition, DSM-5, responds to allegations that the term "gender identity disorder" is stigmatizing by replacing it with "**gender dysphoria**." Gender identity disorder as a diagnostic category stigmatized the patient by implying there was something "disordered" about them. Gender dysphoria, on the other hand, removes some of that stigma by taking the word "disorder" out while maintaining a category that will protect patient access to care, including hormone therapy and gender reassignment surgery. In the DSM-5, gender dysphoria is a

condition of people whose gender at birth is contrary to the one they identify with. For a person to be diagnosed with gender dysphoria, there must be a marked difference between the individual's expressed/experienced gender and the gender others would assign him or her, and it must continue for at least six months. In children, the desire to be of the other gender must be present and verbalized (APA 2013).

Changing the clinical description may contribute to a larger acceptance of transgender people in society. A 2017 poll showed that 54 percent of Americans believe gender is determined by sex at birth and 32 percent say society has "gone too far" in accepting transgender people; views are sharply divided along political and religions lines.[9]

Studies show that people who identify as transgender are twice as likely to experience assault or discrimination as nontransgender individuals; they are also one and a half times more likely to experience intimidation (National Coalition of Anti-Violence Programs 2010; Giovanniello 2013). Trans women of color are most likely be to victims of abuse. A practice called "deadnaming" by the American Civil Liberties Union, whereby trans people who are murdered are referred to by their birth name and gender, is a discriminatory tool that effectively erases a person's trans identity and also prevents investigations into their deaths and knowledge of their deaths.[10] Organizations such as the National Coalition of Anti-Violence Programs and Global Action for Trans Equality work to prevent, respond to, and end all types of violence against transgender and homosexual individuals. These organizations hope that by educating the public about gender identity and empowering transgender individuals, this violence will end.

## Glossary

*cisgender available at the end of this section.*

*foreclosure available at the end of this section.*

*gender available at the end of this section.*

*gender dysphoria available at the end of this section.*

*gender expression available at the end of this section.*

*gender identity available at the end of this section.*

*identity achievement available at the end of this section.*

*identity vs. role confusion available at the end of this section.*

*moratorium available at the end of this section.*

*role confusion available at the end of this section.*

*self-concept available at the end of this section.*

*self-esteem available at the end of this section.*

*sex available at the end of this section.*

*transgender available at the end of this section.*


1. Marcia, J. E. (1966). Development and validation of ego identity status. Journal of Personality and Social Psychology, 3, 551–558. mailto:/Sandboxes/lhrli@ucdavis.edu
2. Kim-Spoon, J., Longo, G.S., & McCullough, M.E. (2012) Parent-adolescent relationship quality as a moderator for the influence of parents' religiousness on adolescents' religiousness and adjustment. Journal of Youth and Adolescence, 41(12), 1576-1587. mailto:/Sandboxes/lhrli@ucdavis.edu
3. Taylor, P. (2014). The next America: Boomers, millennials, and the looming generational showdown. New York, NY: Public

Affairs. mailto:/Sandboxes/lhrli@ucdavis.edu
4. Stattin, H., Hussein, O., Ozdemir, M., & Russo, S. (2017). Why do some adolescents encounter everyday events that increase their civil interest whereas others do not? Developmental Psychology, 53 (2), 306-318. mailto:/Sandboxes/lhrli@ucdavis.edu
5. Phinney, J. (1989). Stages of ethnic identity in minority group adolescents. Journal of Early Adolescence, 9, 34–49. mailto:/Sandboxes/lhrli@ucdavis.edu
6. Reisner, S.L., Katz-Wise, S.L., Gordon, A.R., Corliss, H.L., & Austin, S.B. (2016). Social epidemiology of depression and anxiety by gender identity. Journal of Adolescent Health, 59 (2), 203-208. mailto:/Sandboxes/lhrli@ucdavis.edu
7. Sinclair, S. & Carlsson, R. (2013). What will I be when I grow up? The impact of gender identity threat on adolescents' occupational preferences. Journal of Adolescence, 36(3), 465-474. mailto:/Sandboxes/lhrli@ucdavis.edu
8. Flores, A., J. Herman, G. Gates, and T. N.T. Brown. "How many adults identify as transgender." The Williams Institute. http://williamsinstitute.law.ucla.ed...ted-States.pdf. mailto:/Sandboxes/lhrli@ucdavis.edu
9. Salam, M. "For transgender Americans, the political gets even more personal" (2018). The New York Times. https://www.nytimes.com/2018/10/26/us/transgender-lgbt-rights-trump.html. mailto:/Sandboxes/lhrli@ucdavis.edu
10. Strangio, C. 2018. "Deadly violence against transgender people." ACLU. https://www.aclu.org/blog/lgbt-rights/criminal-justice-reform-lgbt-people/deadly-violence-against-transgender-people-rise. mailto:/Sandboxes/lhrli@ucdavis.edu

# Contributors and Attributions

CC licensed content, Original

- Modification, adaptation, and original content. **Authored by**: Tera Jones for Lumen Learning. **Provided by**: Lumen Learning. **License**: *CC BY-SA: Attribution-ShareAlike*

CC licensed content, Shared previously

- First section on Psychosocial Development. **Authored by**: OpenStax College. **Located at**: http://cnx.org/contents/4abf04bf-93a0-45c3-9cbc-2cefd46e68cc@4.100:1/Psychology. **License**: *CC BY: Attribution*
- Adolescent Development . **Authored by**: Jennifer Lansford. **Located at**: http://nobaproject.com/modules/adolescent-development?r=LDE2MjU3. **Project**: The Noba Project. **License**: *CC BY-NC-SA: Attribution-NonCommercial-ShareAlike*
- Adolescence. **Provided by**: Wikipedia. **Located at**: https://en.Wikipedia.org/wiki/Adolescence. **License**: *CC BY-SA: Attribution-ShareAlike*
- Gender Identity. **Provided by**: Lumen Learning. **Located at**: https://courses.lumenlearning.com/wm-introductiontosociology/chapter/sex-and-gender/. **License**: *CC BY: Attribution*
- young teenagers. **Provided by**: Pxhere. **Located at**: https://pxhere.com/en/photo/740655. **License**: *CC0: No Rights Reserved*

All rights reserved content

- James Marcia's Adolescent Identity Development. **Authored by**: Kim Eaton. **Located at**: https://www.youtube.com/watch?v=-JrZwmHU9xE. **License**: *All Rights Reserved*. **License Terms**: Standard YouTube License

## Answers

**Glossary**
an umbrella terms used to describe people whose sense of personal identity and gender corresponds with their birth sex

**Glossary**
term for premature identity formation, which occurs when an adolescent adopts his or her parents' or society's role and values without questioning or analysis, according to Marcia's theory

**Glossary**
a term that refers to social or cultural distinctions of behaviors that are considered male or female

**Glossary**
a condition listed in the DSM-5 in which people whose gender at birth is contrary to the one they identify with. This condition replaces "gender identity disorder"

**Glossary**
how one demonstrates gender (based on traditional gender role norms related to clothing, behavior, and interactions); can be feminine, masculine, androgynous, or somewhere along a spectrum

**Glossary**
the way that one thinks about gender and self-identifies, can be woman, man, or genderqueer

**Glossary**
Erikson's term for the attainment of identity, or the point at which a person understands who he or she is as a unique individual, in accord with past experiences and future plans; already questioned and made commitment according to Marcia's theory

**Glossary**

Erikson's term for the fifth stage of development, in which the person tries to figure out "Who am I?" but is confused as to which of many possible roles to adopt

**Glossary**

an adolescent's choice of a socially acceptable way to postpone making identity-achievement decisions. Going to college is a common example. Engaged in questioning, but not yet making a commitment, according to Marcia's theory

**Glossary**

a situation in which an adolescent does not seem to know or care what his or her identity is. (Sometimes called identity diffusion or role diffusion)

**Glossary**

our individual perceptions of our behavior, abilities, and unique characteristics. It is essentially a mental picture of who you are as a person. For example, beliefs such as "I am a good friend" or "I am a kind person" are part of an overall self-concept

**Glossary**

considered an important component of emotional health, self-esteem encompasses both self-confidence and self-acceptance. It is the way individuals perceive themselves and their self-value

**Glossary**

a term that denotes the presence of physical or physiological differences between males and females

**Glossary**

a term used to describe people whose sense of personal identity does not correspond with their birth sex

This page titled 15.19: Identity Formation is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 7.11: Identity Formation by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# 15.19.1: Moral Reasoning During Adolescence

**Learning Outcomes**

- Describe moral development during adolescence

## Moral Reasoning in Adolescence



Figure 1. Adolescents' moral development gets put to the test in real life situations, often along with peer pressure to behave or not behave in particular ways.

As adolescents become increasingly independent, they also develop more nuanced thinking about morality, or what is right or wrong. We all make moral judgments on a daily basis. As adolescents' cognitive, emotional, and social development continue to mature, their understanding of morality expands and their behavior becomes more closely aligned with their values and beliefs. Therefore, moral development describes the evolution of these guiding principles and is demonstrated by the ability to apply these guidelines in daily life. Understanding moral development is important in this stage where individuals make so many important decisions and gain more and more legal responsibility.

If you recall from the module on Middle Childhood, Lawrence Kohlberg (1984) argued that moral development moves through a series of stages, and reasoning about morality becomes increasingly complex (somewhat in line with increasing cognitive skills, as per Piaget's stages of cognitive development). As children develop intellectually, they pass through three stages of moral thinking: the *preconventional level*, the *conventional level*, and the *postconventional level*. In middle childhood into early adolescence, the child begins to care about how situational outcomes impact others and wants to please and be accepted (conventional morality). At this developmental phase, people are able to value the good that can be derived from holding to social norms in the form of laws or less formalized rules. From adolescence and beyond, adolescents begin to employ abstract reasoning to justify behaviors. Moral behavior is based on self-chosen ethical principles that are generally comprehensive and universal, such as justice, dignity, and equality, which is postconventional morality.

## Influences on Moral Development

Adolescents are receptive to their culture, to the models they see at home, in school and in the mass media. These observations influence moral reasoning and moral behavior. When children are younger, their family, culture, and religion greatly influence their moral decision-making. During the early adolescent period, peers have a much greater influence. Peer pressure can exert a powerful influence because friends play a more significant role in teens' lives. Furthermore, the new ability to think abstractly

enables youth to recognize that rules are simply created by other people. As a result, teens begin to question the absolute authority of parents, schools, government, and other traditional institutions (Vera-Estay, Dooley, & Beauchamp, 2014) [1] By late adolescence, most teens are less rebellious as they have begun to establish their own identity, their own belief system, and their own place in the world.

Unfortunately, some adolescents have life experiences that may interfere with their moral development. Traumatic experiences may cause them to view the world as unjust and unfair. Additionally, social learning also impacts moral development. Adolescents may have observed the adults in their lives making immoral decisions that disregarded the rights and welfare of others, leading these youth to develop beliefs and values that are contrary to the rest of society. That being said, adults have opportunities to support moral development by modeling the moral character that we want to see in our children. Parents are particularly important because they are generally the original source of moral guidance. Authoritative parenting facilitates children's moral growth better than other parenting styles and one of the most influential things a parent can do is to encourage the right kind of peer relations. [2] While parents may find this process of moral development difficult or challenging, it is important to remember that this developmental step is essential to their children's well-being and ultimate success in life.

### Link To Learning

Parenting has the largest impact on adolescent moral development. Read more here in this article, "Building Character: Moral Development in Adolescence" from the Center for Parent and Teen Communication.

### Try It

https://assessments.lumenlearning.co...essments/16616

---


1. Vera-Estay,E. Dooley, J.J. & Beauchamp, M.H. (2014). Cognitive underpinnings of moral reasoning in adolescence: The contribution of executive functions. Journal of Moral Education, 44 (1), 17-33. mailto:/Sandboxes/lhrli@ucdavis.edu
2. McDevitt, T.M. & Ormrod, J.E. (2004). Child development: Educating and working with children and adolescents. Upper Saddle River, NJ: Pearson Prentice Hall. mailto:/Sandboxes/lhrli@ucdavis.edu


## Contributors and Attributions

CC licensed content, Original

- Moral Reasoning During Adolescence. **Authored by**: Tera Jones for Lumen Learning. **Provided by**: Lumen Learning. **License**: *CC BY: Attribution*

CC licensed content, Shared previously

- Girls holding drinks. **Provided by**: pxhere. **Located at**: https://pxhere.com/en/photo/657013. **License**: *CC0: No Rights Reserved*

---


This page titled 15.19.1: Moral Reasoning During Adolescence is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lumen Learning via source content that was edited to the style and standards of the LibreTexts platform.

- 7.9: Moral Reasoning During Adolescence by Lumen Learning is licensed CC BY 4.0. Original source: https://courses.lumenlearning.com/wm-lifespandevelopment/.

# INDEX


## A

abraham maslow
*15.15.4: Adolescent Health- Sleep, Diet, and Exercise*

abstinence education
*15.8.3: Puberty, Sexual Behavior, and Sexual Health in Adolescence*

abstract concepts
*15.8.4: Cognition in Adolescence*

academic achievement
*15.10.5: Social Contexts in Adolescence*
*15.10.6: Family and Community Contexts in Adolescence*
*15.8.1: What Does Psychology Say?*

academic disparities
*15.10.5: Social Contexts in Adolescence*

accidental death
*15.9.3: Physical Health and Growth in Early Adulthood*

achievement
*15.11.3: Identity Development in Context in Early Adulthood*

Acne
*15.1.1: Growth in Adolescence*

adolescence
*15.10.1: What Does Psychology Say?*
*15.10.2: Theories of Adolescent Socioemotional Development*
*15.10.3: Emotional and Self-Development in Adolescence*
*15.10.4: Identity and Culture- Race/Ethnicity, Gender, and Sexuality in Adolescence*
*15.16.5: Adolescence (A Time of Transitions)*
*15.8.1: What Does Psychology Say?*
*15.8.2: Physical Growth and Development in Adolescence*
*15.8.4: Cognition in Adolescence*
*15.8.5: Decision-Making and Risky Behaviors in Adolescence*

adolescence challenges
*15.10.3: Emotional and Self-Development in Adolescence*

adolescence concerns
*15.10.1: What Does Psychology Say?*

adolescent autonomy
*15.10.6: Family and Community Contexts in Adolescence*

adolescent behavior
*15.8.3: Puberty, Sexual Behavior, and Sexual Health in Adolescence*

adolescent brain development
*15.8.4: Cognition in Adolescence*
*15.8.5: Decision-Making and Risky Behaviors in Adolescence*

adolescent childbearing
*15.8.3: Puberty, Sexual Behavior, and Sexual Health in Adolescence*

adolescent development
*15.10.5: Social Contexts in Adolescence*
*15.10.6: Family and Community Contexts in Adolescence*

adolescent egocentrism
*15.8.4: Cognition in Adolescence*

adolescent employment
*15.10.6: Family and Community Contexts in Adolescence*

adolescent growth spurt
*15.15.1: Physical Growth*

adolescent identity development
*15.10.4: Identity and Culture- Race/Ethnicity, Gender, and Sexuality in Adolescence*

adolescent milestones
*15.10.2: Theories of Adolescent Socioemotional Development*

adolescent psychology
*15.10.2: Theories of Adolescent Socioemotional Development*
*15.10.3: Emotional and Self-Development in Adolescence*
*15.10.6: Family and Community Contexts in Adolescence*

adolescent sexual activity
*15.8.3: Puberty, Sexual Behavior, and Sexual Health in Adolescence*

adolescent sexuality
*15.8.3: Puberty, Sexual Behavior, and Sexual Health in Adolescence*
*15.9.4: Sexuality in Early Adulthood*

adolescent thought
*15.8.4: Cognition in Adolescence*

adolescent vulnerability
*15.8.5: Decision-Making and Risky Behaviors in Adolescence*

adulthood
*15.11.1: What Does Psychology Say?*

adulthood transitions
*15.9.5: Cognitive Development in Early Adulthood*

affirmative consent
*15.8.3: Puberty, Sexual Behavior, and Sexual Health in Adolescence*

alcohol use
*15.8.5: Decision-Making and Risky Behaviors in Adolescence*

Ambivalent attachement
*13.10: Attachment in Young Adulthood*

anorexia nervosa
*14.3: Eating Disorders*
*15.15.4: Adolescent Health- Sleep, Diet, and Exercise*

antisocial behavior
*15.17.10: Antisocial Behaviors, Violence, and Child Abuse*

attachment
*15.10.5: Social Contexts in Adolescence*

attraction
*13.11: Relationships and Intimacy*

authoritative parenting
*15.10.6: Family and Community Contexts in Adolescence*

Authority
*15.8.1: What Does Psychology Say?*

automatic processing
*15.16.4: Information Processing Theory- Memory, Encoding, and Storage*

autonomy
*14.4: Adolescents' Relationships*
*15.11.4: Relationships with Friends and Family in Early Adulthood*
*15.17.5: Socialization Agents During Adolescence*

avoidant attachment
*13.10: Attachment in Young Adulthood*

## B

being single
*12.2: Finding Love, Intimacy, and Romance in Early Adulthood*

bi/multiracial identity
*15.10.4: Identity and Culture- Race/Ethnicity, Gender, and Sexuality in Adolescence*

bicultural identity
*15.17.6: Community, Society, and Culture*

Big Five personality traits
*15.11.2: The Development of Self in Early Adulthood*

binge eating disorder
*14.3: Eating Disorders*

birth control
*15.8.3: Puberty, Sexual Behavior, and Sexual Health in Adolescence*

bisexuality
*15.17.8: Development of Sexual Identity*

Black Girl Magic
*15.11.3: Identity Development in Context in Early Adulthood*

body composition
*15.9.3: Physical Health and Growth in Early Adulthood*

body image
*15.10.3: Emotional and Self-Development in Adolescence*

body positivity
*15.10.3: Emotional and Self-Development in Adolescence*

bones
*15.9.3: Physical Health and Growth in Early Adulthood*

brain changes
*15.9.5: Cognitive Development in Early Adulthood*

brain development
*15.10.3: Emotional and Self-Development in Adolescence*
*15.8.2: Physical Growth and Development in Adolescence*

breakups
*12.2: Finding Love, Intimacy, and Romance in Early Adulthood*

bulimia nervosa
*14.3: Eating Disorders*
*15.15.4: Adolescent Health- Sleep, Diet, and Exercise*

bullying
*15.17.9: Antisocial Behavior in Adolescence*

bystander effect
*15.17.9: Antisocial Behavior in Adolescence*

## C


cardiovascular health
- 15.9.3: Physical Health and Growth in Early Adulthood

career aspirations
- 15.9.1: What Does Psychology Say?

career development
- 15.9.1: What Does Psychology Say?

career direction
- 15.11.1: What Does Psychology Say?

Career Exploration
- 15.11.5: Contexts- School and Work Settings in Early Adulthood
- 15.9.2: Becoming an Adult
- 15.9.6: Contexts - Higher Education and Work Achievement in Early Adulthood

career goals
- 15.11.5: Contexts- School and Work Settings in Early Adulthood

career preparation
- 15.9.6: Contexts - Higher Education and Work Achievement in Early Adulthood

career satisfaction
- 15.9.6: Contexts - Higher Education and Work Achievement in Early Adulthood

casual sex
- 12.2: Finding Love, Intimacy, and Romance in Early Adulthood

cid:cdev100
- 15.15: Adolescence - Physical Development
- 15.15.1: Physical Growth
- 15.15.2: Brain Growth
- 15.15.3: Physical Changes in Adolescence
- 15.15.4: Adolescent Health- Sleep, Diet, and Exercise
- 15.15.5: Maintaining Emotional Health
- 15.15.6: Disorders and Syndromes
- 15.15.S: Summary
- 15.16: Adolescence - Cognitive Development
- 15.16.1: Cognitive Development in Adolescence
- 15.16.2: Cognitive Changes in the Brain
- 15.16.3: Cognitive Theorists- Piaget, Elkind, Kohlberg, and Gilligan
- 15.16.4: Information Processing Theory- Memory, Encoding, and Storage
- 15.16.5: Adolescence (A Time of Transitions)
- 15.16.6: Wisdom and Risk-Taking
- 15.16.S: Summary
- 15.17: Adolescence - Social Emotional Development
- 15.17.1: Erik Erikson – Theory of Psychosocial Development
- 15.17.10: Antisocial Behaviors, Violence, and Child Abuse
- 15.17.11: Violence and Abuse
- 15.17.12: Emerging Adulthood - The Bridge Between Adolescence and Adulthood
- 15.17.2: James Marcia – Theory of Identity Development
- 15.17.3: Development of Identity and Self Concept - Who am I?
- 15.17.4: Development of Gender Identity
- 15.17.5: Socialization Agents During Adolescence
- 15.17.6: Community, Society, and Culture
- 15.17.7: Media- Influences on Teens
- 15.17.8: Development of Sexual Identity
- 15.17.9: Antisocial Behavior in Adolescence
- 15.17.S: Summary

cisgender
- 13.5: Gender
- 15.17.4: Development of Gender Identity

cliques
- 15.10.5: Social Contexts in Adolescence

cognitive development
- 15.10.5: Social Contexts in Adolescence
- 15.8.1: What Does Psychology Say?
- 15.8.4: Cognition in Adolescence
- 15.9.1: What Does Psychology Say?
- 15.9.5: Cognitive Development in Early Adulthood

cognitive empathy
- 15.16.1: Cognitive Development in Adolescence

cognitive functioning
- 15.8.4: Cognition in Adolescence

cognitive growth
- 15.8.4: Cognition in Adolescence

cognitive milestones
- 15.9.2: Becoming an Adult

cohabitation
- 12.2: Finding Love, Intimacy, and Romance in Early Adulthood
- 13.12: Emerging and Established Adult Lifestyles

college enrollment
- 15.11.5: Contexts- School and Work Settings in Early Adulthood
- 15.9.6: Contexts - Higher Education and Work Achievement in Early Adulthood

college graduation
- 15.11.1: What Does Psychology Say?

college pathways
- 15.11.5: Contexts- School and Work Settings in Early Adulthood

coming of age
- 15.10.2: Theories of Adolescent Socioemotional Development

commitment
- 12.2: Finding Love, Intimacy, and Romance in Early Adulthood

communication skills
- 15.10.3: Emotional and Self-Development in Adolescence

community college
- 15.9.6: Contexts - Higher Education and Work Achievement in Early Adulthood

community involvement
- 15.10.6: Family and Community Contexts in Adolescence

community service
- 15.11.5: Contexts- School and Work Settings in Early Adulthood

competence
- 15.11.4: Relationships with Friends and Family in Early Adulthood

comprehensive sex education
- 15.8.3: Puberty, Sexual Behavior, and Sexual Health in Adolescence

conduct disorders
- 15.17.10: Antisocial Behaviors, Violence, and Child Abuse

conscription
- 15.16.5: Adolescence (A Time of Transitions)

consensual validation
- 13.11: Relationships and Intimacy

consent culture
- 15.8.3: Puberty, Sexual Behavior, and Sexual Health in Adolescence

contraception
- 15.8.3: Puberty, Sexual Behavior, and Sexual Health in Adolescence

cooking
- 15.9.1: What Does Psychology Say?

corporal punishment
- 15.17.11: Violence and Abuse

crowds
- 15.10.5: Social Contexts in Adolescence

cultural change
- 15.11.2: The Development of Self in Early Adulthood

cultural context
- 15.11.2: The Development of Self in Early Adulthood
- 15.11.4: Relationships with Friends and Family in Early Adulthood

cultural differences
- 15.10.2: Theories of Adolescent Socioemotional Development
- 15.8.4: Cognition in Adolescence

cultural diversity
- 15.10.4: Identity and Culture- Race/Ethnicity, Gender, and Sexuality in Adolescence
- 15.11.2: The Development of Self in Early Adulthood
- 15.11.3: Identity Development in Context in Early Adulthood

cultural factors
- 15.8.4: Cognition in Adolescence

cultural heritage
- 15.10.4: Identity and Culture- Race/Ethnicity, Gender, and Sexuality in Adolescence

cultural ideals
- 15.10.3: Emotional and Self-Development in Adolescence

cultural influence
- 15.11.4: Relationships with Friends and Family in Early Adulthood

cultural influences
- 15.9.4: Sexuality in Early Adulthood
- 15.9.5: Cognitive Development in Early Adulthood

cultural markers of adulthood
- 15.10.2: Theories of Adolescent Socioemotional Development

cultural practices
- 15.9.2: Becoming an Adult

cultural variations
- 15.9.2: Becoming an Adult

cyberbullying
- 15.10.5: Social Contexts in Adolescence


## D


DACA
- 15.9.2: Becoming an Adult

dating
- 14.4: Adolescents' Relationships
- 15.10.5: Social Contexts in Adolescence
- 15.17.8: Development of Sexual Identity
- 15.9.2: Becoming an Adult

dating apps
- 12.2: Finding Love, Intimacy, and Romance in Early Adulthood

dating violence
- 15.10.5: Social Contexts in Adolescence

demographic disparities
- 15.9.6: Contexts - Higher Education and Work Achievement in Early Adulthood

depressant
- 15.15.4: Adolescent Health- Sleep, Diet, and Exercise

development assets
15.10.6: Family and Community Contexts in Adolescence
development of self
15.11.2: The Development of Self in Early Adulthood
developmental psychology
15.10.2: Theories of Adolescent Socioemotional Development
15.8.5: Decision-Making and Risky Behaviors in Adolescence
developmental tasks
15.10.2: Theories of Adolescent Socioemotional Development
15.11.2: The Development of Self in Early Adulthood
15.9.2: Becoming an Adult
developmental trajectories
15.11.5: Contexts- School and Work Settings in Early Adulthood
Deviant peer contagion
15.17.5: Socialization Agents During Adolescence
dialectical thinking
15.9.5: Cognitive Development in Early Adulthood
dialectical Thought
13.7: Cognitive Development in Emerging and Early Adulthood
diet
15.9.3: Physical Health and Growth in Early Adulthood
diffusion
15.11.3: Identity Development in Context in Early Adulthood
discrimination
15.10.4: Identity and Culture- Race/Ethnicity, Gender, and Sexuality in Adolescence
distalproximal development
15.1.1: Growth in Adolescence
dopamine
15.1.2: Adolescent Brain
15.15.2: Brain Growth
15.16.2: Cognitive Changes in the Brain
15.8.5: Decision-Making and Risky Behaviors in Adolescence
drug use
15.8.5: Decision-Making and Risky Behaviors in Adolescence

## E

early adulthood
15.11.2: The Development of Self in Early Adulthood
15.11.3: Identity Development in Context in Early Adulthood
15.11.4: Relationships with Friends and Family in Early Adulthood
15.5: Early Adulthood
15.9.3: Physical Health and Growth in Early Adulthood
15.9.4: Sexuality in Early Adulthood
15.9.5: Cognitive Development in Early Adulthood
early sexual risk behaviors
15.8.3: Puberty, Sexual Behavior, and Sexual Health in Adolescence
eating disorders
15.8.2: Physical Growth and Development in Adolescence
economic challenges
15.11.2: The Development of Self in Early Adulthood
education
15.10.5: Social Contexts in Adolescence
15.11.5: Contexts- School and Work Settings in Early Adulthood
15.9.2: Becoming an Adult
education and transition
15.10.2: Theories of Adolescent Socioemotional Development
educational attainment
15.11.2: The Development of Self in Early Adulthood
15.9.6: Contexts - Higher Education and Work Achievement in Early Adulthood
educational equity
15.10.5: Social Contexts in Adolescence
educational experiences
15.9.1: What Does Psychology Say?
educational impact
15.9.5: Cognitive Development in Early Adulthood
educational opportunities
15.9.6: Contexts - Higher Education and Work Achievement in Early Adulthood
educational systems
15.8.4: Cognition in Adolescence
effortful processing
15.16.4: Information Processing Theory- Memory, Encoding, and Storage
egocentrism
15.16.3: Cognitive Theorists- Piaget, Elkind, Kohlberg, and Gilligan
emerging adulthood
15.11.1: What Does Psychology Say?
15.11.2: The Development of Self in Early Adulthood
15.17.12: Emerging Adulthood - The Bridge Between Adolescence and Adulthood
15.9.1: What Does Psychology Say?
15.9.2: Becoming an Adult
emerging adults
15.11.4: Relationships with Friends and Family in Early Adulthood
emotional development
15.10.3: Emotional and Self-Development in Adolescence
emotional intelligence
15.10.3: Emotional and Self-Development in Adolescence
emotional processing
15.8.2: Physical Growth and Development in Adolescence
15.8.5: Decision-Making and Risky Behaviors in Adolescence
emotional support
15.11.4: Relationships with Friends and Family in Early Adulthood
empathy
15.9.5: Cognitive Development in Early Adulthood
encoding
15.16.4: Information Processing Theory- Memory, Encoding, and Storage
endocrine function
15.9.3: Physical Health and Growth in Early Adulthood
endocrine system
15.9.3: Physical Health and Growth in Early Adulthood
environmental factors
15.9.2: Becoming an Adult
environmental sustainability
15.9.1: What Does Psychology Say?
epigenesis
13.9: Psychosocial Development in Emerging and Early Adulthood
Erik Erikson
15.10.2: Theories of Adolescent Socioemotional Development
15.17.1: Erik Erikson – Theory of Psychosocial Development
Erikson
15.11.2: The Development of Self in Early Adulthood
Erikson's theory
12.2: Finding Love, Intimacy, and Romance in Early Adulthood
ethnic identity
15.10.4: Identity and Culture- Race/Ethnicity, Gender, and Sexuality in Adolescence
15.17.6: Community, Society, and Culture
ethnoracial identity
15.10.4: Identity and Culture- Race/Ethnicity, Gender, and Sexuality in Adolescence
15.11.3: Identity Development in Context in Early Adulthood
executive functioning
15.8.2: Physical Growth and Development in Adolescence
exercise
15.8.2: Physical Growth and Development in Adolescence
15.9.3: Physical Health and Growth in Early Adulthood
exploration and commitment
15.11.3: Identity Development in Context in Early Adulthood
extracurricular activities
15.10.6: Family and Community Contexts in Adolescence

## F

family communication
15.10.6: Family and Community Contexts in Adolescence
family contact
15.11.4: Relationships with Friends and Family in Early Adulthood
family dynamics
15.10.6: Family and Community Contexts in Adolescence
15.11.4: Relationships with Friends and Family in Early Adulthood
15.8.4: Cognition in Adolescence
15.9.2: Becoming an Adult
family formation
12.2: Finding Love, Intimacy, and Romance in Early Adulthood
family influence
15.11.1: What Does Psychology Say?
family relations
15.11.4: Relationships with Friends and Family in Early Adulthood

family relationships
*15.8.5: Decision-Making and Risky Behaviors in Adolescence*
family structure
*15.10.6: Family and Community Contexts in Adolescence*
family support
*15.11.3: Identity Development in Context in Early Adulthood*
*15.11.4: Relationships with Friends and Family in Early Adulthood*
*15.8.2: Physical Growth and Development in Adolescence*
fat distribution
*15.8.2: Physical Growth and Development in Adolescence*
fidelity
*15.17.1: Erik Erikson – Theory of Psychosocial Development*
financial aid
*15.9.6: Contexts - Higher Education and Work Achievement in Early Adulthood*
financial management
*15.9.1: What Does Psychology Say?*
financial stability
*15.9.2: Becoming an Adult*
financial support
*15.11.4: Relationships with Friends and Family in Early Adulthood*
first job
*15.11.1: What Does Psychology Say?*
fitting in
*15.10.1: What Does Psychology Say?*
foreclosure
*15.11.3: Identity Development in Context in Early Adulthood*
formal operational stage
*15.8.4: Cognition in Adolescence*
formal operational thought
*13.7: Cognitive Development in Emerging and Early Adulthood*
friendship
*15.10.3: Emotional and Self-Development in Adolescence*
friendship development
*15.11.4: Relationships with Friends and Family in Early Adulthood*
friendships
*15.10.5: Social Contexts in Adolescence*
*15.11.1: What Does Psychology Say?*
*15.11.4: Relationships with Friends and Family in Early Adulthood*
frontal lobe
*15.8.2: Physical Growth and Development in Adolescence*
*15.8.5: Decision-Making and Risky Behaviors in Adolescence*

## G

Gen Z
*15.9.6: Contexts - Higher Education and Work Achievement in Early Adulthood*
Gender
*15.17.4: Development of Gender Identity*
gender and sexuality
*15.9.3: Physical Health and Growth in Early Adulthood*
gender differences
*15.10.3: Emotional and Self-Development in Adolescence*
*15.8.2: Physical Growth and Development in Adolescence*
gender identity
*15.10.4: Identity and Culture- Race/Ethnicity, Gender, and Sexuality in Adolescence*
*15.11.3: Identity Development in Context in Early Adulthood*
*15.11.5: Contexts- School and Work Settings in Early Adulthood*
*15.17.3: Development of Identity and Self Concept - Who am I?*
*15.9.4: Sexuality in Early Adulthood*
gender intensification
*15.10.4: Identity and Culture- Race/Ethnicity, Gender, and Sexuality in Adolescence*
gender nonconformity
*15.10.4: Identity and Culture- Race/Ethnicity, Gender, and Sexuality in Adolescence*
gender roles
*13.5: Gender*
gender stereotypes
*15.17.4: Development of Gender Identity*
generational differences
*15.9.6: Contexts - Higher Education and Work Achievement in Early Adulthood*
generational identity changes
*15.11.3: Identity Development in Context in Early Adulthood*
globalization
*15.9.2: Becoming an Adult*
graduation
*15.9.1: What Does Psychology Say?*
grandparents
*15.11.4: Relationships with Friends and Family in Early Adulthood*
growth spurts
*15.8.2: Physical Growth and Development in Adolescence*

## H

hallucinogens
*15.15.4: Adolescent Health- Sleep, Diet, and Exercise*
health management
*15.9.1: What Does Psychology Say?*
healthy outcomes
*15.9.3: Physical Health and Growth in Early Adulthood*
healthy relationships
*15.10.5: Social Contexts in Adolescence*
heuristic thinking
*15.9.5: Cognitive Development in Early Adulthood*
high school
*15.11.5: Contexts- School and Work Settings in Early Adulthood*
High School Dropouts
*15.18: Education*
higher education
*15.11.4: Relationships with Friends and Family in Early Adulthood*
*15.9.6: Contexts - Higher Education and Work Achievement in Early Adulthood*
Homogamy
*12.2: Finding Love, Intimacy, and Romance in Early Adulthood*
homophily
*15.17.5: Socialization Agents During Adolescence*
homosexuality
*15.17.8: Development of Sexual Identity*
Hooking Up
*13.12: Emerging and Established Adult Lifestyles*
hormonal changes
*15.8.3: Puberty, Sexual Behavior, and Sexual Health in Adolescence*
hormone production
*15.8.2: Physical Growth and Development in Adolescence*
HPA axis
*15.8.3: Puberty, Sexual Behavior, and Sexual Health in Adolescence*
hypothetical reasoning
*15.8.4: Cognition in Adolescence*

## I

idealism
*15.8.4: Cognition in Adolescence*
identity achievement
*15.9.2: Becoming an Adult*
identity consolidation
*15.11.3: Identity Development in Context in Early Adulthood*
identity development
*12.2: Finding Love, Intimacy, and Romance in Early Adulthood*
*15.10.2: Theories of Adolescent Socioemotional Development*
*15.11.3: Identity Development in Context in Early Adulthood*
Identity diffusion
*15.1.4: Psychosocial Development in Adolescence*
identity exploration
*15.9.2: Becoming an Adult*
identity foreclosure
*15.1.4: Psychosocial Development in Adolescence*
identity formation
*15.10.4: Identity and Culture- Race/Ethnicity, Gender, and Sexuality in Adolescence*
identity reflection
*15.11.3: Identity Development in Context in Early Adulthood*
identity stages
*15.9.2: Becoming an Adult*
identity statuses
*15.10.2: Theories of Adolescent Socioemotional Development*
*15.11.3: Identity Development in Context in Early Adulthood*
identity theory
*15.9.2: Becoming an Adult*
identity versus role confusion
*15.10.2: Theories of Adolescent Socioemotional Development*
Identity vs. Role Confusion
*15.17.1: Erik Erikson – Theory of Psychosocial Development*
imaginary audience
*15.16.3: Cognitive Theorists- Piaget, Elkind, Kohlberg, and Gilligan*
immigration status
*15.9.2: Becoming an Adult*

immune system
15.9.3: Physical Health and Growth in Early Adulthood
impulse control
15.8.5: Decision-Making and Risky Behaviors in Adolescence
15.9.5: Cognitive Development in Early Adulthood
independence
15.10.1: What Does Psychology Say?
15.11.1: What Does Psychology Say?
15.11.2: The Development of Self in Early Adulthood
15.11.4: Relationships with Friends and Family in Early Adulthood
15.9.2: Becoming an Adult
individual variability
15.8.2: Physical Growth and Development in Adolescence
informal education
15.9.6: Contexts - Higher Education and Work Achievement in Early Adulthood
information processing perspective
15.8.4: Cognition in Adolescence
inhibition
15.8.2: Physical Growth and Development in Adolescence
injuries
15.9.3: Physical Health and Growth in Early Adulthood
interdependence
15.11.4: Relationships with Friends and Family in Early Adulthood
intergenerational solidarity
15.11.4: Relationships with Friends and Family in Early Adulthood
intersectional contexts
15.9.4: Sexuality in Early Adulthood
intersectional psychology
15.11.3: Identity Development in Context in Early Adulthood
intersectionality
15.11.3: Identity Development in Context in Early Adulthood
intersex
15.17.4: Development of Gender Identity
intervention strategies
15.10.5: Social Contexts in Adolescence
intimacy
12.2: Finding Love, Intimacy, and Romance in Early Adulthood
intimacy vs isolation
15.11.2: The Development of Self in Early Adulthood

J

James Marcia
15.10.2: Theories of Adolescent Socioemotional Development
15.17.2: James Marcia – Theory of Identity Development
Jean Piaget
15.16.3: Cognitive Theorists- Piaget, Elkind, Kohlberg, and Gilligan
job hunting
15.9.1: What Does Psychology Say?
job market
15.9.1: What Does Psychology Say?
15.9.6: Contexts - Higher Education and Work Achievement in Early Adulthood
joints
15.9.3: Physical Health and Growth in Early Adulthood
juvenile delinquency
15.8.5: Decision-Making and Risky Behaviors in Adolescence
juvenile justice
15.8.5: Decision-Making and Risky Behaviors in Adolescence

L

leaving home
15.11.4: Relationships with Friends and Family in Early Adulthood
legal record
15.8.5: Decision-Making and Risky Behaviors in Adolescence
LGBTQ+
15.11.3: Identity Development in Context in Early Adulthood
15.9.4: Sexuality in Early Adulthood
LGBTQ+ adolescents
15.8.2: Physical Growth and Development in Adolescence
LGBTQ+ identity
15.10.4: Identity and Culture- Race/Ethnicity, Gender, and Sexuality in Adolescence
LGBTQ+ relationships
12.2: Finding Love, Intimacy, and Romance in Early Adulthood
life changes
15.11.1: What Does Psychology Say?
life satisfaction
15.11.2: The Development of Self in Early Adulthood
life transitions
15.11.4: Relationships with Friends and Family in Early Adulthood
lifespan development
15.10.1: What Does Psychology Say?
lifestyle choices
15.9.3: Physical Health and Growth in Early Adulthood
lifestyle habits
15.8.2: Physical Growth and Development in Adolescence
limbic system
15.1.2: Adolescent Brain
15.8.2: Physical Growth and Development in Adolescence
15.8.5: Decision-Making and Risky Behaviors in Adolescence
Logan Eggleston
15.11.3: Identity Development in Context in Early Adulthood
love
15.5.5: Types of Love

M

Marcia's framework
15.11.3: Identity Development in Context in Early Adulthood
marketing
15.9.1: What Does Psychology Say?
marriage
12.2: Finding Love, Intimacy, and Romance in Early Adulthood
maturity principle
15.11.2: The Development of Self in Early Adulthood
media influence
15.10.3: Emotional and Self-Development in Adolescence
15.10.5: Social Contexts in Adolescence
media literacy
15.10.3: Emotional and Self-Development in Adolescence
media relations
15.9.1: What Does Psychology Say?
media use
15.10.5: Social Contexts in Adolescence
meditation
15.10.3: Emotional and Self-Development in Adolescence
mental health
15.10.3: Emotional and Self-Development in Adolescence
15.10.6: Family and Community Contexts in Adolescence
15.8.2: Physical Growth and Development in Adolescence
15.8.5: Decision-Making and Risky Behaviors in Adolescence
15.9.3: Physical Health and Growth in Early Adulthood
mental illness
15.9.3: Physical Health and Growth in Early Adulthood
mentorship
15.11.5: Contexts- School and Work Settings in Early Adulthood
metacognition
15.8.4: Cognition in Adolescence
middle school experience
15.10.1: What Does Psychology Say?
Miguel
15.8.1: What Does Psychology Say?
minority groups
15.10.4: Identity and Culture- Race/Ethnicity, Gender, and Sexuality in Adolescence
15.11.3: Identity Development in Context in Early Adulthood
moral reasoning
15.9.5: Cognitive Development in Early Adulthood
moratorium
15.11.3: Identity Development in Context in Early Adulthood
motor skills
15.8.2: Physical Growth and Development in Adolescence
multicultural identity
15.10.4: Identity and Culture- Race/Ethnicity, Gender, and Sexuality in Adolescence
multiracial
15.17.6: Community, Society, and Culture
muscle mass
15.8.2: Physical Growth and Development in Adolescence
myelin
15.16.2: Cognitive Changes in the Brain

## N


neurodiverse
*15.10.5: Social Contexts in Adolescence*

neurological development
*15.9.5: Cognitive Development in Early Adulthood*

new roles
*15.11.1: What Does Psychology Say?*

nutrition
*15.8.2: Physical Growth and Development in Adolescence*


## O


obesity
*13.3: Physical Development in Emerging and Established Adulthood*
*15.9.3: Physical Health and Growth in Early Adulthood*

online dating
*13.12: Emerging and Established Adult Lifestyles*

Oppositional Defiant Disorder
*15.17.10: Antisocial Behaviors, Violence, and Child Abuse*

optimism
*15.11.1: What Does Psychology Say?*

oxytocin
*15.1.2: Adolescent Brain*
*15.15.2: Brain Growth*
*15.8.5: Decision-Making and Risky Behaviors in Adolescence*


## P


parental influence
*15.10.3: Emotional and Self-Development in Adolescence*

parental interactions
*15.8.1: What Does Psychology Say?*

parenthood
*12.2: Finding Love, Intimacy, and Romance in Early Adulthood*
*13.14: Parenthood*

parenting
*15.11.4: Relationships with Friends and Family in Early Adulthood*
*15.9.4: Sexuality in Early Adulthood*

parenting styles
*15.10.3: Emotional and Self-Development in Adolescence*
*15.10.6: Family and Community Contexts in Adolescence*
*15.8.4: Cognition in Adolescence*

peer group
*14.4: Adolescents' Relationships*

peer influence
*15.10.3: Emotional and Self-Development in Adolescence*
*15.10.5: Social Contexts in Adolescence*
*15.8.5: Decision-Making and Risky Behaviors in Adolescence*

peer pressure
*15.10.1: What Does Psychology Say?*
*15.8.5: Decision-Making and Risky Behaviors in Adolescence*

peer relationships
*15.10.3: Emotional and Self-Development in Adolescence*

peer social risks
*15.10.5: Social Contexts in Adolescence*

personal development
*15.11.4: Relationships with Friends and Family in Early Adulthood*

personal growth
*15.11.1: What Does Psychology Say?*

personal identity
*15.10.3: Emotional and Self-Development in Adolescence*

personality
*13.9: Psychosocial Development in Emerging and Early Adulthood*

personality evolution
*15.11.2: The Development of Self in Early Adulthood*

personality stability
*15.11.2: The Development of Self in Early Adulthood*

personality traits
*15.11.2: The Development of Self in Early Adulthood*

physical changes
*15.9.1: What Does Psychology Say?*

physical development
*15.8.1: What Does Psychology Say?*
*15.8.2: Physical Growth and Development in Adolescence*

physical health
*15.9.3: Physical Health and Growth in Early Adulthood*

physical maturity
*15.9.3: Physical Health and Growth in Early Adulthood*

physical milestones
*15.9.2: Becoming an Adult*

physiological changes
*15.9.3: Physical Health and Growth in Early Adulthood*

Piaget
*15.1.3: Cognitive Development in Adolescence*

Piaget's theory
*15.8.4: Cognition in Adolescence*

political identity
*15.17.3: Development of Identity and Self Concept - Who am I?*

polysexuality
*15.17.8: Development of Sexual Identity*

positive youth development
*15.10.6: Family and Community Contexts in Adolescence*

postformal thought
*13.7: Cognitive Development in Emerging and Early Adulthood*

prefrontal cortex
*15.15.2: Brain Growth*
*15.16.2: Cognitive Changes in the Brain*

pregnancy
*15.9.4: Sexuality in Early Adulthood*

preventive care
*15.8.2: Physical Growth and Development in Adolescence*

primary sex characteristics
*15.8.3: Puberty, Sexual Behavior, and Sexual Health in Adolescence*

problem solving
*15.9.5: Cognitive Development in Early Adulthood*

psychological constructivist
*15.16.3: Cognitive Theorists- Piaget, Elkind, Kohlberg, and Gilligan*

psychological effects
*15.10.5: Social Contexts in Adolescence*

psychological moratorium
*15.1.4: Psychosocial Development in Adolescence*
*15.17.1: Erik Erikson – Theory of Psychosocial Development*

psychological outcomes
*15.10.4: Identity and Culture- Race/Ethnicity, Gender, and Sexuality in Adolescence*

psychosocial development
*12.2: Finding Love, Intimacy, and Romance in Early Adulthood*
*15.11.2: The Development of Self in Early Adulthood*
*15.17.1: Erik Erikson – Theory of Psychosocial Development*

psychosocial theory
*15.10.2: Theories of Adolescent Socioemotional Development*

pubertal timing
*15.8.3: Puberty, Sexual Behavior, and Sexual Health in Adolescence*

puberty
*15.1.1: Growth in Adolescence*
*15.10.3: Emotional and Self-Development in Adolescence*
*15.8.2: Physical Growth and Development in Adolescence*
*15.8.3: Puberty, Sexual Behavior, and Sexual Health in Adolescence*

puberty suppression
*15.8.2: Physical Growth and Development in Adolescence*

puberty timing factors
*15.8.3: Puberty, Sexual Behavior, and Sexual Health in Adolescence*

public health
*15.8.5: Decision-Making and Risky Behaviors in Adolescence*


## R


race and ethnicity
*15.11.5: Contexts- School and Work Settings in Early Adulthood*

racial and ethnic differences in puberty
*15.8.3: Puberty, Sexual Behavior, and Sexual Health in Adolescence*

racial discrimination
*15.9.3: Physical Health and Growth in Early Adulthood*

racial disparities
*15.9.3: Physical Health and Growth in Early Adulthood*

racial identity
*15.10.4: Identity and Culture- Race/Ethnicity, Gender, and Sexuality in Adolescence*

reasoning skills
*15.8.4: Cognition in Adolescence*

relatedness
*15.11.4: Relationships with Friends and Family in Early Adulthood*

relationship development
*15.11.2: The Development of Self in Early Adulthood*

relationships
15.9.1: What Does Psychology Say?
15.9.2: Becoming an Adult
religion and identity
15.11.3: Identity Development in Context in Early Adulthood
religious identity
15.11.3: Identity Development in Context in Early Adulthood
reproductive health
15.9.4: Sexuality in Early Adulthood
Resilience
15.10.3: Emotional and Self-Development in Adolescence
15.10.4: Identity and Culture- Race/Ethnicity, Gender, and Sexuality in Adolescence
15.8.2: Physical Growth and Development in Adolescence
retrieval
15.16.4: Information Processing Theory- Memory, Encoding, and Storage
risk and reward
15.8.5: Decision-Making and Risky Behaviors in Adolescence
risk factors
15.8.2: Physical Growth and Development in Adolescence
15.9.4: Sexuality in Early Adulthood
risk perception
15.8.5: Decision-Making and Risky Behaviors in Adolescence
risky behaviors
15.8.5: Decision-Making and Risky Behaviors in Adolescence
rites of passage
15.10.2: Theories of Adolescent Socioemotional Development
role change
15.11.2: The Development of Self in Early Adulthood
role of adolescence
15.10.2: Theories of Adolescent Socioemotional Development
romance
15.11.1: What Does Psychology Say?
romantic relationships
12.2: Finding Love, Intimacy, and Romance in Early Adulthood
15.10.5: Social Contexts in Adolescence
rural areas
15.11.5: Contexts- School and Work Settings in Early Adulthood

## S

safety
15.8.5: Decision-Making and Risky Behaviors in Adolescence
school absenteeism
15.10.5: Social Contexts in Adolescence
school performance
15.10.3: Emotional and Self-Development in Adolescence
scouting
15.10.6: Family and Community Contexts in Adolescence
screen time
15.10.5: Social Contexts in Adolescence
secondary sex characteristics
15.8.3: Puberty, Sexual Behavior, and Sexual Health in Adolescence
secure attachment
12.2: Finding Love, Intimacy, and Romance in Early Adulthood
13.10: Attachment in Young Adulthood
sensory memory
15.16.4: Information Processing Theory- Memory, Encoding, and Storage
sex education impact
15.8.3: Puberty, Sexual Behavior, and Sexual Health in Adolescence
sex education types
15.8.3: Puberty, Sexual Behavior, and Sexual Health in Adolescence
sexting
15.10.5: Social Contexts in Adolescence
sexual assault
15.9.4: Sexuality in Early Adulthood
sexual behavior
15.9.4: Sexuality in Early Adulthood
sexual consent
15.9.4: Sexuality in Early Adulthood
sexual education
15.8.3: Puberty, Sexual Behavior, and Sexual Health in Adolescence
15.9.4: Sexuality in Early Adulthood
sexual exploration
15.9.4: Sexuality in Early Adulthood
sexual harassment
15.10.5: Social Contexts in Adolescence
15.9.4: Sexuality in Early Adulthood
sexual harassment prevention
15.9.4: Sexuality in Early Adulthood
sexual health
15.8.3: Puberty, Sexual Behavior, and Sexual Health in Adolescence
15.9.4: Sexuality in Early Adulthood
sexual identity
15.11.3: Identity Development in Context in Early Adulthood
15.9.4: Sexuality in Early Adulthood
sexual intercourse
15.8.3: Puberty, Sexual Behavior, and Sexual Health in Adolescence
sexual maturity
15.9.4: Sexuality in Early Adulthood
sexual orientation
15.10.4: Identity and Culture- Race/Ethnicity, Gender, and Sexuality in Adolescence
15.9.4: Sexuality in Early Adulthood
sexual orientation milestones
15.10.4: Identity and Culture- Race/Ethnicity, Gender, and Sexuality in Adolescence
sexual transmitted infections
15.9.4: Sexuality in Early Adulthood
sexual violence
15.9.4: Sexuality in Early Adulthood
sexual violence prevention
15.9.4: Sexuality in Early Adulthood
sexuality
13.6: Sexuality
15.9.1: What Does Psychology Say?
15.9.4: Sexuality in Early Adulthood
similarity
13.11: Relationships and Intimacy
singlehood
13.12: Emerging and Established Adult Lifestyles
skin
15.9.3: Physical Health and Growth in Early Adulthood
sleep
15.15.4: Adolescent Health- Sleep, Diet, and Exercise
15.8.2: Physical Growth and Development in Adolescence
15.9.3: Physical Health and Growth in Early Adulthood
sleep patterns
15.8.1: What Does Psychology Say?
social clock
15.11.2: The Development of Self in Early Adulthood
social cognition
15.9.5: Cognitive Development in Early Adulthood
social connectedness
15.11.2: The Development of Self in Early Adulthood
social construct
15.17.4: Development of Gender Identity
social context
15.11.4: Relationships with Friends and Family in Early Adulthood
social development
15.10.5: Social Contexts in Adolescence
social disparities
15.9.3: Physical Health and Growth in Early Adulthood
social dynamics
15.10.2: Theories of Adolescent Socioemotional Development
social identity
15.17.2: James Marcia – Theory of Identity Development
social influences
15.8.4: Cognition in Adolescence
social interactions
15.10.3: Emotional and Self-Development in Adolescence
social investment theory
15.11.2: The Development of Self in Early Adulthood
social neuroscience
15.8.5: Decision-Making and Risky Behaviors in Adolescence
social standing
15.8.5: Decision-Making and Risky Behaviors in Adolescence
social support
15.11.4: Relationships with Friends and Family in Early Adulthood
social trends
15.10.1: What Does Psychology Say?
societal attitudes
15.9.4: Sexuality in Early Adulthood
sociocultural influences on puberty
15.8.3: Puberty, Sexual Behavior, and Sexual Health in Adolescence

socioeconomic status
15.10.6: Family and Community Contexts in Adolescence
15.11.4: Relationships with Friends and Family in Early Adulthood
15.11.5: Contexts- School and Work Settings in Early Adulthood
15.9.2: Becoming an Adult
15.9.3: Physical Health and Growth in Early Adulthood
socioemotional development
15.10.4: Identity and Culture- Race/Ethnicity, Gender, and Sexuality in Adolescence
sports participation
15.10.6: Family and Community Contexts in Adolescence
status dropout rate
15.16.5: Adolescence (A Time of Transitions)
STEM fields
15.9.6: Contexts - Higher Education and Work Achievement in Early Adulthood
stepfamilies
15.10.6: Family and Community Contexts in Adolescence
stigmatized identities
15.11.3: Identity Development in Context in Early Adulthood
stimulation and reward
15.8.5: Decision-Making and Risky Behaviors in Adolescence
STIs
15.8.3: Puberty, Sexual Behavior, and Sexual Health in Adolescence
15.9.4: Sexuality in Early Adulthood
stress
15.9.3: Physical Health and Growth in Early Adulthood
stress management
15.9.3: Physical Health and Growth in Early Adulthood
student athlete
15.11.3: Identity Development in Context in Early Adulthood
student loans
15.9.6: Contexts - Higher Education and Work Achievement in Early Adulthood
substance use
15.8.5: Decision-Making and Risky Behaviors in Adolescence
15.9.3: Physical Health and Growth in Early Adulthood
supportive relationships
15.11.4: Relationships with Friends and Family in Early Adulthood
survival orientation
15.16.3: Cognitive Theorists- Piaget, Elkind, Kohlberg, and Gilligan
synaptic pruning
15.15.2: Brain Growth
15.8.2: Physical Growth and Development in Adolescence

T

Tabula Rosa
15.14.1: Historical Theories on Development
technology in education
15.9.6: Contexts - Higher Education and Work Achievement in Early Adulthood
technology in relationships
12.2: Finding Love, Intimacy, and Romance in Early Adulthood
teen behavior
15.8.5: Decision-Making and Risky Behaviors in Adolescence
teen birth rates
15.8.3: Puberty, Sexual Behavior, and Sexual Health in Adolescence
teen growth
15.8.5: Decision-Making and Risky Behaviors in Adolescence
teen pregnancy
15.8.3: Puberty, Sexual Behavior, and Sexual Health in Adolescence
teenage behavior
15.8.1: What Does Psychology Say?
teenage development
15.10.1: What Does Psychology Say?
Teenage Driving
14.7: Teenage Drivers
teenage experiences
15.10.2: Theories of Adolescent Socioemotional Development
temperament
13.9: Psychosocial Development in Emerging and Early Adulthood
Title IX
15.9.4: Sexuality in Early Adulthood
transferable skills
15.11.5: Contexts- School and Work Settings in Early Adulthood
transgender
13.5: Gender
15.17.4: Development of Gender Identity
transition to adulthood
15.8.1: What Does Psychology Say?
transitions
15.11.1: What Does Psychology Say?

U

unplanned pregnancy
15.8.3: Puberty, Sexual Behavior, and Sexual Health in Adolescence

V

violence
15.17.11: Violence and Abuse
Vocational Identity
15.17.3: Development of Identity and Self Concept - Who am I?
vocational training
15.11.5: Contexts- School and Work Settings in Early Adulthood
15.9.6: Contexts - Higher Education and Work Achievement in Early Adulthood
volunteering
15.9.1: What Does Psychology Say?

W

wisdom
15.16.6: Wisdom and Risk-Taking
workforce entry
15.9.6: Contexts - Higher Education and Work Achievement in Early Adulthood
workforce trends
15.9.6: Contexts - Higher Education and Work Achievement in Early Adulthood

Y

young adult sexuality
15.9.4: Sexuality in Early Adulthood
young adulthood
15.9.2: Becoming an Adult
young adults
12.2: Finding Love, Intimacy, and Romance in Early Adulthood
15.11.5: Contexts- School and Work Settings in Early Adulthood
15.9.6: Contexts - Higher Education and Work Achievement in Early Adulthood
young adults with disabilities
15.11.5: Contexts- School and Work Settings in Early Adulthood
youth empowerment
15.10.6: Family and Community Contexts in Adolescence

This page titled Index is shared under a license and was authored, remixed, and/or curated by Nicole Rosa and Kathryn Frazier.

# GLOSSARY

## S

**Sample Word 1** | Sample Definition 1

This page titled Glossary is shared under a license and was authored, remixed, and/or curated by Nicole Rosa and Kathryn Frazier.

# DETAILED LICENSING

## Overview

**Title:** Psychology of Adolescence

**Webpages:** 307

**Applicable Restrictions:** Noncommercial

**All licenses found:**

- CC BY 4.0: 52.1% (160 pages)
- CC BY-NC-SA 4.0: 42.7% (131 pages)
- Undeclared: 4.6% (14 pages)
- Unknown License: 0.7% (2 pages)
- Unknown License: 0% (0 page)

## By Page


- Psychology of Adolescence - *Unknown License*
  - Front Matter - *Undeclared*
    - TitlePage - *Undeclared*
    - InfoPage - *Undeclared*
    - Table of Contents - *Undeclared*
    - Licensing - *Undeclared*
  - 1: Studying Adolescent Psychology - *CC BY-NC-SA 4.0*
    - 1.1: Human Development - *CC BY-NC-SA 4.0*
    - 1.2: Key Issues in Human Development - *CC BY-NC-SA 4.0*
    - 1.3: The Forbidden Experiment - *CC BY-NC-SA 4.0*
    - 1.4: The Lifespan Perspective - *CC BY-NC-SA 4.0*
    - 1.5: Glossary - *CC BY-NC-SA 4.0*
  - 2: Psychological Research - *CC BY-NC-SA 4.0*
    - 2.1: The Scientific Method - *CC BY-NC-SA 4.0*
    - 2.2: Quantitative and Qualitative Approaches to Research - *CC BY-NC-SA 4.0*
    - 2.3: Descriptive Research - *CC BY-NC-SA 4.0*
    - 2.4: Methods of Data Collection - *CC BY-NC-SA 4.0*
    - 2.5: Analyzing Data- Correlational and Experimental Research - *CC BY-NC-SA 4.0*
    - 2.6: Correlational Research - *CC BY-NC-SA 4.0*
    - 2.7: Experimental Research - *CC BY-NC-SA 4.0*
    - 2.8: Developmental Research Designs - *CC BY-NC-SA 4.0*
    - 2.9: Challenges in Conducting Developmental Research - *CC BY-NC-SA 4.0*
    - 2.10: Glossary - *CC BY-NC-SA 4.0*
  - 3: Psychological Approaches - *CC BY-NC-SA 4.0*
    - 3.1: Understanding Theories - *CC BY-NC-SA 4.0*
    - 3.2: History of Developmental Psychology - *CC BY-NC-SA 4.0*
    - 3.3: Contemporary Psychological Approaches - *CC BY-NC-SA 4.0*
    - 3.4: Psychodynamic Approach - *CC BY-NC-SA 4.0*
    - 3.5: Behavioral Approach - *CC BY-NC-SA 4.0*
    - 3.6: Humanistic Approach - *CC BY-NC-SA 4.0*
    - 3.7: Cognitive Approach - *CC BY-NC-SA 4.0*
    - 3.8: Contextual Approach - *CC BY-NC-SA 4.0*
    - 3.9: Biopsychology and Evolutionary Psychology - *CC BY-NC-SA 4.0*
    - 3.10: Comparing Contemporary Approaches - *CC BY-NC-SA 4.0*
    - 3.11: Glossary - *CC BY-NC-SA 4.0*
  - 4: Physical Development during Adolescence - *CC BY-NC-SA 4.0*
    - 4.1: Puberty Begins - *CC BY-NC-SA 4.0*
    - 4.2: Sexual Development - *CC BY-NC-SA 4.0*
    - 4.3: Health Concerns during Adolescence - *CC BY-NC-SA 4.0*
    - 4.4: Glossary - *CC BY-NC-SA 4.0*
  - 5: Brain Development during Adolescence - *CC BY-NC-SA 4.0*
    - 5.1: Brain Basics - *CC BY-NC-SA 4.0*
    - 5.2: Brain Changes during Adolescence - *CC BY-NC-SA 4.0*
    - 5.3: Adolescent Sleep - *CC BY-NC-SA 4.0*
    - 5.4: Teens and Risk-Taking Behavior - *CC BY-NC-SA 4.0*
    - 5.5: Inside the Teenage Brain - *CC BY-NC-SA 4.0*
    - 5.6: Behavioral and Psychological Adjustment - *CC BY-NC-SA 4.0*
    - 5.7: Glossary - *CC BY-NC-SA 4.0*
  - 6: Cognitive Changes during Adolescence - *CC BY-*

*NC-SA 4.0*
- 6.1: Constructivist Theories - *CC BY-NC-SA 4.0*
- 6.2: Psychological Constructivism - *CC BY-NC-SA 4.0*
- 6.3: Social Constructivism - *CC BY-NC-SA 4.0*
- 6.4: Information Processing Theories - *CC BY-NC-SA 4.0*
- 6.5: Intelligence - *CC BY-NC-SA 4.0*
- 6.6: Glossary - *CC BY-NC-SA 4.0*

◦ 7: Learning, Achievement, and Work in Adolescence - *CC BY-NC-SA 4.0*
- 7.1: Education - *CC BY-NC-SA 4.0*
- 7.2: Understanding Learning Difficulties - *CC BY-NC-SA 4.0*
- 7.3: Academic Achievement - *CC BY-NC-SA 4.0*
- 7.4: Work and Career - *CC BY-NC-SA 4.0*
- 7.5: Glossary - *CC BY-NC-SA 4.0*

◦ 8: Identity Development - *CC BY-NC-SA 4.0*
- 8.1: Identity Formation - *CC BY-NC-SA 4.0*
- 8.2: Identity Development Theory - *CC BY-NC-SA 4.0*
- 8.3: Domains of Identity - *CC BY-NC-SA 4.0*
- 8.4: Glossary - *CC BY-NC-SA 4.0*

◦ 9: Moral Development - *CC BY-NC-SA 4.0*
- 9.1: Theories of Moral Development - *CC BY-NC-SA 4.0*
- 9.2: Modern Views of Moral Development - *CC BY-NC-SA 4.0*
- 9.3: Influences on Moral Development - *CC BY-NC-SA 4.0*
- 9.4: Moral Reasoning in Adolescence - *CC BY-NC-SA 4.0*
- 9.5: Glossary - *CC BY-NC-SA 4.0*

◦ 10: Changing Family Relationships - *CC BY-NC-SA 4.0*
- 10.1: Key Components of Good Parenting - *CC BY-NC-SA 4.0*
- 10.2: Family Life - *CC BY-NC-SA 4.0*
- 10.3: Child Maltreatment - *CC BY-NC-SA 4.0*
- 10.4: Stress and Development - *CC BY-NC-SA 4.0*
- 10.5: Glossary - *CC BY-NC-SA 4.0*

◦ 11: Changing Peer Relationships - *CC BY-NC-SA 4.0*
- 11.1: Peer Relationships - *CC BY-NC-SA 4.0*
- 11.2: Sociometric Peer Status - *CC BY-NC-SA 4.0*
- 11.3: Bullying - *CC BY-NC-SA 4.0*
- 11.4: Teen Dating - *CC BY-NC-SA 4.0*
- 11.5: Glossary - *CC BY-NC-SA 4.0*

◦ 12: Intimacy and Sexuality - *Unknown License*
- 12.1: Sexual Development in Adolescence - *CC BY 4.0*
- 12.2: Finding Love, Intimacy, and Romance in Early Adulthood - *CC BY 4.0*

◦ 13: Emerging and Early Adulthood - *CC BY-NC-SA 4.0*
- 13.1: Emerging Adulthood - *CC BY-NC-SA 4.0*
- 13.2: When Does Adulthood Begin? - *CC BY-NC-SA 4.0*
- 13.3: Physical Development in Emerging and Established Adulthood - *CC BY-NC-SA 4.0*
- 13.4: A Healthy but Risky Time - *CC BY-NC-SA 4.0*
- 13.5: Gender - *CC BY-NC-SA 4.0*
- 13.6: Sexuality - *CC BY-NC-SA 4.0*
- 13.7: Cognitive Development in Emerging and Early Adulthood - *CC BY-NC-SA 4.0*
- 13.8: Education and Career - *CC BY-NC-SA 4.0*
- 13.9: Psychosocial Development in Emerging and Early Adulthood - *CC BY-NC-SA 4.0*
- 13.10: Attachment in Young Adulthood - *CC BY-NC-SA 4.0*
- 13.11: Relationships and Intimacy - *CC BY-NC-SA 4.0*
- 13.12: Emerging and Established Adult Lifestyles - *CC BY-NC-SA 4.0*
- 13.13: Intimate Partner Abuse - *CC BY-NC-SA 4.0*
- 13.14: Parenthood - *CC BY-NC-SA 4.0*
- 13.C: COVID-19 Impact on Emerging and Established Adulthood - *CC BY-NC-SA 4.0*
- 13.R: Emerging and Early Adulthood (References) - *CC BY-NC-SA 4.0*

◦ 14: Issues in Adolescence - *Undeclared*
- 14.1: Adolescent Sleep - *CC BY-NC-SA 4.0*
- 14.2: Health During Adolescence - *CC BY 4.0*
- 14.3: Eating Disorders - *CC BY-NC-SA 4.0*
- 14.4: Adolescents' Relationships - *CC BY-NC-SA 4.0*
- 14.5: Adolescent Sexual Activity - *CC BY-NC-SA 4.0*
- 14.6: COVID-19 Impact on Adolescence - *CC BY-NC-SA 4.0*
- 14.7: Teenage Drivers - *CC BY-NC-SA 4.0*
- 14.8: Behavioral and Psychological Adjustment - *CC BY 4.0*
- 14.9: Teenagers and Working - *CC BY-NC-SA 4.0*

◦ 15: Extra chapters/content - *Undeclared*
- 15.1: Adolescence - *CC BY-NC-SA 4.0*
  - 15.1.1: Growth in Adolescence - *CC BY-NC-SA 4.0*
  - 15.1.2: Adolescent Brain - *CC BY-NC-SA 4.0*
  - 15.1.3: Cognitive Development in Adolescence - *CC BY-NC-SA 4.0*
  - 15.1.4: Psychosocial Development in Adolescence - *CC BY-NC-SA 4.0*
  - 15.1.R: Adolescence (References) - *CC BY-NC-SA 4.0*
- 15.2: Adolescence - *CC BY 4.0*
  - 15.2.1: Why It Matters- Adolescence - *CC BY 4.0*
  - 15.2.2: Introduction to Physical Growth and Development in Adolescence - *CC BY 4.0*
  - 15.2.3: Physical Development during Adolescence - *CC BY 4.0*

- 15.2.4: Brain Development During Adolescence - *CC BY 4.0*
- 15.2.5: Introduction to Cognitive Development in Adolescence - *CC BY 4.0*
- 15.2.6: Cognitive Development during Adolescence - *CC BY 4.0*
- 15.2.7: Introduction to Emotional and Social Development in Adolescence - *CC BY 4.0*
- 15.2.8: Social Development during Adolescence - *CC BY 4.0*
- 15.2.9: Putting It Together- Adolescence - *CC BY 4.0*
- 15.2.10: Discussion- Adolescence - *CC BY 4.0*
- 15.2.11: Assignment- Build an Interactive - *CC BY 4.0*
- 15.2.12: Discussion- Adolescence Interview Assignment - *CC BY 4.0*

- 15.3: Adolescence - *CC BY 4.0*
  - 15.3.1: Introduction to Adolescence - *CC BY 4.0*
  - 15.3.2: Physical Development - *CC BY 4.0*
  - 15.3.3: Cognitive Development - *CC BY 4.0*
  - 15.3.4: Social Development - *CC BY 4.0*
  - 15.3.5: Adolescence - *CC BY 4.0*
  - 15.3.6: Adolescence - *CC BY 4.0*
- 15.4: Adolescence - *CC BY 4.0*
  - 15.4.1: Introduction to Adolescense - *CC BY 4.0*
  - 15.4.2: Physical Development - *CC BY 4.0*
  - 15.4.3: Cognitive Development - *CC BY 4.0*
  - 15.4.4: Social Development - *CC BY 4.0*
  - 15.4.5: Lecture- Adolescence - *CC BY 4.0*
- 15.5: Early Adulthood - *CC BY 4.0*
  - 15.5.1: Introduction to Early Adulthood - *CC BY 4.0*
  - 15.5.2: Physical Development - *CC BY 4.0*
  - 15.5.3: Cognitive Development - *CC BY 4.0*
  - 15.5.4: Psychosocial Development - *CC BY 4.0*
  - 15.5.5: Types of Love - *CC BY 4.0*
  - 15.5.6: Love Attitude Scale - *CC BY 4.0*
  - 15.5.7: Love Styles - *CC BY 4.0*
  - 15.5.8: Adolescence and Early Adulthood - *CC BY 4.0*
  - 15.5.9: Early Adulthood - *CC BY 4.0*
  - 15.5.10: Early Adulthood - *CC BY 4.0*
  - 15.5.11: Adolescence and Early Adulthood - *CC BY 4.0*
  - 15.5.12: Unit 3 Exam - *CC BY 4.0*
- 15.6: Early Adulthood - *CC BY 4.0*
  - 15.6.1: Lecture- Early Adulthood - *CC BY 4.0*
  - 15.6.2: Physical Development - *CC BY 4.0*
  - 15.6.3: Cognitive Development - *CC BY 4.0*
  - 15.6.4: Psychosocial Development - *CC BY 4.0*
  - 15.6.5: Activity- Love Attitude Scale - *CC BY 4.0*
  - 15.6.6: Types of Love - *CC BY 4.0*
  - 15.6.7: Work and Personality - *CC BY 4.0*
- 15.7: Young Adulthood - *CC BY-NC-SA 4.0*
  - 15.7.1: Emerging Adulthood - *CC BY-NC-SA 4.0*
  - 15.7.2: Health and Physical Development for Young Adults - *CC BY-NC-SA 4.0*
  - 15.7.3: Gender in Young Adulthood - *CC BY-NC-SA 4.0*
  - 15.7.4: Sexuality in Young Adulthood - *CC BY-NC-SA 4.0*
  - 15.7.5: Cognitive Development in Young Adulthood - *CC BY-NC-SA 4.0*
  - 15.7.6: Work and Education in Young Adulthood - *CC BY-NC-SA 4.0*
  - 15.7.7: Psychosocial Development in Young Adulthood - *CC BY-NC-SA 4.0*
  - 15.7.8: Young Adult Lifestyles - *CC BY-NC-SA 4.0*
  - 15.7.9: Part 4 References - *CC BY-NC-SA 4.0*
- 15.8: Physical and Cognitive Development in Adolescence (Ages 12 to 18) - *CC BY 4.0*
  - 15.8.1: What Does Psychology Say? - *CC BY 4.0*
  - 15.8.2: Physical Growth and Development in Adolescence - *CC BY 4.0*
  - 15.8.3: Puberty, Sexual Behavior, and Sexual Health in Adolescence - *CC BY 4.0*
  - 15.8.4: Cognition in Adolescence - *CC BY 4.0*
  - 15.8.5: Decision-Making and Risky Behaviors in Adolescence - *CC BY 4.0*
  - 15.8.6: Key Terms - *CC BY 4.0*
  - 15.8.7: Summary - *CC BY 4.0*
  - 15.8.8: Review Questions - *CC BY 4.0*
  - 15.8.9: Check Your Understanding Questions - *CC BY 4.0*
  - 15.8.10: Personal Application Questions - *CC BY 4.0*
  - 15.8.11: Essay Questions - *CC BY 4.0*
- 15.9: Physical and Cognitive Development in Early Adulthood (Ages 18 to 29) - *CC BY 4.0*
  - 15.9.1: What Does Psychology Say? - *CC BY 4.0*
  - 15.9.2: Becoming an Adult - *CC BY 4.0*
  - 15.9.3: Physical Health and Growth in Early Adulthood - *CC BY 4.0*
  - 15.9.4: Sexuality in Early Adulthood - *CC BY 4.0*
  - 15.9.5: Cognitive Development in Early Adulthood - *CC BY 4.0*
  - 15.9.6: Contexts - Higher Education and Work Achievement in Early Adulthood - *CC BY 4.0*
  - 15.9.7: Key Terms - *CC BY 4.0*

- 15.9.8: Summary - *CC BY 4.0*
- 15.9.9: Review Questions - *CC BY 4.0*
- 15.9.10: Check Your Understanding Questions - *CC BY 4.0*
- 15.9.11: Personal Application Questions - *CC BY 4.0*
- 15.9.12: Essay Questions - *CC BY 4.0*

- 15.10: Social and Emotional Development in Adolescence (Ages 12 to 18) - *CC BY 4.0*
  - 15.10.1: What Does Psychology Say? - *CC BY 4.0*
  - 15.10.2: Theories of Adolescent Socioemotional Development - *CC BY 4.0*
  - 15.10.3: Emotional and Self-Development in Adolescence - *CC BY 4.0*
  - 15.10.4: Identity and Culture- Race/ Ethnicity, Gender, and Sexuality in Adolescence - *CC BY 4.0*
  - 15.10.5: Social Contexts in Adolescence - *CC BY 4.0*
  - 15.10.6: Family and Community Contexts in Adolescence - *CC BY 4.0*
  - 15.10.7: Key Terms - *CC BY 4.0*
  - 15.10.8: Summary - *CC BY 4.0*
  - 15.10.9: Review Questions - *CC BY 4.0*
  - 15.10.10: Check Your Understanding Questions - *CC BY 4.0*
  - 15.10.11: Personal Application Questions - *CC BY 4.0*
  - 15.10.12: Essay Questions - *CC BY 4.0*
- 15.11: Social and Emotional Development in Early Adulthood (Ages 18 to 29) - *CC BY 4.0*
  - 15.11.1: What Does Psychology Say? - *CC BY 4.0*
  - 15.11.2: The Development of Self in Early Adulthood - *CC BY 4.0*
  - 15.11.3: Identity Development in Context in Early Adulthood - *CC BY 4.0*
  - 15.11.4: Relationships with Friends and Family in Early Adulthood - *CC BY 4.0*
  - 15.11.5: Contexts- School and Work Settings in Early Adulthood - *CC BY 4.0*
  - 15.11.6: Key Terms - *CC BY 4.0*
  - 15.11.7: Summary - *CC BY 4.0*
  - 15.11.8: Review Questions - *CC BY 4.0*
  - 15.11.9: Check Your Understanding Questions - *CC BY 4.0*
  - 15.11.10: Personal Application Questions - *CC BY 4.0*
  - 15.11.11: Essay Questions - *CC BY 4.0*
- 15.12: Early Adulthood - *CC BY 4.0*
  - 15.12.1: Why It Matters- Early Adulthood - *CC BY 4.0*
  - 15.12.2: Introduction to Physical Development in Early Adulthood - *CC BY 4.0*
  - 15.12.3: Developmental Tasks of Early Adulthood - *CC BY 4.0*
  - 15.12.4: Physical Development in Early Adulthood - *CC BY 4.0*
  - 15.12.5: Sex and Fertility in Early Adulthood - *CC BY 4.0*
  - 15.12.6: Introduction to Cognitive Development in Early Adulthood - *CC BY 4.0*
  - 15.12.7: Cognitive Development in Early Adulthood - *CC BY 4.0*
  - 15.12.8: Education and Work - *CC BY 4.0*
  - 15.12.9: Introduction to Theories of Adult Psychosocial Development - *CC BY 4.0*
  - 15.12.10: Theories of Early Adult Psychosocial Development - *CC BY 4.0*
  - 15.12.11: Emerging Adulthood - *CC BY 4.0*
  - 15.12.12: Introduction to Relationships in Early Adulthood - *CC BY 4.0*
  - 15.12.13: Attraction and Love - *CC BY 4.0*
  - 15.12.14: Trends in Dating, Cohabitation, and Marriage - *CC BY 4.0*
  - 15.12.15: Parenting - *CC BY 4.0*
  - 15.12.16: Putting It Together- Early Adulthood - *CC BY 4.0*
  - 15.12.17: Discussion- Early Adulthood - *CC BY 4.0*
  - 15.12.18: Assignment- Emerging Adulthood in the Media - *CC BY 4.0*
  - 15.12.19: Discussion- Dating and Marriage Interview Assignment - *CC BY 4.0*
  - 15.12.20: Assignment- My Development Journal - *CC BY 4.0*
- 15.13: Research Methods - *Undeclared*
  - 15.13.1: Introduction to Research in Lifespan Development - *CC BY 4.0*
  - 15.13.2: Research Methods - *CC BY 4.0*
  - 15.13.3: Correlational and Experimental Research - *CC BY 4.0*
  - 15.13.4: Developmental Research Designs - *CC BY 4.0*
  - 15.13.5: Challenges Conducting Developmental Research - *CC BY 4.0*
  - 15.13.6: Conducting Ethical Research - *CC BY-NC-SA 4.0*
  - 15.13.7: Extras - Keep/Delete - *Undeclared*
    - 15.13.7.1: Research Methods - *CC BY-NC-SA 4.0*
    - 15.13.7.2: Research Designs - *CC BY-NC-SA 4.0*
    - 15.13.7.3: Developmental Research Designs - *CC BY-NC-SA 4.0*
    - 15.13.7.4: The Cohort Effect - *CC BY-NC-SA 4.0*
- 15.14: Developmental Theories - *CC BY-NC-SA 4.0*
  - 15.14.1: Historical Theories on Development - *CC BY-NC-SA 4.0*
    - 15.14.1.1: Psychodynamic Theory - *CC BY-NC-SA 4.0*

- 15.14.2: Contemporary Theories on Development - *CC BY-NC-SA 4.0*
  - 15.14.2.1: Psychosocial Theory - *CC BY-NC-SA 4.0*
  - 15.14.2.2: Exploring Behaviour - *CC BY-NC-SA 4.0*
  - 15.14.2.3: Exploring Cognition - *CC BY-NC-SA 4.0*
- 15.15: Adolescence - Physical Development - *CC BY 4.0*
  - 15.15.1: Physical Growth - *CC BY 4.0*
  - 15.15.2: Brain Growth - *CC BY 4.0*
  - 15.15.3: Physical Changes in Adolescence - *CC BY 4.0*
  - 15.15.4: Adolescent Health- Sleep, Diet, and Exercise - *CC BY 4.0*
  - 15.15.5: Maintaining Emotional Health - *CC BY 4.0*
  - 15.15.6: Disorders and Syndromes - *CC BY 4.0*
  - 15.15.S: Summary - *CC BY 4.0*
- 15.16: Adolescence - Cognitive Development - *CC BY 4.0*
  - 15.16.1: Cognitive Development in Adolescence - *CC BY 4.0*
  - 15.16.2: Cognitive Changes in the Brain - *CC BY 4.0*
  - 15.16.3: Cognitive Theorists- Piaget, Elkind, Kohlberg, and Gilligan - *CC BY 4.0*
  - 15.16.4: Information Processing Theory- Memory, Encoding, and Storage - *CC BY 4.0*
  - 15.16.5: Adolescence (A Time of Transitions) - *CC BY 4.0*
  - 15.16.6: Wisdom and Risk-Taking - *CC BY 4.0*
  - 15.16.S: Summary - *CC BY 4.0*
- 15.17: Adolescence - Social Emotional Development - *CC BY 4.0*
  - 15.17.1: Erik Erikson – Theory of Psychosocial Development - *CC BY 4.0*
  - 15.17.2: James Marcia – Theory of Identity Development - *CC BY 4.0*
  - 15.17.3: Development of Identity and Self Concept - Who am I? - *CC BY 4.0*
  - 15.17.4: Development of Gender Identity - *CC BY 4.0*
  - 15.17.5: Socialization Agents During Adolescence - *CC BY 4.0*
  - 15.17.6: Community, Society, and Culture - *CC BY 4.0*
  - 15.17.7: Media- Influences on Teens - *CC BY 4.0*
  - 15.17.8: Development of Sexual Identity - *CC BY 4.0*
  - 15.17.9: Antisocial Behavior in Adolescence - *CC BY 4.0*
  - 15.17.10: Antisocial Behaviors, Violence, and Child Abuse - *CC BY 4.0*
  - 15.17.11: Violence and Abuse - *CC BY 4.0*
  - 15.17.12: Emerging Adulthood - The Bridge Between Adolescence and Adulthood - *CC BY 4.0*
  - 15.17.S: Summary - *CC BY 4.0*
- 15.18: Education - *CC BY-NC-SA 4.0*
  - 15.18.1: School During Adolescence - *CC BY 4.0*
- 15.19: Identity Formation - *CC BY 4.0*
  - 15.19.1: Moral Reasoning During Adolescence - *CC BY 4.0*

◦ Back Matter - *Undeclared*
- Index - *Undeclared*
- Glossary - *Undeclared*
- Detailed Licensing - *Undeclared*
- Detailed Licensing - *Undeclared*


This page titled Psychology of Adolescence is shared under a license and was authored, remixed, and/or curated by Nicole Rosa & Kathryn Frazier.

# DETAILED LICENSING

## Overview

**Title:** Psychology of Adolescence

**Webpages:** 307

**Applicable Restrictions:** Noncommercial

**All licenses found:**

- CC BY 4.0: 52.1% (160 pages)
- CC BY-NC-SA 4.0: 42.7% (131 pages)
- Undeclared: 4.6% (14 pages)
- Unknown License: 0.7% (2 pages)
- Unknown License: 0% (0 page)

## By Page


- Psychology of Adolescence - *Unknown License*
  - Front Matter - *Undeclared*
    - TitlePage - *Undeclared*
    - InfoPage - *Undeclared*
    - Table of Contents - *Undeclared*
    - Licensing - *Undeclared*
  - 1: Studying Adolescent Psychology - *CC BY-NC-SA 4.0*
    - 1.1: Human Development - *CC BY-NC-SA 4.0*
    - 1.2: Key Issues in Human Development - *CC BY-NC-SA 4.0*
    - 1.3: The Forbidden Experiment - *CC BY-NC-SA 4.0*
    - 1.4: The Lifespan Perspective - *CC BY-NC-SA 4.0*
    - 1.5: Glossary - *CC BY-NC-SA 4.0*
  - 2: Psychological Research - *CC BY-NC-SA 4.0*
    - 2.1: The Scientific Method - *CC BY-NC-SA 4.0*
    - 2.2: Quantitative and Qualitative Approaches to Research - *CC BY-NC-SA 4.0*
    - 2.3: Descriptive Research - *CC BY-NC-SA 4.0*
    - 2.4: Methods of Data Collection - *CC BY-NC-SA 4.0*
    - 2.5: Analyzing Data- Correlational and Experimental Research - *CC BY-NC-SA 4.0*
    - 2.6: Correlational Research - *CC BY-NC-SA 4.0*
    - 2.7: Experimental Research - *CC BY-NC-SA 4.0*
    - 2.8: Developmental Research Designs - *CC BY-NC-SA 4.0*
    - 2.9: Challenges in Conducting Developmental Research - *CC BY-NC-SA 4.0*
    - 2.10: Glossary - *CC BY-NC-SA 4.0*
  - 3: Psychological Approaches - *CC BY-NC-SA 4.0*
    - 3.1: Understanding Theories - *CC BY-NC-SA 4.0*
    - 3.2: History of Developmental Psychology - *CC BY-NC-SA 4.0*
    - 3.3: Contemporary Psychological Approaches - *CC BY-NC-SA 4.0*
    - 3.4: Psychodynamic Approach - *CC BY-NC-SA 4.0*
    - 3.5: Behavioral Approach - *CC BY-NC-SA 4.0*
    - 3.6: Humanistic Approach - *CC BY-NC-SA 4.0*
    - 3.7: Cognitive Approach - *CC BY-NC-SA 4.0*
    - 3.8: Contextual Approach - *CC BY-NC-SA 4.0*
    - 3.9: Biopsychology and Evolutionary Psychology - *CC BY-NC-SA 4.0*
    - 3.10: Comparing Contemporary Approaches - *CC BY-NC-SA 4.0*
    - 3.11: Glossary - *CC BY-NC-SA 4.0*
  - 4: Physical Development during Adolescence - *CC BY-NC-SA 4.0*
    - 4.1: Puberty Begins - *CC BY-NC-SA 4.0*
    - 4.2: Sexual Development - *CC BY-NC-SA 4.0*
    - 4.3: Health Concerns during Adolescence - *CC BY-NC-SA 4.0*
    - 4.4: Glossary - *CC BY-NC-SA 4.0*
  - 5: Brain Development during Adolescence - *CC BY-NC-SA 4.0*
    - 5.1: Brain Basics - *CC BY-NC-SA 4.0*
    - 5.2: Brain Changes during Adolescence - *CC BY-NC-SA 4.0*
    - 5.3: Adolescent Sleep - *CC BY-NC-SA 4.0*
    - 5.4: Teens and Risk-Taking Behavior - *CC BY-NC-SA 4.0*
    - 5.5: Inside the Teenage Brain - *CC BY-NC-SA 4.0*
    - 5.6: Behavioral and Psychological Adjustment - *CC BY-NC-SA 4.0*
    - 5.7: Glossary - *CC BY-NC-SA 4.0*
  - 6: Cognitive Changes during Adolescence - *CC BY-*

NC-SA 4.0
- 6.1: Constructivist Theories - CC BY-NC-SA 4.0
- 6.2: Psychological Constructivism - CC BY-NC-SA 4.0
- 6.3: Social Constructivism - CC BY-NC-SA 4.0
- 6.4: Information Processing Theories - CC BY-NC-SA 4.0
- 6.5: Intelligence - CC BY-NC-SA 4.0
- 6.6: Glossary - CC BY-NC-SA 4.0

◦ 7: Learning, Achievement, and Work in Adolescence - CC BY-NC-SA 4.0
- 7.1: Education - CC BY-NC-SA 4.0
- 7.2: Understanding Learning Difficulties - CC BY-NC-SA 4.0
- 7.3: Academic Achievement - CC BY-NC-SA 4.0
- 7.4: Work and Career - CC BY-NC-SA 4.0
- 7.5: Glossary - CC BY-NC-SA 4.0

◦ 8: Identity Development - CC BY-NC-SA 4.0
- 8.1: Identity Formation - CC BY-NC-SA 4.0
- 8.2: Identity Development Theory - CC BY-NC-SA 4.0
- 8.3: Domains of Identity - CC BY-NC-SA 4.0
- 8.4: Glossary - CC BY-NC-SA 4.0

◦ 9: Moral Development - CC BY-NC-SA 4.0
- 9.1: Theories of Moral Development - CC BY-NC-SA 4.0
- 9.2: Modern Views of Moral Development - CC BY-NC-SA 4.0
- 9.3: Influences on Moral Development - CC BY-NC-SA 4.0
- 9.4: Moral Reasoning in Adolescence - CC BY-NC-SA 4.0
- 9.5: Glossary - CC BY-NC-SA 4.0

◦ 10: Changing Family Relationships - CC BY-NC-SA 4.0
- 10.1: Key Components of Good Parenting - CC BY-NC-SA 4.0
- 10.2: Family Life - CC BY-NC-SA 4.0
- 10.3: Child Maltreatment - CC BY-NC-SA 4.0
- 10.4: Stress and Development - CC BY-NC-SA 4.0
- 10.5: Glossary - CC BY-NC-SA 4.0

◦ 11: Changing Peer Relationships - CC BY-NC-SA 4.0
- 11.1: Peer Relationships - CC BY-NC-SA 4.0
- 11.2: Sociometric Peer Status - CC BY-NC-SA 4.0
- 11.3: Bullying - CC BY-NC-SA 4.0
- 11.4: Teen Dating - CC BY-NC-SA 4.0
- 11.5: Glossary - CC BY-NC-SA 4.0

◦ 12: Intimacy and Sexuality - Unknown License
- 12.1: Sexual Development in Adolescence - CC BY 4.0
- 12.2: Finding Love, Intimacy, and Romance in Early Adulthood - CC BY 4.0

◦ 13: Emerging and Early Adulthood - CC BY-NC-SA 4.0
- 13.1: Emerging Adulthood - CC BY-NC-SA 4.0
- 13.2: When Does Adulthood Begin? - CC BY-NC-SA 4.0
- 13.3: Physical Development in Emerging and Established Adulthood - CC BY-NC-SA 4.0
- 13.4: A Healthy but Risky Time - CC BY-NC-SA 4.0
- 13.5: Gender - CC BY-NC-SA 4.0
- 13.6: Sexuality - CC BY-NC-SA 4.0
- 13.7: Cognitive Development in Emerging and Early Adulthood - CC BY-NC-SA 4.0
- 13.8: Education and Career - CC BY-NC-SA 4.0
- 13.9: Psychosocial Development in Emerging and Early Adulthood - CC BY-NC-SA 4.0
- 13.10: Attachment in Young Adulthood - CC BY-NC-SA 4.0
- 13.11: Relationships and Intimacy - CC BY-NC-SA 4.0
- 13.12: Emerging and Established Adult Lifestyles - CC BY-NC-SA 4.0
- 13.13: Intimate Partner Abuse - CC BY-NC-SA 4.0
- 13.14: Parenthood - CC BY-NC-SA 4.0
- 13.C: COVID-19 Impact on Emerging and Established Adulthood - CC BY-NC-SA 4.0
- 13.R: Emerging and Early Adulthood (References) - CC BY-NC-SA 4.0

◦ 14: Issues in Adolescence - Undeclared
- 14.1: Adolescent Sleep - CC BY-NC-SA 4.0
- 14.2: Health During Adolescence - CC BY 4.0
- 14.3: Eating Disorders - CC BY-NC-SA 4.0
- 14.4: Adolescents' Relationships - CC BY-NC-SA 4.0
- 14.5: Adolescent Sexual Activity - CC BY-NC-SA 4.0
- 14.6: COVID-19 Impact on Adolescence - CC BY-NC-SA 4.0
- 14.7: Teenage Drivers - CC BY-NC-SA 4.0
- 14.8: Behavioral and Psychological Adjustment - CC BY 4.0
- 14.9: Teenagers and Working - CC BY-NC-SA 4.0

◦ 15: Extra chapters/content - Undeclared
- 15.1: Adolescence - CC BY-NC-SA 4.0
  - 15.1.1: Growth in Adolescence - CC BY-NC-SA 4.0
  - 15.1.2: Adolescent Brain - CC BY-NC-SA 4.0
  - 15.1.3: Cognitive Development in Adolescence - CC BY-NC-SA 4.0
  - 15.1.4: Psychosocial Development in Adolescence - CC BY-NC-SA 4.0
  - 15.1.R: Adolescence (References) - CC BY-NC-SA 4.0
- 15.2: Adolescence - CC BY 4.0
  - 15.2.1: Why It Matters- Adolescence - CC BY 4.0
  - 15.2.2: Introduction to Physical Growth and Development in Adolescence - CC BY 4.0
  - 15.2.3: Physical Development during Adolescence - CC BY 4.0

- 15.2.4: Brain Development During Adolescence - *CC BY 4.0*
- 15.2.5: Introduction to Cognitive Development in Adolescence - *CC BY 4.0*
- 15.2.6: Cognitive Development during Adolescence - *CC BY 4.0*
- 15.2.7: Introduction to Emotional and Social Development in Adolescence - *CC BY 4.0*
- 15.2.8: Social Development during Adolescence - *CC BY 4.0*
- 15.2.9: Putting It Together- Adolescence - *CC BY 4.0*
- 15.2.10: Discussion- Adolescence - *CC BY 4.0*
- 15.2.11: Assignment- Build an Interactive - *CC BY 4.0*
- 15.2.12: Discussion- Adolescence Interview Assignment - *CC BY 4.0*

- 15.3: Adolescence - *CC BY 4.0*
  - 15.3.1: Introduction to Adolescence - *CC BY 4.0*
  - 15.3.2: Physical Development - *CC BY 4.0*
  - 15.3.3: Cognitive Development - *CC BY 4.0*
  - 15.3.4: Social Development - *CC BY 4.0*
  - 15.3.5: Adolescence - *CC BY 4.0*
  - 15.3.6: Adolescence - *CC BY 4.0*
- 15.4: Adolescence - *CC BY 4.0*
  - 15.4.1: Introduction to Adolescense - *CC BY 4.0*
  - 15.4.2: Physical Development - *CC BY 4.0*
  - 15.4.3: Cognitive Development - *CC BY 4.0*
  - 15.4.4: Social Development - *CC BY 4.0*
  - 15.4.5: Lecture- Adolescence - *CC BY 4.0*
- 15.5: Early Adulthood - *CC BY 4.0*
  - 15.5.1: Introduction to Early Adulthood - *CC BY 4.0*
  - 15.5.2: Physical Development - *CC BY 4.0*
  - 15.5.3: Cognitive Development - *CC BY 4.0*
  - 15.5.4: Psychosocial Development - *CC BY 4.0*
  - 15.5.5: Types of Love - *CC BY 4.0*
  - 15.5.6: Love Attitude Scale - *CC BY 4.0*
  - 15.5.7: Love Styles - *CC BY 4.0*
  - 15.5.8: Adolescence and Early Adulthood - *CC BY 4.0*
  - 15.5.9: Early Adulthood - *CC BY 4.0*
  - 15.5.10: Early Adulthood - *CC BY 4.0*
  - 15.5.11: Adolescence and Early Adulthood - *CC BY 4.0*
  - 15.5.12: Unit 3 Exam - *CC BY 4.0*
- 15.6: Early Adulthood - *CC BY 4.0*
  - 15.6.1: Lecture- Early Adulthood - *CC BY 4.0*
  - 15.6.2: Physical Development - *CC BY 4.0*
  - 15.6.3: Cognitive Development - *CC BY 4.0*
  - 15.6.4: Psychosocial Development - *CC BY 4.0*
  - 15.6.5: Activity- Love Attitude Scale - *CC BY 4.0*
  - 15.6.6: Types of Love - *CC BY 4.0*
  - 15.6.7: Work and Personality - *CC BY 4.0*
- 15.7: Young Adulthood - *CC BY-NC-SA 4.0*
  - 15.7.1: Emerging Adulthood - *CC BY-NC-SA 4.0*
  - 15.7.2: Health and Physical Development for Young Adults - *CC BY-NC-SA 4.0*
  - 15.7.3: Gender in Young Adulthood - *CC BY-NC-SA 4.0*
  - 15.7.4: Sexuality in Young Adulthood - *CC BY-NC-SA 4.0*
  - 15.7.5: Cognitive Development in Young Adulthood - *CC BY-NC-SA 4.0*
  - 15.7.6: Work and Education in Young Adulthood - *CC BY-NC-SA 4.0*
  - 15.7.7: Psychosocial Development in Young Adulthood - *CC BY-NC-SA 4.0*
  - 15.7.8: Young Adult Lifestyles - *CC BY-NC-SA 4.0*
  - 15.7.9: Part 4 References - *CC BY-NC-SA 4.0*
- 15.8: Physical and Cognitive Development in Adolescence (Ages 12 to 18) - *CC BY 4.0*
  - 15.8.1: What Does Psychology Say? - *CC BY 4.0*
  - 15.8.2: Physical Growth and Development in Adolescence - *CC BY 4.0*
  - 15.8.3: Puberty, Sexual Behavior, and Sexual Health in Adolescence - *CC BY 4.0*
  - 15.8.4: Cognition in Adolescence - *CC BY 4.0*
  - 15.8.5: Decision-Making and Risky Behaviors in Adolescence - *CC BY 4.0*
  - 15.8.6: Key Terms - *CC BY 4.0*
  - 15.8.7: Summary - *CC BY 4.0*
  - 15.8.8: Review Questions - *CC BY 4.0*
  - 15.8.9: Check Your Understanding Questions - *CC BY 4.0*
  - 15.8.10: Personal Application Questions - *CC BY 4.0*
  - 15.8.11: Essay Questions - *CC BY 4.0*
- 15.9: Physical and Cognitive Development in Early Adulthood (Ages 18 to 29) - *CC BY 4.0*
  - 15.9.1: What Does Psychology Say? - *CC BY 4.0*
  - 15.9.2: Becoming an Adult - *CC BY 4.0*
  - 15.9.3: Physical Health and Growth in Early Adulthood - *CC BY 4.0*
  - 15.9.4: Sexuality in Early Adulthood - *CC BY 4.0*
  - 15.9.5: Cognitive Development in Early Adulthood - *CC BY 4.0*
  - 15.9.6: Contexts - Higher Education and Work Achievement in Early Adulthood - *CC BY 4.0*
  - 15.9.7: Key Terms - *CC BY 4.0*

- 15.9.8: Summary - *CC BY 4.0*
- 15.9.9: Review Questions - *CC BY 4.0*
- 15.9.10: Check Your Understanding Questions - *CC BY 4.0*
- 15.9.11: Personal Application Questions - *CC BY 4.0*
- 15.9.12: Essay Questions - *CC BY 4.0*

- 15.10: Social and Emotional Development in Adolescence (Ages 12 to 18) - *CC BY 4.0*
  - 15.10.1: What Does Psychology Say? - *CC BY 4.0*
  - 15.10.2: Theories of Adolescent Socioemotional Development - *CC BY 4.0*
  - 15.10.3: Emotional and Self-Development in Adolescence - *CC BY 4.0*
  - 15.10.4: Identity and Culture- Race/ Ethnicity, Gender, and Sexuality in Adolescence - *CC BY 4.0*
  - 15.10.5: Social Contexts in Adolescence - *CC BY 4.0*
  - 15.10.6: Family and Community Contexts in Adolescence - *CC BY 4.0*
  - 15.10.7: Key Terms - *CC BY 4.0*
  - 15.10.8: Summary - *CC BY 4.0*
  - 15.10.9: Review Questions - *CC BY 4.0*
  - 15.10.10: Check Your Understanding Questions - *CC BY 4.0*
  - 15.10.11: Personal Application Questions - *CC BY 4.0*
  - 15.10.12: Essay Questions - *CC BY 4.0*
- 15.11: Social and Emotional Development in Early Adulthood (Ages 18 to 29) - *CC BY 4.0*
  - 15.11.1: What Does Psychology Say? - *CC BY 4.0*
  - 15.11.2: The Development of Self in Early Adulthood - *CC BY 4.0*
  - 15.11.3: Identity Development in Context in Early Adulthood - *CC BY 4.0*
  - 15.11.4: Relationships with Friends and Family in Early Adulthood - *CC BY 4.0*
  - 15.11.5: Contexts- School and Work Settings in Early Adulthood - *CC BY 4.0*
  - 15.11.6: Key Terms - *CC BY 4.0*
  - 15.11.7: Summary - *CC BY 4.0*
  - 15.11.8: Review Questions - *CC BY 4.0*
  - 15.11.9: Check Your Understanding Questions - *CC BY 4.0*
  - 15.11.10: Personal Application Questions - *CC BY 4.0*
  - 15.11.11: Essay Questions - *CC BY 4.0*
- 15.12: Early Adulthood - *CC BY 4.0*
  - 15.12.1: Why It Matters- Early Adulthood - *CC BY 4.0*
  - 15.12.2: Introduction to Physical Development in Early Adulthood - *CC BY 4.0*
  - 15.12.3: Developmental Tasks of Early Adulthood - *CC BY 4.0*
  - 15.12.4: Physical Development in Early Adulthood - *CC BY 4.0*
  - 15.12.5: Sex and Fertility in Early Adulthood - *CC BY 4.0*
  - 15.12.6: Introduction to Cognitive Development in Early Adulthood - *CC BY 4.0*
  - 15.12.7: Cognitive Development in Early Adulthood - *CC BY 4.0*
  - 15.12.8: Education and Work - *CC BY 4.0*
  - 15.12.9: Introduction to Theories of Adult Psychosocial Development - *CC BY 4.0*
  - 15.12.10: Theories of Early Adult Psychosocial Development - *CC BY 4.0*
  - 15.12.11: Emerging Adulthood - *CC BY 4.0*
  - 15.12.12: Introduction to Relationships in Early Adulthood - *CC BY 4.0*
  - 15.12.13: Attraction and Love - *CC BY 4.0*
  - 15.12.14: Trends in Dating, Cohabitation, and Marriage - *CC BY 4.0*
  - 15.12.15: Parenting - *CC BY 4.0*
  - 15.12.16: Putting It Together- Early Adulthood - *CC BY 4.0*
  - 15.12.17: Discussion- Early Adulthood - *CC BY 4.0*
  - 15.12.18: Assignment- Emerging Adulthood in the Media - *CC BY 4.0*
  - 15.12.19: Discussion- Dating and Marriage Interview Assignment - *CC BY 4.0*
  - 15.12.20: Assignment- My Development Journal - *CC BY 4.0*
- 15.13: Research Methods - *Undeclared*
  - 15.13.1: Introduction to Research in Lifespan Development - *CC BY 4.0*
  - 15.13.2: Research Methods - *CC BY 4.0*
  - 15.13.3: Correlational and Experimental Research - *CC BY 4.0*
  - 15.13.4: Developmental Research Designs - *CC BY 4.0*
  - 15.13.5: Challenges Conducting Developmental Research - *CC BY 4.0*
  - 15.13.6: Conducting Ethical Research - *CC BY-NC-SA 4.0*
  - 15.13.7: Extras - Keep/Delete - *Undeclared*
    - 15.13.7.1: Research Methods - *CC BY-NC-SA 4.0*
    - 15.13.7.2: Research Designs - *CC BY-NC-SA 4.0*
    - 15.13.7.3: Developmental Research Designs - *CC BY-NC-SA 4.0*
    - 15.13.7.4: The Cohort Effect - *CC BY-NC-SA 4.0*
- 15.14: Developmental Theories - *CC BY-NC-SA 4.0*
  - 15.14.1: Historical Theories on Development - *CC BY-NC-SA 4.0*
    - 15.14.1.1: Psychodynamic Theory - *CC BY-NC-SA 4.0*

        - 15.14.2: Contemporary Theories on Development - *CC BY-NC-SA 4.0*
            - 15.14.2.1: Psychosocial Theory - *CC BY-NC-SA 4.0*
            - 15.14.2.2: Exploring Behaviour - *CC BY-NC-SA 4.0*
            - 15.14.2.3: Exploring Cognition - *CC BY-NC-SA 4.0*
    - 15.15: Adolescence - Physical Development - *CC BY 4.0*
        - 15.15.1: Physical Growth - *CC BY 4.0*
        - 15.15.2: Brain Growth - *CC BY 4.0*
        - 15.15.3: Physical Changes in Adolescence - *CC BY 4.0*
        - 15.15.4: Adolescent Health- Sleep, Diet, and Exercise - *CC BY 4.0*
        - 15.15.5: Maintaining Emotional Health - *CC BY 4.0*
        - 15.15.6: Disorders and Syndromes - *CC BY 4.0*
        - 15.15.S: Summary - *CC BY 4.0*
    - 15.16: Adolescence - Cognitive Development - *CC BY 4.0*
        - 15.16.1: Cognitive Development in Adolescence - *CC BY 4.0*
        - 15.16.2: Cognitive Changes in the Brain - *CC BY 4.0*
        - 15.16.3: Cognitive Theorists- Piaget, Elkind, Kohlberg, and Gilligan - *CC BY 4.0*
        - 15.16.4: Information Processing Theory- Memory, Encoding, and Storage - *CC BY 4.0*
        - 15.16.5: Adolescence (A Time of Transitions) - *CC BY 4.0*
        - 15.16.6: Wisdom and Risk-Taking - *CC BY 4.0*
        - 15.16.S: Summary - *CC BY 4.0*
    - 15.17: Adolescence - Social Emotional Development - *CC BY 4.0*
        - 15.17.1: Erik Erikson – Theory of Psychosocial Development - *CC BY 4.0*
        - 15.17.2: James Marcia – Theory of Identity Development - *CC BY 4.0*
        - 15.17.3: Development of Identity and Self Concept - Who am I? - *CC BY 4.0*
        - 15.17.4: Development of Gender Identity - *CC BY 4.0*
        - 15.17.5: Socialization Agents During Adolescence - *CC BY 4.0*
        - 15.17.6: Community, Society, and Culture - *CC BY 4.0*
        - 15.17.7: Media- Influences on Teens - *CC BY 4.0*
        - 15.17.8: Development of Sexual Identity - *CC BY 4.0*
        - 15.17.9: Antisocial Behavior in Adolescence - *CC BY 4.0*
        - 15.17.10: Antisocial Behaviors, Violence, and Child Abuse - *CC BY 4.0*
        - 15.17.11: Violence and Abuse - *CC BY 4.0*
        - 15.17.12: Emerging Adulthood - The Bridge Between Adolescence and Adulthood - *CC BY 4.0*
        - 15.17.S: Summary - *CC BY 4.0*
    - 15.18: Education - *CC BY-NC-SA 4.0*
        - 15.18.1: School During Adolescence - *CC BY 4.0*
    - 15.19: Identity Formation - *CC BY 4.0*
        - 15.19.1: Moral Reasoning During Adolescence - *CC BY 4.0*
- Back Matter - *Undeclared*
    - Index - *Undeclared*
    - Glossary - *Undeclared*
    - Detailed Licensing - *Undeclared*
    - Detailed Licensing - *Undeclared*


This page titled Psychology of Adolescence is shared under a license and was authored, remixed, and/or curated by Nicole Rosa & Kathryn Frazier.