TOGETHER - THE SCIENCE OF SOCIAL PSYCHOLOGY



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Together - The Science of Social Psychology

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CHAPTER OVERVIEW

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1.1: An Introduction to the Science of Social Psychology

By Robert Biswas-Diener

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The science of social psychology investigates the ways other people affect our thoughts, feelings, and behaviors. It is an exciting field of study because it is so familiar and relevant to our day-to-day lives. Social psychologists study a wide range of topics that can roughly be grouped into 5 categories: attraction, attitudes, peace & conflict, social influence, and social cognition.

learning Objectives

- Define social psychology and understand how it is different from other areas of psychology.
- Understand “levels of analysis” and why this concept is important to science.
- List at least three major areas of study in social psychology.
- Define the “need to belong”.

Introduction

We live in a world where, increasingly, people of all backgrounds have smart phones. In economically developing societies, cellular towers are often less expensive to install than traditional landlines. In many households in industrialized societies, each person has his or her own mobile phone instead of using a shared home phone. As this technology becomes increasingly common, curious researchers have wondered what effect phones might have on relationships. Do you believe that smart phones help foster closer relationships? Or do you believe that smart phones can hinder connections? In a series of studies, researchers have discovered that the mere presence of a mobile phone lying on a table can interfere with relationships. In studies of conversations between both strangers and close friends—conversations occurring in research laboratories and in coffee shops—mobile phones appeared to distract people from connecting with one another. The participants in these studies reported lower conversation quality, lower trust, and lower levels of empathy for the other person (Przybylski & Weinstein, 2013). This is not to discount the usefulness of mobile phones, of course. It is merely a reminder that they are better used in some situations than they are in others. It is also a real-world example of how social psychology can help produce insights about the ways we understand and interact with one another.



Social psychology is interested in how other people affect our thoughts, feelings, and behaviors. Researchers study group interactions, the way culture shapes our thinking, and even how technology impacts human relationships. [Image: Matthew G, https://goo.gl/En2JSi, CC BY 2.0, goo.gl/BRvSA7]

Social psychology is the branch of psychological science mainly concerned with understanding how the presence of others affects our thoughts, feelings, and behaviors. Just as clinical psychology focuses on mental disorders and their treatment, and developmental psychology investigates the way people change across their lifespan, social psychology has its own focus. As the name suggests, this science is all about investigating the ways groups function, the costs and benefits of social status, the influences of culture, and all the other psychological processes involving two or more people.

Social psychology is such an exciting science precisely because it tackles issues that are so familiar and so relevant to our everyday life. Humans are "social animals." Like bees and deer, we live together in groups. Unlike those animals, however, people are unique, in that we care a great deal about our relationships. In fact, a classic study of life stress found that the most stressful events in a person's life—the death of a spouse, divorce, and going to jail—are so painful because they entail the loss of relationships (Holmes & Rahe, 1967). We spend a huge amount of time thinking about and interacting with other people, and researchers are interested in understanding these thoughts and actions. Giving up a seat on the bus for another person is an example of social psychology. So is disliking a person because he is wearing a shirt with the logo of a rival sports team. Flirting, conforming, arguing, trusting, competing—these are all examples of topics that interest social psychology researchers.

At times, science can seem abstract and far removed from the concerns of daily life. When neuroscientists discuss the workings of the anterior cingulate cortex, for example, it might sound important. But the specific parts of the brain and their functions do not always seem directly connected to the stuff you care about: parking tickets, holding hands, or getting a job. Social psychology feels so close to home because it often deals with universal psychological processes to which people can easily relate. For example, people have a powerful **need to belong**(Baumeister & Leary, 1995). It doesn't matter if a person is from Israel, Mexico, or the Philippines; we all have a strong need to make friends, start families, and spend time together. We fulfill this need by doing things

such as joining teams and clubs, wearing clothing that represents “our group,” and identifying ourselves based on national or religious affiliation. It feels good to belong to a group. Research supports this idea. In a study of the most and least happy people, the differentiating factor was not gender, income, or religion; it was having high-quality relationships (Diener & Seligman, 2002). Even introverts report being happier when they are in social situations (Pavot, Diener & Fujita, 1990). Further evidence can be found by looking at the negative psychological experiences of people who do not feel they belong. People who feel lonely or isolated are more vulnerable to depression and problems with physical health (Cacioppo, & Patrick, 2008).



The feelings we experience as members of groups – as teammates, fellow citizens, followers of a particular faith - play a huge role in our identities and in our happiness. [Image: leonardo samrani, https://goo.gl/jHVWXR, CC BY 2.0, goo.gl/BRvSA7]

Social Psychology is a Science

The need to belong is also a useful example of the ways the various aspects of psychology fit together. Psychology is a science that can be sub-divided into specialties such as “abnormal psychology” (the study of mental illness) or “developmental psychology” (the study of how people develop across the life span). In daily life, however, we don’t stop and examine our thoughts or behaviors as being distinctly social versus developmental versus personality-based versus clinical. In daily life, these all blend together. For example, the need to belong is rooted in developmental psychology. Developmental psychologists have long paid attention to the importance of attaching to a caregiver, feeling safe and supported during childhood, and the tendency to conform to peer pressure during adolescence. Similarly, clinical psychologists—those who research mental disorders-- have pointed to people feeling a lack of belonging to help explain loneliness, depression, and other psychological pains. In practice, psychologists separate concepts into categories such as “clinical,” “developmental,” and “social” only out of scientific necessity. It is easier to simplify thoughts, feelings, and behaviors in order to study them. Each psychological sub-discipline has its own unique approaches to research. You may have noticed that this is almost always how psychology is taught, as well. You take a course in personality, another in human sexuality, and a third in gender studies, as if these topics are unrelated. In day-to-day life, however, these distinctions do not actually exist, and there is heavy overlap between the various areas of psychology.

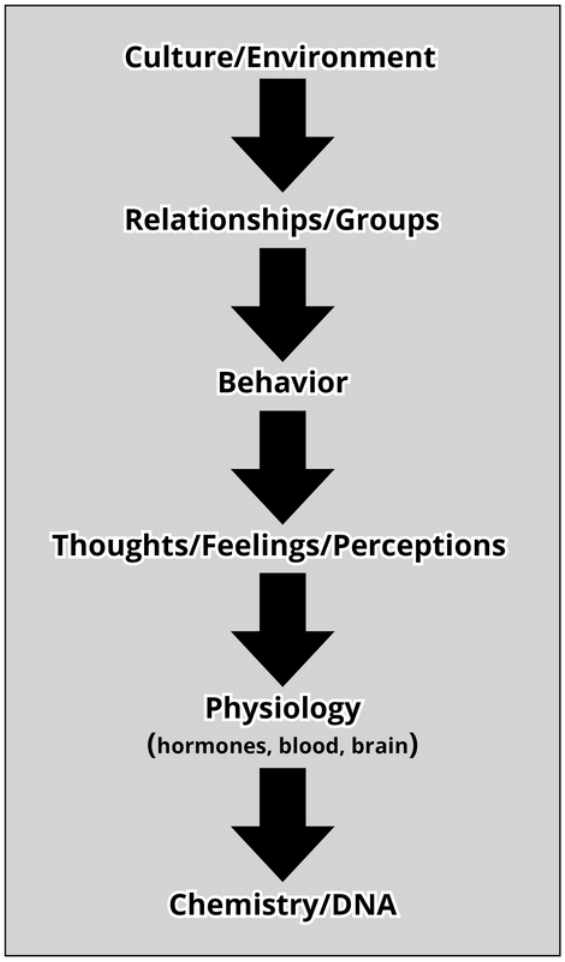


Figure 11.1.1: The levels of analysis in psychology.

In psychology, there are varying **levels of analysis**. Figure 11.1.1 summarizes the different levels at which scientists might understand a single event. Take the example of a toddler watching her mother make a phone call: the toddler is curious, and is using **observational learning** to teach herself about this machine called a telephone. At the most specific levels of analysis, we might understand that various neurochemical processes are occurring in the toddler's brain. We might be able to use imaging techniques to see that the cerebellum, among other parts of the brain, is activated with electrical energy. If we could "pull back" our scientific lens, we might also be able to gain insight into the toddler's own experience of the phone call. She might be confused, interested, or jealous. Moving up to the next level of analysis, we might notice a change in the toddler's behavior: during the call she furrows her brow, squints her eyes, and stares at her mother and the phone. She might even reach out and grab at the phone. At still another level of analysis, we could see the ways that her relationships enter into the equation. We might observe, for instance, that the toddler frowns and grabs at the phone when her mother uses it, but plays happily and ignores it when her stepbrother makes a call. All of these chemical, emotional, behavioral, and social processes occur simultaneously. None of them is the objective truth. Instead, each offers clues into better understanding what, psychologically speaking, is happening.

Social psychologists attend to all levels of analysis but—historically—this branch of psychology has emphasized the higher levels of analysis. Researchers in this field are drawn to questions related to relationships, groups, and culture. This means that they frame their research hypotheses in these terms. Imagine for a moment that you are a social researcher. In your daily life, you notice that older men on average seem to talk about their feelings less than do younger men. You might want to explore your **hypothesis** by recording natural conversations between males of different ages. This would allow you to see if there was evidence supporting your original observation. It would also allow you to begin to sift through all the factors that might influence this phenomenon: What happens when an older man talks to a younger man? What happens when an older man talks to a stranger versus his best friend? What happens when two highly educated men interact versus two working class men? Exploring each of these questions focuses on interactions, behavior, and culture rather than on perceptions, hormones, or DNA.



Social psychologists have developed unique methods for studying attitudes and behaviors that help answer questions that may not be possible to answer in a laboratory. Naturalistic observation of real world interactions, for example, would be a method well suited for understanding more about men and how they share their feelings. [Image: Michael Coghlan, https://goo.gl/dGc3JV, CC BY-SA 2.0, goo.gl/rxiUsF]

In part, this focus on complex relationships and interactions is one of the things that makes research in social psychology so difficult. High quality research often involves the ability to control the environment, as in the case of laboratory experiments. The research laboratory, however, is artificial, and what happens there may not translate to the more natural circumstances of life. This is why social psychologists have developed their own set of unique methods for studying attitudes and social behavior. For example, they use naturalistic observation to see how people behave when they don't know they are being watched. Whereas people in the laboratory might report that they personally hold no racist views or opinions (biases most people wouldn't readily admit to), if you were to observe how close they sat next to people of other ethnicities while riding the bus, you might discover a behavioral clue to their actual attitudes and preferences.

What is Included in Social Psychology?

Social psychology is the study of group processes: how we behave in groups, and how we feel and think about one another. While it is difficult to summarize the many areas of social psychology research, it can be helpful to lump them into major categories as a starting point to wrap our minds around. There is, in reality, no specific number of definitive categories, but for the purpose of illustration, let's use five. Most social psychology research topics fall into one (but sometimes more) of each of these areas:

Attraction

A large amount of study in social psychology has focused on the process of **attraction**. Think about a young adult going off to college for the first time. He takes an art history course and sits next to a young woman he finds attractive. This feeling raises several interesting questions: Where does the attraction come from? Is it biological or learned? Why do his standards for beauty

differ somewhat from those of his best friend? The study of attraction covers a huge range of topics. It can begin with first impressions, then extend to courtship and commitment. It involves the concepts of beauty, sex, and evolution. Attraction researchers might study stalking behavior. They might research divorce or remarriage. They might study changing standards of beauty across decades.



When a study of attractiveness was conducted with Maasai tribal people the researchers found that when participants rated the attractiveness of their friends they used different criteria than when they rated the attractiveness of strangers – a pattern that was also discovered in a sample of people from the United States. [Image: DFID, https://goo.gl/5FfSjt, CC BY 2.0, goo.gl/BRvSA7]

In a series of studies focusing on the topic of attraction, researchers were curious how people make judgments of the extent to which the faces of their friends and of strangers are good looking (Wirtz, Biswas-Diener, Diener & Drogos, 2011). To do this, the researchers showed a set of photographs of faces of young men and women to several assistants who were **blind to the research hypothesis**. Some of the people in the photos were Caucasian, some were African-American, and some were Maasai, a tribe of traditional people from Kenya. The assistants were asked to rate the various facial features in the photos, including skin smoothness, eye size, prominence of cheekbones, symmetry (how similar the left and the right halves of the face are), and other characteristics. The photos were then shown to the research participants—of the same three ethnicities as the people in the photos—who were asked to rate the faces for overall attractiveness. Interestingly, when rating the faces of strangers, white people, Maasai, and African-Americans were in general agreement about which faces were better looking. Not only that, but there was high consistency in which *specific* facial features were associated with being good looking. For instance, across ethnicities and cultures, everyone seemed to find smooth skin more attractive than blemished skin. Everyone seemed to also agree that larger chins made men more attractive, but not women.

Then came an interesting discovery. The researchers found that Maasai tribal people agreed about the faces of strangers—but *not* about the faces of people they knew! Two people might look at the same photo of someone they knew; one would give a thumbs up for attractiveness, the other one, not so much. It appeared that friends were using some other standard of beauty than simply nose, eyes, skin, and other facial features. To explore this further, the researchers conducted a second study in the United States. They brought university students into their laboratory in pairs. Each pair were friends; some were same-sex friends and some were opposite-sex friends. They had their photographs taken and were then asked to privately rate each other's attractiveness, along with photos of other participants whom they did not know (strangers). Friends were also asked to rate each other on personality traits, including "admirable," "generous," "likable," "outgoing," "sensitive," and "warm."

In doing this, the researchers discovered two things. First, they found the exact same pattern as in the earlier study: when the university students rated strangers, they focused on actual facial features, such as skin smoothness and large eyes, to make their

judgments (whether or not they realized it). But when it came to the hotness-factor of their friends, these features appeared not to be very important. Suddenly, likable personality characteristics were a better predictor of who was considered good looking. This makes sense. Attractiveness is, in part, an evolutionary and biological process. Certain features such as smooth skin are signals of health and reproductive fitness—something especially important when scoping out strangers. Once we know a person, however, it is possible to swap those biological criteria for psychological ones. People tend to be attracted not just to muscles and symmetrical faces but also to kindness and generosity. As more information about a person's personality becomes available, it becomes the most important aspect of a person's attractiveness.

Understanding how attraction works is more than an intellectual exercise; it can also lead to better interventions. Insights from studies on attraction can find their way into public policy conversations, couples therapy, and sex education programs.

Attitudes



Social psychologists are interested in finding ways to apply their research to improve the lives of individuals and benefit communities and society as a whole. For example researchers are looking at ways to change the general public's attitudes about stigmatized groups such as the homeless. [Image: Sascha Kohlmann, http://goo.gl/L436hN, CC BY-SA 2.0, goo.gl/rxiUsF]

Social psychology shares with its intellectual cousins sociology and political science an interest in **attitudes**. Attitudes are opinions, feelings, and beliefs about a person, concept, or group. People hold attitudes about all types of things: the films they see, political issues, and what constitutes a good date. Social psychology researchers are interested in what attitudes people hold, where these attitudes come from, and how they change over time. Researchers are especially interested in social attitudes people hold about categories of people, such as the elderly, military veterans, or people with mental disabilities.

Among the most studied topics in attitude research are stereotyping and prejudice. Although people often use these words interchangeably, they are actually different concepts. **Stereotyping** is a way of using information shortcuts about a group to effectively navigate social situations or make decisions. For instance, you might hold a stereotype that elderly people are physically slower and frailer than twenty-year-olds. If so, you are more likely to treat interactions with the elderly in a different manner than interactions with younger people. Although you might delight in jumping on your friend's back, punching a buddy in the arm, or jumping out and scaring a friend you probably do not engage in these behaviors with the elderly. Stereotypical information may or may not be correct. Also, stereotypical information may be positive or negative. Regardless of accuracy, all people use stereotypes, because they are efficient and inescapable ways to deal with huge amounts of social information. It is important to keep in mind,

however, that stereotypes, even if they are correct in general, likely do not apply to every member of the group. As a result, it can seem unfair to judge an individual based on perceived group norms.

Prejudice, on the other hand, refers to how a person feels about an individual based on their group membership. For example, someone with a prejudice against tattoos may feel uncomfortable sitting on the metro next to a young man with multiple, visible tattoos. In this case, the person is pre-judging the man with tattoos based on group members (people with tattoos) rather than getting to know the man as an individual. Like stereotypes, prejudice can be positive or negative.

Discrimination occurs when a person is biased against an individual, simply because of the individual's membership in a social category. For instance, if you were to learn that a person has gone to rehabilitation for alcohol treatment, it might be unfair to treat him or her as untrustworthy. You might hold a stereotype that people who have been involved with drugs are untrustworthy or that they have an arrest record. Discrimination would come when you *act* on that stereotype by, for example, refusing to hire the person for a job for which they are otherwise qualified. Understanding the psychological mechanisms of problems like prejudice can be the first step in solving them.

Social psychology focuses on basic processes, but also on applications. That is, researchers are interested in ways to make the world a better place, so they look for ways to put their discoveries into constructive practice. This can be clearly seen in studies on attitude change. In such experiments, researchers are interested in how people can overcome negative attitudes and feel more empathy towards members of other groups. Take, for example, a study by Daniel Batson and his colleagues (1997) on attitudes about people from **stigmatized groups**. In particular, the researchers were curious how college students in their study felt about homeless people. They had students listen to a recording of a fictitious homeless man—Harold Mitchell—describing his life. Half of the participants were told to be objective and fair in their consideration of his story. The other half were instructed to try to see life through Harold's eyes and imagine how he felt. After the recording finished, the participants rated their attitudes toward homeless people in general. They addressed attitudes such as "Most homeless people could get a job if they wanted to," or "Most homeless people choose to live that way." It turns out that when people are instructed to have empathy—to try to see the world through another person's eyes—it gives them not only more empathy for that individual, but also for the group as a whole. In the Batson et al. experiment (1997), the high empathy participants reported a favorable rating of homeless people than did those participants in the low empathy condition.

Studies like these are important because they reveal practical possibilities for creating a more positive society. In this case, the results tell us that it is possible for people to change their attitudes and look more favorably on people they might otherwise avoid or be prejudiced against. In fact, it appears that it takes relatively little—simply the effort to see another's point of view—to nudge people toward being a bit kinder and more generous toward one another. In a world where religious and political divisions are highly publicized, this type of research might be an important step toward working together.



Why do we fight? How do we fight? What factors contribute to successful reconciliation? Social psychologists study conflict, aggression, and violence and their research leads to many real-world applications in areas such as international relations and clinical therapy. [Image: David Shankbone, http://goo.gl/r6DWkc, CC BY 2.0, goo.gl/BRvSA7]

Social psychologists are also interested in peace and conflict. They research conflicts ranging from the small—such as a spat between lovers—to the large—such as wars between nations. Researchers are interested in why people fight, how they fight, and what the possible costs and benefits of fighting are. In particular, social psychologists are interested in the mental processes associated with conflict and reconciliation. They want to understand how emotions, thoughts, and sense of identity play into conflicts, as well as making up afterward.

Take, for instance, a 1996 study by Dov Cohen and his colleagues. They were interested in people who come from a "**culture of honor**"—that is, a cultural background that emphasizes personal or family reputation and social status. Cohen and his colleagues realized that cultural forces influence why people take offense and how they behave when others offend them. To investigate how people from a culture of honor react to aggression, the Cohen research team invited dozens of university students into the laboratory, half of whom were from a culture of honor. In their experiment, they had a **research confederate** "accidentally" bump the **research participant** as they passed one another in the hallway, then say "asshole" quietly. They discovered that people from the Northern United States were likely to laugh off the incident with amusement (only 35% became angry), while 85% of folks from the Southern United States—a culture of honor region—became angry.

In a follow-up study, the researchers were curious as to whether this anger would boil over and lead people from cultures of honor to react more violently than others (Cohen, Nisbett, Bowdle, & Schwarz, 1996). In a cafeteria setting, the researchers "accidentally" knocked over drinks of people from cultures of honor as well as drinks of people not from honor cultures. As expected, the people from honor cultures became angrier; however, they did not act out more aggressively. Interestingly, in follow-up interviews, the people from cultures of honor said they would expect their peers—other people from their culture of honor—to act violently even though they, themselves, had not. This follow-up study provides insights into the links between emotions and social behavior. It also sheds light on the ways that people perceive certain groups.

This line of research is just a single example of how social psychologists study the forces that give rise to aggression and violence. Just as in the case of attitudes, a better understanding of these forces might help researchers, therapists, and policy makers intervene more effectively in conflicts.

Social Influence

Take a moment and think about television commercials. How influenced do you think you are by the ads you see? A very common perception voiced among psychology students is "Other people are influenced by ads, but not me!" To some degree, it is an

unsettling thought that outside influences might sway us to spend money on, make decisions about, or even *feel* what they want us to. Nevertheless, none of us can escape **social influence**. Perhaps, more than any other topic, social influence is the heart and soul of social psychology. Our most famous studies deal with the ways that other people affect our behavior; they are studies on **conformity**—being persuaded to give up our own opinions and go along with the group—and **obedience**—following orders or requests from people in authority.



Many of our most common everyday-activities – eating in a restaurant for example – involve instances of social influence. We may not even be aware that our behaviors are being guided by outside forces of persuasion, but none of us is immune to social influence. [Image: Alan Light, http://goo.gl/ZdxASW, CC BY 2.0, goo.gl/T4qgSp]

Among the most researched topics is persuasion. Persuasion is the act of delivering a particular message so that it influences a person's behavior in a desired way. Your friends try to persuade you to join their group for lunch. Your parents try to persuade you to go to college and to take your studies seriously. Doctors try to persuade you to eat a healthy diet or exercise more often. And, yes, advertisers try to persuade you also. They showcase their products in a way that makes them seem useful, affordable, reliable, or cool.

One example of persuasion can be seen in a very common situation: tipping the serving staff at a restaurant. In some societies, especially in the United States, tipping is an important part of dining. As you probably know, servers hope to get a large tip in exchange for good service. One group of researchers was curious what servers do to coax diners into giving bigger tips. Occasionally, for instance, servers write a personal message of thanks on the bill. In a series of studies, the researchers were interested in how gift-giving would affect tipping. First, they had two male waiters in New York deliver a piece of foil-wrapped chocolate along with the bill at the end of the meal. Half of 66 diners received the chocolate and the other half did not. When patrons were given the unexpected sweet, they tipped, on average, 2% more (Strohmetz, Rind, Fisher & Lynn 2002).

In a follow-up study, the researchers changed the conditions. In this case, two female servers brought a small basket of assorted chocolates to the table (Strohmetz et al., 2002). In one research condition, they told diners they could pick two sweets; in a separate research condition, however, they told diners they could pick one sweet, but then—as the diners were getting ready to leave—the waiters returned and offered them a second sweet. In both situations, the diners received the same number of sweets, but in the second condition the waiters appeared to be more generous, as if they were making a personal decision to give an additional little gift. In both of these conditions the average amount of tips went up, but tips increased a whopping 21% in the "very generous" condition. The researchers concluded that giving a small gift puts people in the frame of mind to give a little something back, a principle called **reciprocity**.

Research on persuasion is very useful. Although it is tempting to dismiss it as a mere attempt by advertisers to get you to purchase goods and services, persuasion is used for many purposes. For example, medical professionals often hope people will donate their

organs after they die. Donated organs can be used to train medical students, advance scientific discovery, or save other people's lives through transplantation. For years, doctors and researchers tried to persuade people to donate, but relatively few people did. Then, policy makers offered an organ donation option for people getting their driver's license, and donations rose. When people received their license, they could tick a box that signed them up for the organ donation program. By coupling the decision to donate organs with a more common event—getting a license—policy makers were able to increase the number of donors. Then, they had the further idea of "nudging" people to donate—by making them "opt out" rather than "opt in." Now, people are automatically signed up to donate organs *unless* they make the effort to check a box indicating they don't want to. By making organ donation the default, more people have donated and more lives have been saved. This is a small but powerful example of how we can be persuaded to behave certain ways, often without even realizing what is influencing us.

Social Cognition

You, me, all of us—we spend much of our time thinking about other people. We make guesses as to their honesty, their motives, and their opinions. **Social cognition** is the term for the way we think about the social world and how we perceive others. In some sense, we are continually telling a story in our own minds about the people around us. We struggle to understand why a date failed to show up, whether we can trust the notes of a fellow student, or if our friends are laughing at our jokes because we are funny or if they are just being nice. When we make educated guesses about the efforts or motives of others, this is called **social attribution**. We are "attributing" their behavior to a particular cause. For example, we might attribute the failure of a date to arrive on time to car trouble, forgetfulness, or the wrong-headed possibility that we are not worthy of being loved.



"Am I the only one who knows how to drive? The roads are full of maniacs and idiots today!" If you've ever had these feelings while behind the wheel you likely have experienced what psychologists call the fundamental attribution error. [Image: seppschanz, http://goo.gl/eVkDIs, CC BY-NC 2.0, goo.gl/iF4hmM]

Because the information we have regarding other people's motives and behavior is not as complete as our insights into our own, we are likely to make unreliable judgments of them. Imagine, for example, that a person on the freeway speeds up behind you, follows dangerously close, then swerves around and passes you illegally. As the driver speeds off into the distance you might think to yourself, "What a jerk!" You are beginning to tell yourself a story about why that person behaved that way. Because you don't have any information about his or her situation—rushing to the hospital, or escaping a bank robbery?—you default to judgments of character: clearly, that driver is impatient, aggressive, and downright rude. If you were to do the exact same thing, however—cut someone off on the freeway—you would be less likely to attribute the same behavior to poor character, and more likely to chalk it up to the situation. (Perhaps you were momentarily distracted by the radio.) The consistent way we attribute people's actions to personality traits while overlooking situational influences is called the **fundamental attribution error**.

The fundamental attribution error can also emerge in other ways. It can include groups we belong to versus opposing groups. Imagine, for example, that you are a fan of rugby. Your favorite team is the All Blacks, from New Zealand. In one particular match, you notice how unsporting the opposing team is. They appear to pout and seem to commit an unusually high number of fouls. Their fouling behavior is clearly linked to their character; they are mean people! Yet, when a player from the All Blacks is called for a foul, you may be inclined to see that as a bad call by the referee or a product of the fact that your team is pressured from a tough schedule and a number of injuries to their star players. This mental process allows a person to maintain his or her own high self-esteem while dismissing the bad behavior of others.

Conclusion

People are more connected to one another today than at any time in history. For the first time, it is easy to have thousands of acquaintances on social media. It is easier than ever before to travel and meet people from different cultures. Businesses, schools, religious groups, political parties, and governments interact more than they ever have. For the first time, people in greater numbers live clustered in cities than live spread out across rural settings. These changes have psychological consequences. Over the last hundred years, we have seen dramatic shifts in political engagement, ethnic relations, and even the very definition of family itself.

Social psychologists are scientists who are interested in understanding the ways we relate to one another, and the impact these relationships have on us, individually and collectively. Not only can social psychology research lead to a better understanding of personal relationships, but it can lead to practical solutions for many social ills. Lawmakers, teachers and parents, therapists, and policy makers can all use this science to help develop societies with less conflict and more social support.

Outside Resources

Web: A collection of links on the topic of peace psychology
https://www.socialpsychology.org/peace.htm

Web: A great resource for all things social psychology, all in one place - Social Psychology Network
http://www.socialpsychology.org/

Web: A list of profiles of major historical figures in social psychology
https://www.socialpsychology.org/social-figures.htm

Web: A review of the history of social psychology as well as the topics of interest in the field
https://en.Wikipedia.org/wiki/Social_psychology

Web: A succinct review of major historical figures in social psychology
http://www.simplypsychology.org/soci...sychology.html

Web: An article on the definition and areas of influence of peace psychology
https://en.Wikipedia.org/wiki/Peace_psychology

Web: Article describing another way of conceptualizing levels of analysis in social psychology
http://psych.colorado.edu/~oreilly/cecn/node11.html

Web: Extended list of major historical figures in social psychology
http://www.sparknotes.com/psychology...haracters.html

Web: History and principles of social psychology
https://opentextbc.ca/socialpsychology/chapter/defining-social-psychology-history-and-principles/

Web: Links to sources on history of social psychology as well as major historical figures
https://www.socialpsychology.org/history.htm

Web: The Society for the Study of Peace, Conflict and Violence
http://www.peacepsych.org/

Discussion Questions

1. List the types of relationships you have. How do these people affect your behavior? Are there actions you perform or things you do that you might not otherwise if it weren't for them?

2. When you think about where each person in your psychology class sits, what influences the seat he or she chooses to use? Is it just a matter of personal preference or are there other influences at work?
3. Do you ever try to persuade friends or family members to do something? How do you try to persuade them? How do they try to persuade you? Give specific examples.
4. If you were a social psychologist, what would you want to research? Why? How would you go about it?

Vocabulary

Attitude

A way of thinking or feeling about a target that is often reflected in a person's behavior. Examples of attitude targets are individuals, concepts, and groups.

Attraction

The psychological process of being sexually interested in another person. This can include, for example, physical attraction, first impressions, and dating rituals.

Blind to the research hypothesis

When participants in research are not aware of what is being studied.

Conformity

Changing one's attitude or behavior to match a perceived social norm.

Culture of honor

A culture in which personal or family reputation is especially important.

Discrimination

Discrimination is behavior that advantages or disadvantages people merely based on their group membership.

Fundamental attribution error

The tendency to emphasize another person's personality traits when describing that person's motives and behaviors and overlooking the influence of situational factors.

Hypothesis

A possible explanation that can be tested through research.

Levels of analysis

Complementary views for analyzing and understanding a phenomenon.

Need to belong

A strong natural impulse in humans to form social connections and to be accepted by others.

Obedience

Responding to an order or command from a person in a position of authority.

Observational learning

Learning by observing the behavior of others.

Prejudice

An evaluation or emotion toward people based merely on their group membership.

Reciprocity

The act of exchanging goods or services. By giving a person a gift, the principle of reciprocity can be used to influence others; they then feel obligated to give back.

Research confederate

A person working with a researcher, posing as a research participant or as a bystander.

Research participant

A person being studied as part of a research program.

Social attribution

The way a person explains the motives or behaviors of others.

Social cognition

The way people process and apply information about others.

Social influence

When one person causes a change in attitude or behavior in another person, whether intentionally or unintentionally.

Social psychology

The branch of psychological science that is mainly concerned with understanding how the presence of others affects our thoughts, feelings, and behaviors.

Stereotyping

A mental process of using information shortcuts about a group to effectively navigate social situations or make decisions.

Stigmatized group

A group that suffers from social disapproval based on some characteristic that sets them apart from the majority.

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1.2: Research Methods in Social Psychology

By Rajiv Jhangiani

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Social psychologists are interested in the ways that other people affect thought, emotion, and behavior. To explore these concepts requires special research methods. Following a brief overview of traditional research designs, this module introduces how complex experimental designs, field experiments, naturalistic observation, experience sampling techniques, survey research, subtle and nonconscious techniques such as priming, and archival research and the use of big data may each be adapted to address social psychological questions. This module also discusses the importance of obtaining a representative sample along with some ethical considerations that social psychologists face.

learning objectives

- Describe the key features of basic and complex experimental designs.
- Describe the key features of field experiments, naturalistic observation, and experience sampling techniques.
- Describe survey research and explain the importance of obtaining a representative sample.
- Describe the implicit association test and the use of priming.
- Describe use of archival research techniques.
- Explain five principles of ethical research that most concern social psychologists.

Introduction



Interested to improve your personal performance? Test your skills in the presence of other people to take advantage of social facilitation. [Image: Hans 905, http://goo.gl/SiOSZh, CC BY-NC-SA 2.0, goo.gl/iF4hmM]

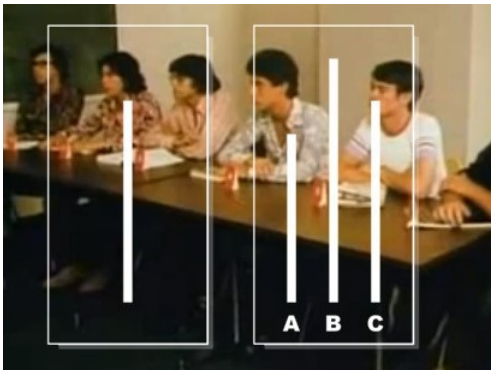
Are you passionate about cycling? Norman Triplett certainly was. At the turn of last century he studied the lap times of cycling races and noticed a striking fact: riding in competitive races appeared to improve riders' times by about 20-30 seconds every mile compared to when they rode the same courses alone. Triplett suspected that the riders' enhanced performance could not be explained simply by the slipstream caused by other cyclists blocking the wind. To test his hunch, he designed what is widely described as the first experimental study in social psychology (published in 1898!)—in this case, having children reel in a length of fishing line as fast as they could. The children were tested alone, then again when paired with another child. The results? The children who performed the task in the presence of others out-reeled those that did so alone.

Although Triplett's research fell short of contemporary standards of scientific rigor (e.g., he eyeballed the data instead of measuring performance precisely; Stroebe, 2012), we now know that this effect, referred to as "**social facilitation**," is reliable—performance on simple or well-rehearsed tasks tends to be enhanced when we are in the presence of others (even when we are not competing against them). To put it another way, the next time you think about showing off your pool-playing skills on a date, the odds are you'll play better than when you practice by yourself. (If you haven't practiced, maybe you should watch a movie instead!)

Research Methods in Social Psychology

One of the things Triplett's early experiment illustrated is scientists' reliance on systematic observation over opinion, or **anecdotal evidence**. The **scientific method** usually begins with observing the world around us (e.g., results of cycling competitions) and thinking of an interesting question (e.g., Why do cyclists perform better in groups?). The next step involves generating a specific testable prediction, or **hypothesis** (e.g., performance on simple tasks is enhanced in the presence of others). Next, scientists must **operationalize** the variables they are studying. This means they must figure out a way to define and measure abstract concepts. For example, the phrase "perform better" could mean different things in different situations; in Triplett's experiment it referred to the amount of time (measured with a stopwatch) it took to wind a fishing reel. Similarly, "in the presence of others" in this case was operationalized as another child winding a fishing reel at the same time in the same room. Creating specific operational definitions like this allows scientists to precisely manipulate the **independent variable**, or "cause" (the presence of others), and to measure the **dependent variable**, or "effect" (performance)—in other words, to collect data. Clearly described operational definitions also help reveal possible limitations to studies (e.g., Triplett's study did not investigate the impact of another child in the room who was not also winding a fishing reel) and help later researchers replicate them precisely.

Laboratory Research



The Asch conformity experiment, which investigated how social pressure influences individual conformity, remains a classic example of a social psychology lab experiment. [Image: D-janous, goo.gl/KwuGGM, CC BY-SA 4.0, goo.gl/etijyD]

As you can see, social psychologists have always relied on carefully designed **laboratory environments** to run experiments where they can closely control situations and manipulate variables (see the NOBA module on Research Designs for an overview of traditional methods). However, in the decades since Triplett discovered social facilitation, a wide range of methods and techniques have been devised, uniquely suited to demystifying the mechanics of how we relate to and influence one another. This module provides an introduction to the use of complex laboratory experiments, field experiments, naturalistic observation, survey research, nonconscious techniques, and archival research, as well as more recent methods that harness the power of technology and large data sets, to study the broad range of topics that fall within the domain of social psychology. At the end of this module we will also consider some of the key ethical principles that govern research in this diverse field.

The use of **complex experimental designs**, with multiple independent and/or dependent variables, has grown increasingly popular because they permit researchers to study both the individual and joint effects of several factors on a range of related situations. Moreover, thanks to technological advancements and the growth of **social neuroscience**, an increasing number of researchers now integrate biological markers (e.g., hormones) or use neuroimaging techniques (e.g., fMRI) in their research designs to better understand the biological mechanisms that underlie social processes.

We can dissect the fascinating research of Dov Cohen and his colleagues (1996) on "culture of honor" to provide insights into complex lab studies. A culture of honor is one that emphasizes personal or family reputation. In a series of lab studies, the Cohen research team invited dozens of university students into the lab to see how they responded to aggression. Half were from the

Southern United States (a culture of honor) and half were from the Northern United States (not a culture of honor; this type of setup constitutes a **participant variable** of two levels). Region of origin was independent variable #1. Participants also provided a saliva sample immediately upon arriving at the lab; (they were given a **cover story** about how their blood sugar levels would be monitored over a series of tasks).

The participants completed a brief questionnaire and were then sent down a narrow corridor to drop it off on a table. En route, they encountered a **confederate** at an open file cabinet who pushed the drawer in to let them pass. When the participant returned a few seconds later, the confederate, who had re-opened the file drawer, slammed it shut and bumped into the participant with his shoulder, muttering "asshole" before walking away. In a manipulation of an independent variable—in this case, the insult—some of the participants were insulted publicly (in view of two other confederates pretending to be doing homework) while others were insulted privately (no one else was around). In a third condition—the control group—participants experienced a modified procedure in which they were not insulted at all.

Although this is a fairly elaborate procedure on its face, what is particularly impressive is the number of dependent variables the researchers were able to measure. First, in the public insult condition, the two additional confederates (who observed the interaction, pretending to do homework) rated the participants' emotional reaction (e.g., anger, amusement, etc.) to being bumped into and insulted. Second, upon returning to the lab, participants in all three conditions were told they would later undergo electric shocks as part of a stress test, and were asked how much of a shock they would be willing to receive (between 10 volts and 250 volts). This decision was made in front of two confederates who had already chosen shock levels of 75 and 25 volts, presumably providing an opportunity for participants to publicly demonstrate their toughness. Third, across all conditions, the participants rated the likelihood of a variety of ambiguously provocative scenarios (e.g., one driver cutting another driver off) escalating into a fight or verbal argument. And fourth, in one of the studies, participants provided saliva samples, one right after returning to the lab, and a final one after completing the questionnaire with the ambiguous scenarios. Later, all three saliva samples were tested for levels of cortisol (a hormone associated with stress) and testosterone (a hormone associated with aggression).

The results showed that people from the Northern United States were far more likely to laugh off the incident (only 35% having anger ratings as high as or higher than amusement ratings), whereas the opposite was true for people from the South (85% of whom had anger ratings as high as or higher than amusement ratings). Also, only those from the South experienced significant increases in cortisol and testosterone following the insult (with no difference between the public and private insult conditions). Finally, no regional differences emerged in the interpretation of the ambiguous scenarios; however, the participants from the South were more likely to choose to receive a greater shock in the presence of the two confederates.

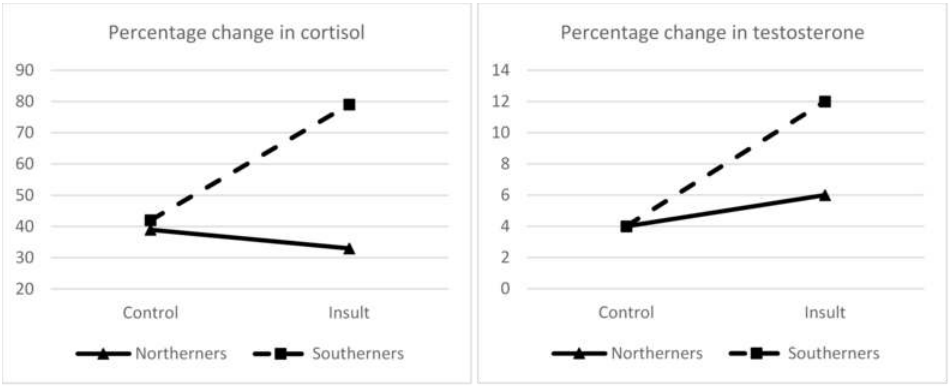


Figure 11.4.1

Field Research

Because social psychology is primarily focused on the social context—groups, families, cultures—researchers commonly leave the laboratory to collect data on life as it is actually lived. To do so, they use a variation of the laboratory experiment, called a **field experiment**. A field experiment is similar to a lab experiment except it uses real-world situations, such as people shopping at a grocery store. One of the major differences between field experiments and laboratory experiments is that the people in field experiments do not know they are participating in research, so—in theory—they will act more naturally. In a classic example from 1972, Alice Isen and Paula Levin wanted to explore the ways emotions affect helping behavior. To investigate this they observed

the behavior of people at pay phones (I know! *Pay phones!*). Half of the unsuspecting participants (determined by **random assignment**) found a dime planted by researchers (I know! *A dime!*) in the coin slot, while the other half did not. Presumably, finding a dime felt surprising and lucky and gave people a small jolt of happiness. Immediately after the unsuspecting participant left the phone booth, a confederate walked by and dropped a stack of papers. Almost 100% of those who found a dime helped to pick up the papers. And what about those who didn't find a dime? Only 1 out 25 of them bothered to help.

In cases where it's not practical or ethical to randomly assign participants to different experimental conditions, we can use **naturalistic observation**—unobtrusively watching people as they go about their lives. Consider, for example, a classic demonstration of the "**basking in reflected glory**" phenomenon: Robert Cialdini and his colleagues used naturalistic observation at seven universities to confirm that students are significantly more likely to wear clothing bearing the school name or logo on days following wins (vs. draws or losses) by the school's varsity football team (Cialdini et al., 1976). In another study, by Jenny Radesky and her colleagues (2014), 40 out of 55 observations of caregivers eating at fast food restaurants with children involved a caregiver using a mobile device. The researchers also noted that caregivers who were most absorbed in their device tended to ignore the children's behavior, followed by scolding, issuing repeated instructions, or using physical responses, such as kicking the children's feet or pushing away their hands.



The ubiquitous smart phone provides social psychology researchers with an invaluable tool for working with study participants to gather data about such things as their daily activities, interactions, attitudes, and emotions. [Image: eltpics, http://goo.gl/DWvoUK, CC BY-NC 2.0, goo.gl/l8UUGY]

A group of techniques collectively referred to as**experience sampling methods** represent yet another way of conducting naturalistic observation, often by harnessing the power of technology. In some cases, participants are notified several times during the day by a pager, wristwatch, or a smartphone app to record data (e.g., by responding to a brief survey or scale on their smartphone, or in a diary). For example, in a study by Reed Larson and his colleagues (1994), mothers and fathers carried pagers for one week and reported their emotional states when beeped at random times during their daily activities at work or at home. The results showed that mothers reported experiencing more positive emotional states when away from home (including at work), whereas fathers showed the reverse pattern. A more recently developed technique, known as the **electronically activated recorder**, or EAR, does not even require participants to stop what they are doing to record their thoughts or feelings; instead, a small portable

audio recorder or smartphone app is used to automatically record brief snippets of participants' conversations throughout the day for later coding and analysis. For a more in-depth description of the EAR technique and other experience-sampling methods, see the NOBA module on Conducting Psychology Research in the Real World.

Survey Research

In this diverse world, **survey research** offers itself as an invaluable tool for social psychologists to study individual and group differences in people's feelings, attitudes, or behaviors. For example, the World Values Survey II was based on large representative samples of 19 countries and allowed researchers to determine that the relationship between income and subjective well-being was stronger in poorer countries (Diener & Oishi, 2000). In other words, an increase in income has a much larger impact on your life satisfaction if you live in Nigeria than if you live in Canada. In another example, a nationally-representative survey in Germany with 16,000 respondents revealed that holding cynical beliefs is related to lower income (e.g., between 2003-2012 the income of the least cynical individuals increased by $300 per month, whereas the income of the most cynical individuals did not increase at all). Furthermore, survey data collected from 41 countries revealed that this negative correlation between cynicism and income is especially strong in countries where people in general engage in more altruistic behavior and tend not to be very cynical (Stavrova & Ehlebracht, 2016).

Of course, obtaining large, cross-cultural, and representative samples has become far easier since the advent of the internet and the proliferation of web-based survey platforms—such as Qualtrics—and participant recruitment platforms—such as Amazon's Mechanical Turk. And although some researchers harbor doubts about the representativeness of online samples, studies have shown that internet samples are in many ways *more* diverse and representative than samples recruited from human subject pools (e.g., with respect to gender; Gosling et al., 2004). Online samples also compare favorably with traditional samples on attentiveness while completing the survey, reliability of data, and proportion of non-respondents (Paolacci et al., 2010).

Subtle/Nonconscious Research Methods

The methods we have considered thus far—field experiments, naturalistic observation, and surveys—work well when the thoughts, feelings, or behaviors being investigated are conscious and directly or indirectly observable. However, social psychologists often wish to measure or manipulate elements that are involuntary or nonconscious, such as when studying prejudicial attitudes people may be unaware of or embarrassed by. A good example of a technique that was developed to measure people's nonconscious (and often ugly) attitudes is known as the **implicit association test (IAT)** (Greenwald et al., 1998). This computer-based task requires participants to sort a series of stimuli (as rapidly and accurately as possible) into simple and combined categories while their reaction time is measured (in milliseconds). For example, an IAT might begin with participants sorting the names of relatives (such as "Niece" or "Grandfather") into the categories "Male" and "Female," followed by a round of sorting the names of disciplines (such as "Chemistry" or "English") into the categories "Arts" and "Science." A third round might combine the earlier two by requiring participants to sort stimuli into either "Male or Science" or "Female and Arts" before the fourth round switches the combinations to "Female or Science" and "Male and Arts." If across all of the trials a person is quicker at accurately sorting incoming stimuli into the compound category "Male or Science" than into "Female or Science," the authors of the IAT suggest that the participant likely has a stronger association between males and science than between females and science. Incredibly, this specific gender-science IAT has been completed by more than half a million participants across 34 countries, about 70% of whom show an implicit stereotype associating science with males more than with females (Nosek et al., 2009). What's more, when the data are grouped by country, national differences in implicit stereotypes predict national differences in the achievement gap between boys and girls in science and math. Our automatic associations, apparently, carry serious societal consequences.

Another nonconscious technique, known as **priming**, is often used to subtly manipulate behavior by activating or making more accessible certain concepts or beliefs. Consider the fascinating example of **terror management theory (TMT)**, whose authors believe that human beings are (unconsciously) terrified of their mortality (i.e., the fact that, some day, we will all die; Pyszczynski et al., 2003). According to TMT, in order to cope with this unpleasant reality (and the possibility that our lives are ultimately essentially meaningless), we cling firmly to systems of cultural and religious beliefs that give our lives meaning and purpose. If this hypothesis is correct, one straightforward prediction would be that people should cling even more firmly to their cultural beliefs when they are subtly reminded of their own mortality.



The research conducted by Rosenblatt and colleagues revealed that even seemingly sophisticated and level-headed thinkers like judges can be influenced by priming. [Image: Penn State, https://goo.gl/mLrmWv, CC BY-NC-SA 2.0, goo.gl/Toc0ZF]

In one of the earliest tests of this hypothesis, actual municipal court judges in Arizona were asked to set a bond for an alleged prostitute immediately after completing a brief questionnaire. For half of the judges the questionnaire ended with questions about their thoughts and feelings regarding the prospect of their own death. Incredibly, judges in the experimental group that were primed with thoughts about their mortality set a significantly higher bond than those in the control group ($455 vs. $50!)—presumably because they were especially motivated to defend their belief system in the face of a violation of the law (Rosenblatt et al., 1989). Although the judges consciously completed the survey, what makes this a study of priming is that the second task (sentencing) was unrelated, so any influence of the survey on their later judgments would have been nonconscious. Similar results have been found in TMT studies in which participants were primed to think about death even more subtly, such as by having them complete questionnaires just before or after they passed a funeral home (Pyszczynski et al., 1996).

To verify that the subtle manipulation (e.g., questions about one's death) has the intended effect (activating death-related thoughts), priming studies like these often include a **manipulation check** following the introduction of a prime. For example, right after being primed, participants in a TMT study might be given a word fragment task in which they have to complete words such as COFF_ _ or SK _ _ L. As you might imagine, participants in the mortality-primed experimental group typically complete these fragments as COFFIN and SKULL, whereas participants in the control group complete them as COFFEE and SKILL.

The use of priming to unwittingly influence behavior, known as **social or behavioral priming** (Ferguson & Mann, 2014), has been at the center of the recent "replication crisis" in Psychology (see the NOBA module on replication). Whereas earlier studies showed, for example, that priming people to think about old age makes them walk slower (Bargh, Chen, & Burrows, 1996), that priming them to think about a university professor boosts performance on a trivia game (Dijksterhuis & van Knippenberg, 1998), and that reminding them of mating motives (e.g., sex) makes them more willing to engage in risky behavior (Greitemeyer, Kastenmüller, & Fischer, 2013), several recent efforts to replicate these findings have failed (e.g., Harris et al., 2013; Shanks et al.,

2013). Such failures to replicate findings highlight the need to ensure that both the original studies and replications are carefully designed, have adequate sample sizes, and that researchers pre-register their hypotheses and openly share their results—whether these support the initial hypothesis or not.

Archival Research



Researchers need not rely only on developing new data to gain insights into human behavior. Existing documentation from decades and even centuries past provide a wealth of information that is useful to social psychologists. [Image: Archivo FSP, http://goo.gl/bUx6sJ, CC BY-SA 3.0, goo.gl/g6ncfj]

Imagine that a researcher wants to investigate how the presence of passengers in a car affects drivers' performance. She could ask research participants to respond to questions about their own driving habits. Alternately, she might be able to access police records of the number of speeding tickets issued by automatic camera devices, then count the number of solo drivers versus those with passengers. This would be an example of **archival research**. The examination of archives, statistics, and other records such as speeches, letters, or even tweets, provides yet another window into social psychology. Although this method is typically used as a type of **correlational research** design—due to the lack of control over the relevant variables—archival research shares the higher **ecological validity** of naturalistic observation. That is, the observations are conducted outside the laboratory and represent real world behaviors. Moreover, because the archives being examined can be collected at any time and from many sources, this technique is especially flexible and often involves less expenditure of time and other resources during data collection.

Social psychologists have used archival research to test a wide variety of hypotheses using real-world data. For example, analyses of major league baseball games played during the 1986, 1987, and 1988 seasons showed that baseball pitchers were more likely to hit batters with a pitch on hot days (Reifman et al., 1991). Another study compared records of race-based lynching in the United States between 1882-1930 to the inflation-adjusted price of cotton during that time (a key indicator of the Deep South's economic health), demonstrating a significant negative correlation between these variables. Simply put, there were significantly more lynchings when the price of cotton stayed flat, and fewer lynchings when the price of cotton rose (Beck & Tolnay, 1990; Hovland & Sears, 1940). This suggests that race-based violence is associated with the health of the economy.

More recently, analyses of social media posts have provided social psychologists with extremely large sets of data ("**big data**") to test creative hypotheses. In an example of research on attitudes about vaccinations, Mitra and her colleagues (2016) collected over 3 million tweets sent by more than 32 thousand users over four years. Interestingly, they found that those who held (and tweeted) anti-vaccination attitudes were also more likely to tweet about their mistrust of government and beliefs in government conspiracies. Similarly, Eichstaedt and his colleagues (2015) used the language of 826 million tweets to predict community-level mortality rates

from heart disease. That's right: more anger-related words and fewer positive-emotion words in tweets predicted higher rates of heart disease.

In a more controversial example, researchers at Facebook attempted to test whether emotional contagion—the transfer of emotional states from one person to another—would occur if Facebook manipulated the content that showed up in its users' News Feed (Kramer et al., 2014). And it did. When friends' posts with positive expressions were concealed, users wrote slightly fewer positive posts (e.g., "Loving my new phone!"). Conversely, when posts with negative expressions were hidden, users wrote slightly fewer negative posts (e.g., "Got to go to work. Ugh."). This suggests that people's positivity or negativity can impact their social circles.

The controversial part of this study—which included 689,003 Facebook users and involved the analysis of over 3 million posts made over just one week—was the fact that Facebook did not explicitly request permission from users to participate. Instead, Facebook relied on the fine print in their data-use policy. And, although academic researchers who collaborated with Facebook on this study applied for ethical approval from their institutional review board (IRB), they apparently only did so after data collection was complete, raising further questions about the ethicality of the study and highlighting concerns about the ability of large, profit-driven corporations to subtly manipulate people's social lives and choices.

Research Issues in Social Psychology

The Question of Representativeness



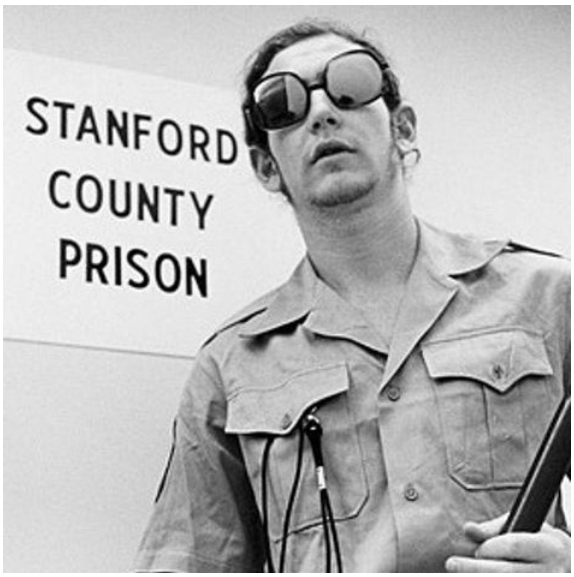
How confident can we be that the results of social psychology studies generalize to the wider population if study participants are largely of the WEIRD variety? [Image: Mike Miley, http://goo.gl/NtvlU8, CC BY-SA 2.0, goo.gl/eH69he]

Along with our counterparts in the other areas of psychology, social psychologists have been guilty of largely recruiting **samples of convenience** from the thin slice of humanity—students—found at universities and colleges (Sears, 1986). This presents a problem when trying to assess the social mechanics of the public at large. Aside from being an overrepresentation of young, middle-class Caucasians, college students may also be more compliant and more susceptible to attitude change, have less stable personality traits and interpersonal relationships, and possess stronger cognitive skills than samples reflecting a wider range of age and experience (Peterson & Merunka, 2014; Visser, Krosnick, & Lavrakas, 2000). Put simply, these traditional samples (college students) may not be sufficiently representative of the broader population. Furthermore, considering that 96% of participants in psychology studies come from western, educated, industrialized, rich, and democratic countries (so-called **WEIRD cultures**; Henrich, Heine, & Norenzayan, 2010), and that the majority of these *are also psychology students*, the question of non-representativeness becomes even more serious.

Of course, when studying a basic cognitive process (like working memory capacity) or an aspect of social behavior that appears to be fairly universal (e.g., even cockroaches exhibit social facilitation!), a non-representative sample may not be a big deal. However,

over time research has repeatedly demonstrated the important role that individual differences (e.g., personality traits, cognitive abilities, etc.) and culture (e.g., individualism vs. collectivism) play in shaping social behavior. For instance, even if we only consider a tiny sample of research on aggression, we know that narcissists are more likely to respond to criticism with aggression (Bushman & Baumeister, 1998); conservatives, who have a low tolerance for uncertainty, are more likely to prefer aggressive actions against those considered to be "outsiders" (de Zavala et al., 2010); countries where men hold the bulk of power in society have higher rates of physical aggression directed against female partners (Archer, 2006); and males from the southern part of the United States are more likely to react with aggression following an insult (Cohen et al., 1996).

Ethics in Social Psychological Research



The Stanford Prison Study has been criticized for putting participants in dangerous and psychologically damaging situations. [Image: Teodorvasic97, goo.gl/0LJReB, CC BY-SA 4.0, goo.gl/etijyD]

For better or worse (but probably for worse), when we think about the most unethical studies in psychology, we think about social psychology. Imagine, for example, encouraging people to deliver what they believe to be a dangerous electric shock to a stranger (with bloodcurdling screams for added effect!). This is considered a "classic" study in social psychology. Or, how about having students play the role of prison guards, deliberately and sadistically abusing other students in the role of prison inmates. Yep, social psychology too. Of course, both Stanley Milgram's (1963) experiments on obedience to authority and the Stanford prison study (Haney et al., 1973) would be considered unethical by today's standards, which have progressed with our understanding of the field. Today, we follow a series of guidelines and receive prior approval from our institutional research boards before beginning such experiments. Among the most important principles are the following:

1. Informed consent: In general, people should know when they are involved in research, and understand what will happen to them during the study (at least in general terms that do not give away the hypothesis). They are then given the choice to participate, along with the freedom to withdraw from the study at any time. This is precisely why the Facebook emotional contagion study discussed earlier is considered ethically questionable. Still, it's important to note that certain kinds of methods—such as naturalistic observation in public spaces, or archival research based on public records—do not require obtaining informed consent.
2. Privacy: Although it is permissible to observe people's actions in public—even without them knowing—researchers cannot violate their privacy by observing them in restrooms or other private spaces without their knowledge and consent. Researchers also may not identify individual participants in their research reports (we typically report only group means and other statistics). With online data collection becoming increasingly popular, researchers also have to be mindful that they follow local data privacy laws, collect only the data that they really need (e.g., avoiding including unnecessary questions in surveys), strictly restrict access to the raw data, and have a plan in place to securely destroy the data after it is no longer needed.
3. Risks and Benefits: People who participate in psychological studies should be exposed to risk only if they fully understand the risks and only if the likely benefits clearly outweigh those risks. The Stanford prison study is a notorious example of a failure to meet this obligation. It was planned to run for two weeks but had to be shut down after only six days because of the abuse

suffered by the “prison inmates.” But even less extreme cases, such as researchers wishing to investigate implicit prejudice using the IAT, need to be considerate of the consequences of providing feedback to participants about their nonconscious biases. Similarly, any manipulations that could potentially provoke serious emotional reactions (e.g., the culture of honor study described above) or relatively permanent changes in people’s beliefs or behaviors (e.g., attitudes towards recycling) need to be carefully reviewed by the IRB.

4. Deception: Social psychologists sometimes need to deceive participants (e.g., using a cover story) to avoid **demand characteristics** by hiding the true nature of the study. This is typically done to prevent participants from modifying their behavior in unnatural ways, especially in laboratory or field experiments. For example, when Milgram recruited participants for his experiments on obedience to authority, he described it as being a study of the effects of punishment on memory! Deception is typically only permitted (a) when the benefits of the study outweigh the risks, (b) participants are not reasonably expected to be harmed, (c) the research question cannot be answered without the use of deception, and (d) participants are informed about the deception as soon as possible, usually through debriefing.
5. Debriefing: This is the process of informing research participants as soon as possible of the purpose of the study, revealing any deceptions, and correcting any misconceptions they might have as a result of participating. Debriefing also involves minimizing harm that might have occurred. For example, an experiment examining the effects of sad moods on charitable behavior might involve inducing a sad mood in participants by having them think sad thoughts, watch a sad video, or listen to sad music. Debriefing would therefore be the time to return participants’ moods to normal by having them think happy thoughts, watch a happy video, or listen to happy music.

Conclusion

As an immensely social species, we affect and influence each other in many ways, particularly through our interactions and cultural expectations, both conscious and nonconscious. The study of social psychology examines much of the business of our everyday lives, including our thoughts, feelings, and behaviors we are unaware or ashamed of. The desire to carefully and precisely study these topics, together with advances in technology, has led to the development of many creative techniques that allow researchers to explore the mechanics of how we relate to one another. Consider this your invitation to join the investigation.

Outside Resources

Article: Do research ethics need updating for the digital age? Questions raised by the Facebook emotional contagion study.

http://www.apa.org/monitor/2014/10/r...ch-ethics.aspx

Article: Psychology is WEIRD. A commentary on non-representative samples in Psychology.

http://www.slate.com/articles/health...n_college.html

Web: Linguistic Inquiry and Word Count. Paste in text from a speech, article, or other archive to analyze its linguistic structure.

www.liwc.net/tryonline.php

Web: Project Implicit. Take a demonstration implicit association test

https://implicit.harvard.edu/implicit/

Web: Research Randomizer. An interactive tool for random sampling and random assignment.

https://www.randomizer.org/

Discussion Questions

1. What are some pros and cons of experimental research, field research, and archival research?
2. How would you feel if you learned that you had been a participant in a naturalistic observation study (without explicitly providing your consent)? How would you feel if you learned during a debriefing procedure that you have a stronger association between the concept of violence and members of visible minorities? Can you think of other examples of when following principles of ethical research create challenging situations?
3. Can you think of an attitude (other than those related to prejudice) that would be difficult or impossible to measure by asking people directly?
4. What do you think is the difference between a manipulation check and a dependent variable?

Vocabulary

Anecdotal evidence

An argument that is based on personal experience and not considered reliable or representative.

Archival research

A type of research in which the researcher analyses records or archives instead of collecting data from live human participants.

Basking in reflected glory

The tendency for people to associate themselves with successful people or groups.

Big data

The analysis of large data sets.

Complex experimental designs

An experiment with two or more independent variables.

Confederate

An actor working with the researcher. Most often, this individual is used to deceive unsuspecting research participants. Also known as a “stooge.”

Correlational research

A type of descriptive research that involves measuring the association between two variables, or how they go together.

Cover story

A fake description of the purpose and/or procedure of a study, used when deception is necessary in order to answer a research question.

Demand characteristics

Subtle cues that make participants aware of what the experimenter expects to find or how participants are expected to behave.

Dependent variable

The variable the researcher measures but does not manipulate in an experiment.

Ecological validity

The degree to which a study finding has been obtained under conditions that are typical for what happens in everyday life.

Electronically activated recorder (EAR)

A methodology where participants wear a small, portable audio recorder that intermittently records snippets of ambient sounds around them.

Experience sampling methods

Systematic ways of having participants provide samples of their ongoing behavior. Participants' reports are dependent (contingent) upon either a signal, pre-established intervals, or the occurrence of some event.

Field experiment

An experiment that occurs outside of the lab and in a real world situation.

Hypothesis

A logical idea that can be tested.

Implicit association test (IAT)

A computer-based categorization task that measures the strength of association between specific concepts over several trials.

Independent variable

The variable the researcher manipulates and controls in an experiment.

Laboratory environments

A setting in which the researcher can carefully control situations and manipulate variables.

Manipulation check

A measure used to determine whether or not the manipulation of the independent variable has had its intended effect on the participants.

Naturalistic observation

Unobtrusively watching people as they go about the business of living their lives.

Operationalize

How researchers specifically measure a concept.

Participant variable

The individual characteristics of research subjects - age, personality, health, intelligence, etc.

Priming

The process by which exposing people to one stimulus makes certain thoughts, feelings or behaviors more salient.

Random assignment

Assigning participants to receive different conditions of an experiment by chance.

Samples of convenience

Participants that have been recruited in a manner that prioritizes convenience over representativeness.

Scientific method

A method of investigation that includes systematic observation, measurement, and experiment, and the formulation, testing, and modification of hypotheses.

Social facilitation

When performance on simple or well-rehearsed tasks is enhanced when we are in the presence of others.

Social neuroscience

An interdisciplinary field concerned with identifying the neural processes underlying social behavior and cognition.

Social or behavioral priming

A field of research that investigates how the activation of one social concept in memory can elicit changes in behavior, physiology, or self-reports of a related social concept without conscious awareness.

Survey research

A method of research that involves administering a questionnaire to respondents in person, by telephone, through the mail, or over the internet.

Terror management theory (TMT)

A theory that proposes that humans manage the anxiety that stems from the inevitability of death by embracing frameworks of meaning such as cultural values and beliefs.

WEIRD cultures

Cultures that are western, educated, industrialized, rich, and democratic.

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1.3: Statistical Thinking

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As our society increasingly calls for evidence-based decision making, it is important to consider how and when we can draw valid inferences from data. This module will use four recent research studies to highlight key elements of a statistical investigation.

learning objectives

- Define basic elements of a statistical investigation.
- Describe the role of p-values and confidence intervals in statistical inference.
- Describe the role of random sampling in generalizing conclusions from a sample to a population.
- Describe the role of random assignment in drawing cause-and-effect conclusions.
- Critique statistical studies.

Introduction

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. Moreover, data abound everywhere in modern life. Conducting such a study well, and interpreting the results of such studies well for making informed decisions or setting policies, requires understanding basic ideas of statistics, the science of gaining insight from data. Rather than relying on anecdote and intuition, statistics allows us to systematically study phenomena of interest.



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, goo.gl/l8UUGY]

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, such as smoking habits, on the comprehensive lifestyle questionnaires? 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 module, 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.

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. The most fundamental principle of statistics is that data vary. The pattern of that variation is crucial to capture and to understand. Often, careful presentation of the data will address many of the research questions without requiring more sophisticated analyses. It may, however, point to additional questions that need to be examined in more detail.

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 Table 1.

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

Table 1. Frequency tables of patient reading levels and pamphlet readability levels.

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 1.

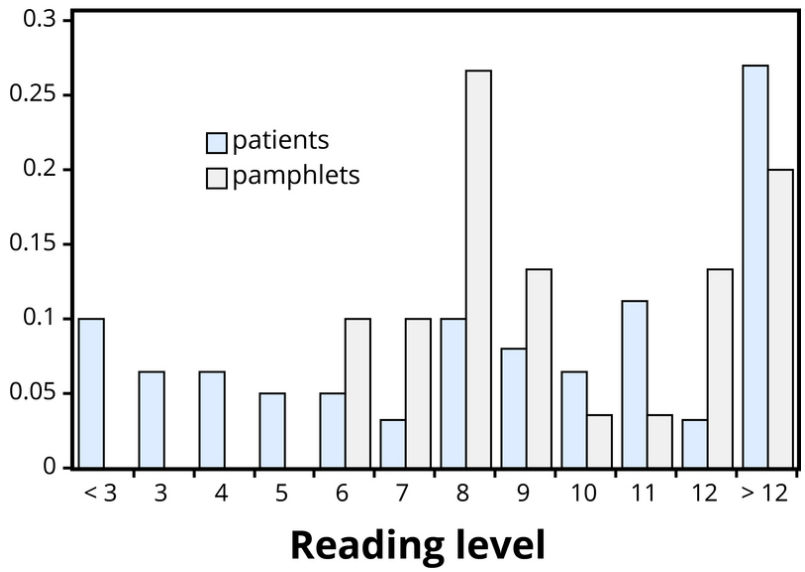


Figure 2.3.1: Comparison of patient reading levels and pamphlet readability levels.

Figure 2.3.1 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.

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?

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.



Correlation does not equal causation: When babies get their first teeth their saliva production increases but this does not mean that increased saliva causes them to get their teeth. [Image: Ben McLeod, https://goo.gl/0EkXpV, CC BY-NC-SA 2.0, goo.gl/Toc0ZF]

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. 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 tells you how often a random process would give a result at least as extreme as what was found in the actual study, assuming there was nothing other than random chance at play. So, 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. We often compare the p-value to some cut-off value (called the level of **significance**, typically around 0.05). If 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.



Generalizability is an important research consideration: The results of studies with widely representative samples are more likely to generalize to the population. [Image: Mike PD, https://goo.gl/ynFCMC, CC BY-NC-SA 2.0, goo.gl/Toc0ZF]

One limitation to the previous study 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.

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.

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 or extrinsic 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, where higher scores indicate more creativity.

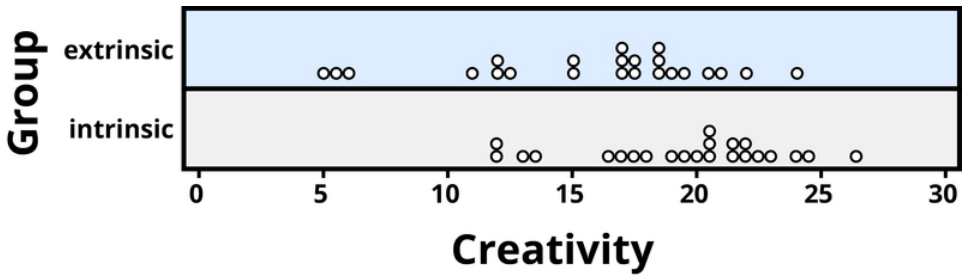


Figure 2.3.2: Creativity scores separated by type of motivation.

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 2.3.2 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 2.3.3 shows the results from 1,000 such hypothetical random assignments for these scores.

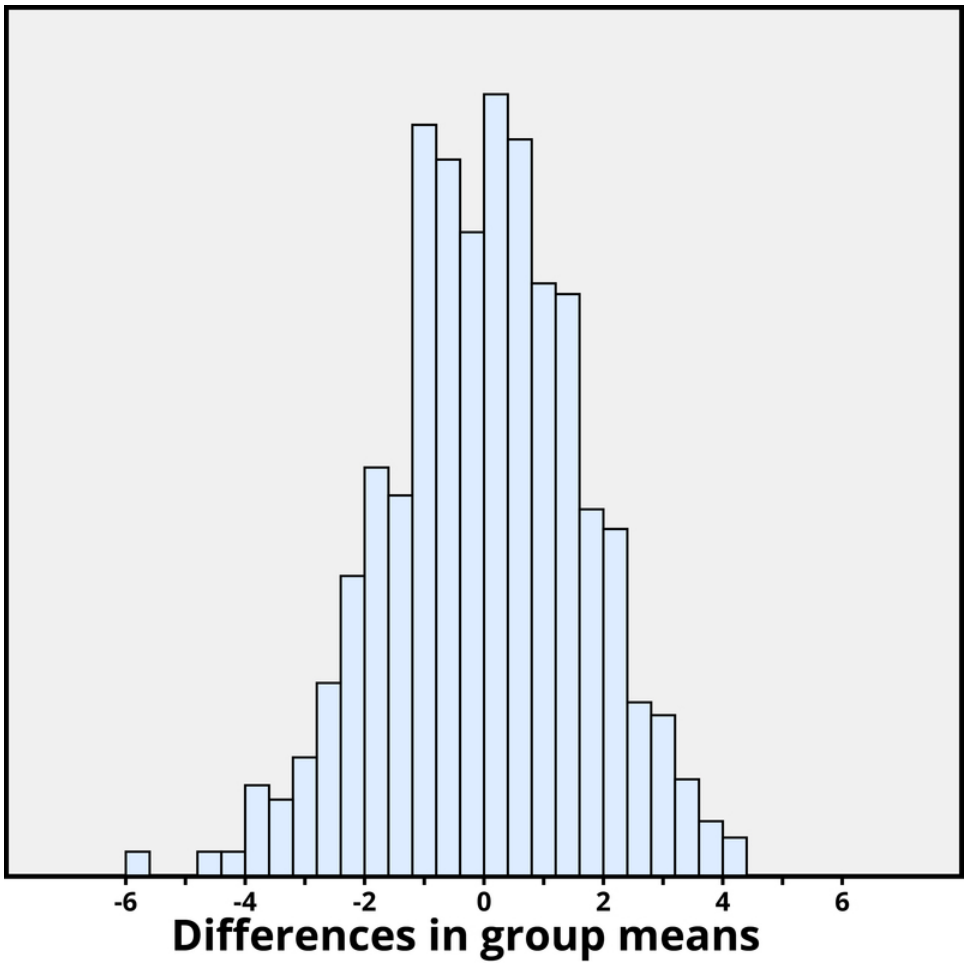


Figure 2.3.3: Differences in group means under random assignment alone.

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 2, 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 the individuals in this study, but we would still want to know more about how these individuals were selected to participate.

Conclusion



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, https://goo.gl/9l8Dht, CC BY-NC-SA 2.0, goo.gl/Toc0ZF]

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 at the beginning of this module? 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.

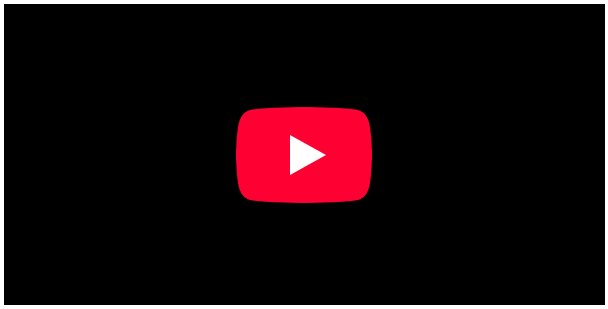
This study needs to be reviewed in the larger context of similar studies and consistency of results across studies, with the constant caution that this was not a randomized experiment. Whereas a statistical analysis can still "adjust" for other potential confounding variables, we are not yet convinced 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.

Outside Resources

Apps: Interactive web applets for teaching and learning statistics include the collection at

http://www.rossmanchance.com/applets/

P-Value extravaganza





Web: Inter-university Consortium for Political and Social Research

http://www.icpsr.umich.edu/index.html

Web: The Consortium for the Advancement of Undergraduate Statistics

https://www.causeweb.org/

Discussion Questions

1. Find a recent research article in your field and answer the following: What was the primary research question? How were individuals selected to participate in the study? Were summary results provided? How strong is the evidence presented in favor

or against the research question? Was random assignment used? Summarize the main conclusions from the study, addressing the issues of statistical significance, statistical confidence, generalizability, and cause and effect. Do you agree with the conclusions drawn from this study, based on the study design and the results presented?

2. Is it reasonable to use a random sample of 1,000 individuals to draw conclusions about all U.S. adults? Explain why or why not.

Vocabulary

Cause-and-effect
Related to whether we say one variable is causing changes in the other variable, versus other variables that may be related to these two variables.

Confidence interval
An interval of plausible values for a population parameter; the interval of values within the margin of error of a statistic.

Distribution
The pattern of variation in data.

Generalizability
Related to whether the results from the sample can be generalized to a larger population.

Margin of error
The expected amount of random variation in a statistic; often defined for 95% confidence level.

Parameter
A numerical result summarizing a population (e.g., mean, proportion).

Population
A larger collection of individuals that we would like to generalize our results to.

P-value
The probability of observing a particular outcome in a sample, or more extreme, under a conjecture about the larger population or process.

Random assignment
Using a probability-based method to divide a sample into treatment groups.

Random sampling
Using a probability-based method to select a subset of individuals for the sample from the population.

Sample
The collection of individuals on which we collect data.

Statistic
A numerical result computed from a sample (e.g., mean, proportion).

Statistical significance
A result is statistically significant if it is unlikely to arise by chance alone.

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1.4: Conducting Psychology Research in the Real World

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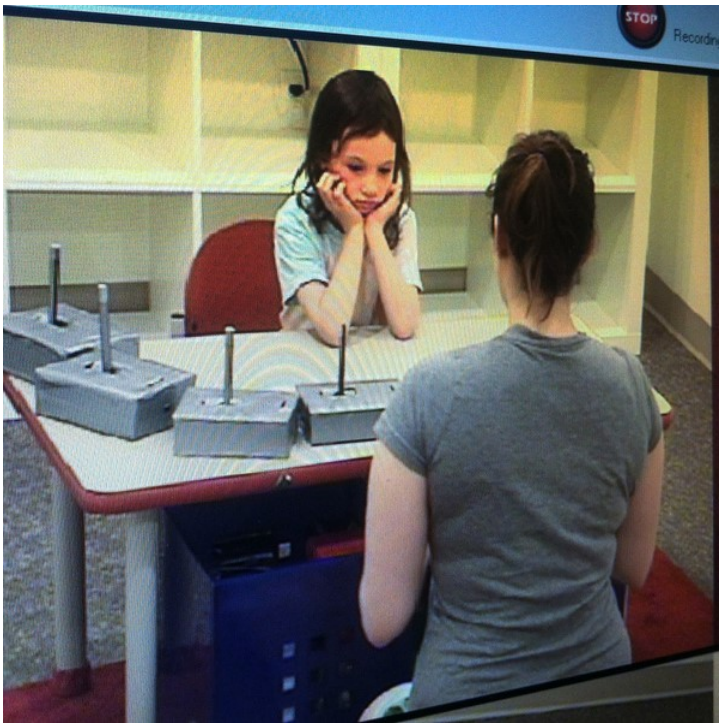
Because of its ability to determine cause-and-effect relationships, the laboratory experiment is traditionally considered the method of choice for psychological science. One downside, however, is that as it carefully controls conditions and their effects, it can yield findings that are out of touch with reality and have limited use when trying to understand real-world behavior. This module highlights the importance of also conducting research outside the psychology laboratory, within participants' natural, everyday environments, and reviews existing methodologies for studying daily life.

learning objectives

- Identify limitations of the traditional laboratory experiment.
- Explain ways in which daily life research can further psychological science.
- Know what methods exist for conducting psychological research in the real world.

Introduction

The laboratory experiment is traditionally considered the "gold standard" in psychology research. This is because only laboratory experiments can clearly separate cause from effect and therefore establish causality. Despite this unique strength, it is also clear that a scientific field that is mainly based on controlled laboratory studies ends up lopsided. Specifically, it accumulates a lot of knowledge on what *can* happen—under carefully isolated and controlled circumstances—but it has little to say about what actually *does* happen under the circumstances that people actually encounter in their daily lives.



Do the research results obtained in isolated, carefully controlled laboratory conditions generalize into the real world? [Image: Nessen Marshall, CC BY-NC-SA 2.0, goo.gl/Toc0ZF]

For example, imagine you are a participant in an experiment that looks at the effect of being in a good mood on generosity, a topic that may have a good deal of practical application. Researchers create an internally-valid, carefully-controlled experiment where they randomly assign you to watch either a happy movie or a neutral movie, and then you are given the opportunity to help the researcher out by staying longer and participating in another study. If people in a good mood are more willing to stay and help out, the researchers can feel confident that – since everything else was held constant – your positive mood led you to be more helpful.

However, what does this tell us about helping behaviors in the real world? Does it **generalize** to other kinds of helping, such as donating money to a charitable cause? Would all kinds of happy movies produce this behavior, or only this one? What about other positive experiences that might boost mood, like receiving a compliment or a good grade? And what if you were watching the movie with friends, in a crowded theatre, rather than in a sterile research lab? Taking research out into the real world can help answer some of these sorts of important questions.

As one of the founding fathers of social psychology remarked, "Experimentation in the laboratory occurs, socially speaking, on an island quite isolated from the life of society" (Lewin, 1944, p. 286). This module highlights the importance of going beyond experimentation and also conducting research outside the laboratory (Reis & Gosling, 2010), directly within participants' natural environments, and reviews existing methodologies for studying daily life.

Rationale for Conducting Psychology Research in the Real World

One important challenge researchers face when designing a study is to find the right balance between ensuring **internal validity**, or the degree to which a study allows unambiguous causal inferences, and **external validity**, or the degree to which a study ensures that potential findings apply to settings and samples other than the ones being studied (Brewer, 2000). Unfortunately, these two kinds of validity tend to be difficult to achieve at the same time, in one study. This is because creating a controlled setting, in which all potentially influential factors (other than the experimentally-manipulated variable) are controlled, is bound to create an environment that is quite different from what people naturally encounter (e.g., using a happy movie clip to promote helpful behavior). However, it is the degree to which an experimental situation is comparable to the corresponding real-world situation of interest that determines how generalizable potential findings will be. In other words, if an experiment is very far-off from what a person might normally experience in everyday life, you might reasonably question just how useful its findings are.

Because of the incompatibility of the two types of validity, one is often—by design—prioritized over the other. Due to the importance of identifying true causal relationships, psychology has traditionally emphasized internal over external validity. However, in order to make claims about human behavior that apply across populations and environments, researchers complement traditional laboratory research, where participants are brought into the lab, with field research where, in essence, the psychological laboratory is brought to participants. Field studies allow for the important test of how psychological variables and processes of interest "behave" under real-world circumstances (i.e., what *actually does happen* rather than what *can happen*). They can also facilitate "downstream" operationalizations of constructs that measure life outcomes of interest *directly* rather than indirectly.

Take, for example, the fascinating field of psychoneuroimmunology, where the goal is to understand the interplay of psychological factors - such as personality traits or one's stress level - and the immune system. Highly sophisticated and carefully controlled experiments offer ways to isolate the variety of neural, hormonal, and cellular mechanisms that link psychological variables such as chronic stress to biological outcomes such as immunosuppression (a state of impaired immune functioning; Sapolsky, 2004). Although these studies demonstrate impressively how psychological factors can affect health-relevant biological processes, they—because of their research design—remain mute about the degree to which these factors actually do undermine people's everyday health in real life. It is certainly important to show that laboratory stress can alter the number of natural killer cells in the blood. But it is equally important to test to what extent the levels of stress that people experience on a day-to-day basis result in them catching a cold more often or taking longer to recover from one. The goal for researchers, therefore, must be to complement traditional laboratory experiments with less controlled studies under real-world circumstances. The term **ecological validity** is used to refer the degree to which an effect has been obtained under conditions that are typical for what happens in everyday life (Brewer, 2000). In this example, then, people might keep a careful daily log of how much stress they are under as well as noting physical symptoms such as headaches or nausea. Although many factors beyond stress level may be responsible for these symptoms, this more correlational approach can shed light on how the relationship between stress and health plays out outside of the laboratory.

An Overview of Research Methods for Studying Daily Life

Capturing "life as it is lived" has been a strong goal for some researchers for a long time. Wilhelm and his colleagues recently published a comprehensive review of early attempts to systematically document daily life (Wilhelm, Perrez, & Pawlik, 2012). Building onto these original methods, researchers have, over the past decades, developed a broad toolbox for measuring experiences, behavior, and physiology directly in participants' daily lives (Mehl & Conner, 2012). Figure 1 provides a schematic overview of the methodologies described below.

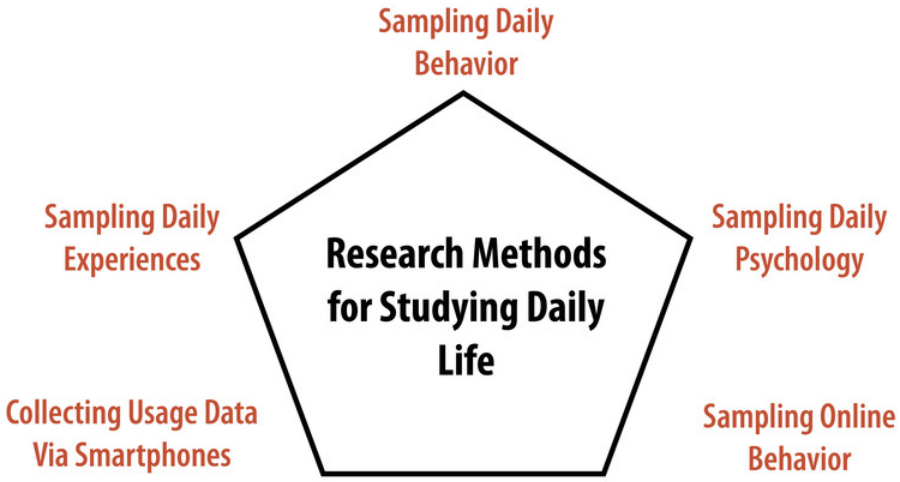


Figure 1. Schematic Overview of Research Methods for Studying Daily Life

Studying Daily Experiences

Starting in the mid-1970s, motivated by a growing skepticism toward highly-controlled laboratory studies, a few groups of researchers developed a set of new methods that are now commonly known as the **experience-sampling method** (Hektner, Schmidt, & Csikszentmihalyi, 2007), **ecological momentary assessment** (Stone & Shiffman, 1994), or the **diary method** (Bolger & Rafaeli, 2003). Although variations within this set of methods exist, the basic idea behind all of them is to collect in-the-moment (or, close-to-the-moment) self-report data directly from people as they go about their daily lives. This is typically accomplished by asking participants' repeatedly (e.g., five times per day) over a period of time (e.g., a week) to report on their current thoughts and feelings. The momentary questionnaires often ask about their location (e.g., "Where are you now?"), social environment (e.g., "With whom are you now?"), activity (e.g., "What are you currently doing?"), and experiences (e.g., "How are you feeling?"). That way, researchers get a snapshot of what was going on in participants' lives at the time at which they were asked to report.

Technology has made this sort of research possible, and recent technological advances have altered the different tools researchers are able to easily use. Initially, participants wore electronic wristwatches that beeped at preprogrammed but seemingly random times, at which they completed one of a stack of provided paper questionnaires. With the mobile computing revolution, both the prompting and the questionnaire completion were gradually replaced by handheld devices such as smartphones. Being able to collect the momentary questionnaires digitally and time-stamped (i.e., having a record of exactly when participants responded) had major methodological and practical advantages and contributed to experience sampling going mainstream (Conner, Tennen, Fleeson, & Barrett, 2009).



Using modern technology like smartphones allows for more widespread experience sampling of research participants. Whether at home, work, or just sitting in a coffee shop technology makes it easier than ever to participate in psychology research. [Image: Vladimir Yaitskiy, https://goo.gl/7sjXfq, CC BY-NC-SA 2.0, goo.gl/Toc0ZF]

Over time, experience sampling and related momentary self-report methods have become very popular, and, by now, they are effectively the gold standard for studying daily life. They have helped make progress in almost all areas of psychology (Mehl & Conner, 2012). These methods ensure receiving many measurements from many participants, and has further inspired the development of novel statistical methods (Bolger & Laurenceau, 2013). Finally, and maybe most importantly, they accomplished what they sought out to accomplish: to bring attention to what psychology ultimately wants and needs to know about, namely "what people actually do, think, and feel in the various contexts of their lives" (Funder, 2001, p. 213). In short, these approaches have allowed researchers to do research that is more externally valid, or more generalizable to real life, than the traditional laboratory experiment.

To illustrate these techniques, consider a classic study, Stone, Reed, and Neale (1987), who tracked positive and negative experiences surrounding a respiratory infection using daily experience sampling. They found that undesirable experiences peaked and desirable ones dipped about four to five days prior to participants coming down with the cold. More recently, Killingsworth and Gilbert (2010) collected momentary self-reports from more than 2,000 participants via a smartphone app. They found that participants were less happy when their mind was in an idling, mind-wandering state, such as surfing the Internet or multitasking at work, than when it was in an engaged, task-focused one, such as working diligently on a paper. These are just two examples that illustrate how experience-sampling studies have yielded findings that could not be obtained with traditional laboratory methods.

Recently, the **day reconstruction method (DRM)** (Kahneman, Krueger, Schkade, Schwarz, & Stone, 2004) has been developed to obtain information about a person's daily experiences without going through the burden of collecting momentary experience-sampling data. In the DRM, participants report their experiences of a given day retrospectively after engaging in a systematic, experiential reconstruction of the day on the following day. As a participant in this type of study, you might look back on yesterday, divide it up into a series of episodes such as "made breakfast," "drove to work," "had a meeting," etc. You might then report who you were with in each episode and how you felt in each. This approach has shed light on what situations lead to moments of positive and negative mood throughout the course of a normal day.

Studying Daily Behavior

Experience sampling is often used to study everyday behavior (i.e., daily social interactions and activities). In the laboratory, behavior is best studied using direct behavioral observation (e.g., video recordings). In the real world, this is, of course, much more

difficult. As Funder put it, it seems it would require a "detective's report [that] would specify in exact detail everything the participant said and did, and with whom, in all of the contexts of the participant's life" (Funder, 2007, p. 41).

As difficult as this may seem, Mehl and colleagues have developed a naturalistic observation methodology that is similar in spirit. Rather than following participants—like a detective—with a video camera (see Craik, 2000), they equip participants with a portable audio recorder that is programmed to periodically record brief snippets of ambient sounds (e.g., 30 seconds every 12 minutes). Participants carry the recorder (originally a microcassette recorder, now a smartphone app) on them as they go about their days and return it at the end of the study. The recorder provides researchers with a series of sound bites that, together, amount to an acoustic diary of participants' days as they naturally unfold—and that constitute a representative sample of their daily activities and social encounters. Because it is somewhat similar to having the researcher's ear at the participant's lapel, they called their method the **electronically activated recorder, or EAR** (Mehl, Pennebaker, Crow, Dabbs, & Price, 2001). The ambient sound recordings can be coded for many things, including participants' locations (e.g., at school, in a coffee shop), activities (e.g., watching TV, eating), interactions (e.g., in a group, on the phone), and emotional expressions (e.g., laughing, sighing). As unnatural or intrusive as it might seem, participants report that they quickly grow accustomed to the EAR and say they soon find themselves behaving as they normally would.

In a cross-cultural study, Ramírez-Esparza and her colleagues used the EAR method to study sociability in the United States and Mexico. Interestingly, they found that although American participants rated themselves significantly higher than Mexicans on the question, "I see myself as a person who is talkative," they actually spent almost 10 percent less time talking than Mexicans did (Ramírez-Esparza, Mehl, Álvarez Bermúdez, & Pennebaker, 2009). In a similar way, Mehl and his colleagues used the EAR method to debunk the long-standing myth that women are considerably more talkative than men. Using data from six different studies, they showed that both sexes use on average about 16,000 words per day. The estimated sex difference of 546 words was trivial compared to the immense range of more than 46,000 words between the least and most talkative individual (695 versus 47,016 words; Mehl, Vazire, Ramírez-Esparza, Slatcher, & Pennebaker, 2007). Together, these studies demonstrate how naturalistic observation can be used to study objective aspects of daily behavior and how it can yield findings quite different from what other methods yield (Mehl, Robbins, & Deters, 2012).

A series of other methods and creative ways for assessing behavior directly and unobtrusively in the real world are described in a seminal book on real-world, subtle measures (Webb, Campbell, Schwartz, Sechrest, & Grove, 1981). For example, researchers have used time-lapse photography to study the flow of people and the use of space in urban public places (Whyte, 1980). More recently, they have observed people's personal (e.g., dorm rooms) and professional (e.g., offices) spaces to understand how personality is expressed and detected in everyday environments (Gosling, Ko, Mannarelli, & Morris, 2002). They have even systematically collected and analyzed people's garbage to measure what people actually consume (e.g., empty alcohol bottles or cigarette boxes) rather than what they *say* they consume (Rathje & Murphy, 2001). Because people often cannot and sometimes may not want to accurately report what they do, the direct—and ideally nonreactive—assessment of real-world behavior is of high importance for psychological research (Baumeister, Vohs, & Funder, 2007).

Studying Daily Physiology

In addition to studying how people think, feel, and behave in the real world, researchers are also interested in how our bodies respond to the fluctuating demands of our lives. What are the daily experiences that make our "blood boil"? How do our neurotransmitters and hormones respond to the stressors we encounter in our lives? What physiological reactions do we show to being loved—or getting ostracized? You can see how studying these powerful experiences in real life, as they actually happen, may provide more rich and informative data than one might obtain in an artificial laboratory setting that merely mimics these experiences.



Real world stressors may result in very different physiological responses than the same stressors simulated in a lab environment. [Image: State Farm, https://goo.gl/FGYyVz, CC BY 2.0, goo.gl/9uSnqN]

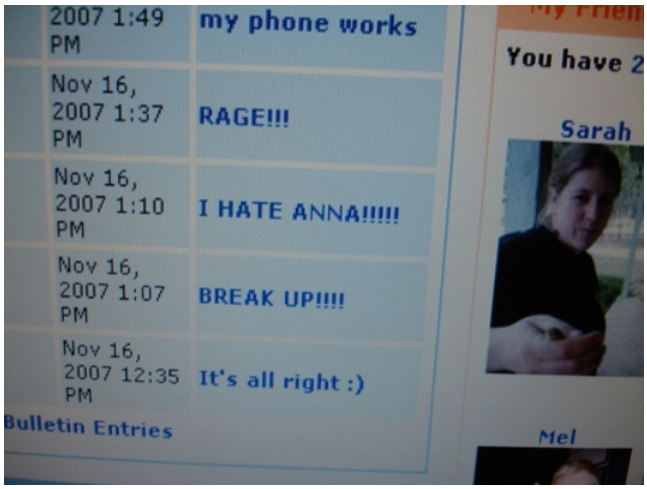
Also, in pursuing these questions, it is important to keep in mind that what is stressful, engaging, or boring for one person might not be so for another. It is, in part, for this reason that researchers have found only limited correspondence between how people respond physiologically to a standardized laboratory stressor (e.g., giving a speech) and how they respond to stressful experiences in their lives. To give an example, Wilhelm and Grossman (2010) describe a participant who showed rather minimal heart rate increases in response to a laboratory stressor (about five to 10 beats per minute) but quite dramatic increases (almost 50 beats per minute) later in the afternoon while watching a soccer game. Of course, the reverse pattern can happen as well, such as when patients have high blood pressure in the doctor's office but not in their home environment—the so-called **white coat hypertension** (White, Schulman, McCabe, & Dey, 1989).

Ambulatory physiological monitoring – that is, monitoring physiological reactions as people go about their daily lives - has a long history in biomedical research and an array of monitoring devices exist (Fahrenberg & Myrtek, 1996). Among the biological signals that can now be measured in daily life with portable signal recording devices are the electrocardiogram (ECG), blood pressure, electrodermal activity (or "sweat response"), body temperature, and even the electroencephalogram (EEG) (Wilhelm & Grossman, 2010). Most recently, researchers have added **ambulatory assessment** of hormones (e.g., cortisol) and other biomarkers (e.g., immune markers) to the list (Schlotz, 2012). The development of ever more sophisticated ways to track what goes on underneath our skins as we go about our lives is a fascinating and rapidly advancing field.

In a recent study, Lane, Zareba, Reis, Peterson, and Moss (2011) used experience sampling combined with ambulatory electrocardiography (a so-called Holter monitor) to study how emotional experiences can alter cardiac function in patients with a congenital heart abnormality (e.g., long QT syndrome). Consistent with the idea that emotions may, in some cases, be able to trigger a cardiac event, they found that typical—in most cases even relatively low intensity— daily emotions had a measurable effect on ventricular repolarization, an important cardiac indicator that, in these patients, is linked to risk of a cardiac event. In another study, Smyth and colleagues (1998) combined experience sampling with momentary assessment of cortisol, a stress hormone. They found that momentary reports of current or even anticipated stress predicted increased cortisol secretion 20 minutes later. Further, and independent of that, the experience of other kinds of negative affect (e.g., anger, frustration) also predicted higher levels of cortisol and the experience of positive affect (e.g., happy, joyful) predicted lower levels of this important stress hormone. Taken together, these studies illustrate how researchers can use ambulatory physiological monitoring to study how the little—and seemingly trivial or inconsequential—experiences in our lives leave objective, measurable traces in our bodily systems.

Studying Online Behavior

Another domain of daily life that has only recently emerged is virtual daily behavior or how people act and interact with others on the Internet. Irrespective of whether social media will turn out to be humanity's blessing or curse (both scientists and laypeople are currently divided over this question), the fact is that people are spending an ever increasing amount of time online. In light of that, researchers are beginning to think of virtual behavior as being as serious as "actual" behavior and seek to make it a legitimate target of their investigations (Gosling & Johnson, 2010).



Online activity reveals a lot of psychological information to researchers. [Image: Sarah C. Frey, CC BY-NC-SA 2.0, goo.gl/Toc0ZF]

One way to study virtual behavior is to make use of the fact that most of what people do on the Web—emailing, chatting, tweeting, blogging, posting— leaves direct (and permanent) verbal traces. For example, differences in the ways in which people use words (e.g., subtle preferences in word choice) have been found to carry a lot of psychological information (Pennebaker, Mehl, & Niederhoffer, 2003). Therefore, a good way to study virtual social behavior is to study virtual language behavior. Researchers can download people's—often public—verbal expressions and communications and analyze them using modern text analysis programs (e.g., Pennebaker, Booth, & Francis, 2007).

For example, Cohn, Mehl, and Pennebaker (2004) downloaded blogs of more than a thousand users of lifejournal.com, one of the first Internet blogging sites, to study how people responded socially and emotionally to the attacks of September 11, 2001. In going "the online route," they could bypass a critical limitation of coping research, the inability to obtain baseline information; that is, how people were doing *before* the traumatic event occurred. Through access to the database of public blogs, they downloaded entries from two months prior to two months after the attacks. Their **linguistic analyses** revealed that in the first days after the attacks, participants expectedly expressed more negative emotions and were more cognitively and socially engaged, asking questions and sending messages of support. Already after two weeks, though, their moods and social engagement returned to baseline, and, interestingly, their use of cognitive-analytic words (e.g., "think," "question") even dropped below their normal level. Over the next six weeks, their mood hovered around their pre-9/11 baseline, but both their social engagement and cognitive-analytic processing stayed remarkably low. This suggests a social and cognitive weariness in the aftermath of the attacks. In using virtual verbal behavior as a marker of psychological functioning, this study was able to draw a fine timeline of how humans cope with disasters.

Reflecting their rapidly growing real-world importance, researchers are now beginning to investigate behavior on social networking sites such as Facebook (Wilson, Gosling, & Graham, 2012). Most research looks at psychological correlates of online behavior such as personality traits and the quality of one's social life but, importantly, there are also first attempts to export traditional experimental research designs into an online setting. In a pioneering study of online social influence, Bond and colleagues (2012) experimentally tested the effects that peer feedback has on voting behavior. Remarkably, their sample consisted of 16 million (!) Facebook users. They found that online political-mobilization messages (e.g., "I voted" accompanied by selected pictures of their Facebook friends) influenced real-world voting behavior. This was true not just for users who saw the messages but also for their friends and friends of their friends. Although the intervention effect on a single user was very small, through the enormous number of users and indirect social contagion effects, it resulted cumulatively in an estimated 340,000 additional votes—enough to tilt a close election. In short, although still in its infancy, research on virtual daily behavior is bound to change social science, and it has already helped us better understand both virtual and "actual" behavior.

"Smartphone Psychology"?

A review of research methods for studying daily life would not be complete without a vision of "what's next." Given how common they have become, it is safe to predict that smartphones will not just remain devices for everyday online communication but will also become devices for scientific data collection and intervention (Kaplan & Stone, 2013; Yarkoni, 2012). These devices

automatically store vast amounts of real-world user interaction data, and, in addition, they are equipped with sensors to track the physical (e. g., location, position) and social (e.g., wireless connections around the phone) context of these interactions. Miller (2012, p. 234) states, "The question is not whether smartphones will revolutionize psychology but how, when, and where the revolution will happen." Obviously, their immense potential for data collection also brings with it big new challenges for researchers (e.g., privacy protection, data analysis, and synthesis). Yet it is clear that many of the methods described in this module —and many still to be developed ways of collecting real-world data—will, in the future, become integrated into the devices that people naturally and happily carry with them from the moment they get up in the morning to the moment they go to bed.

Conclusion

This module sought to make a case for psychology research conducted outside the lab. If the ultimate goal of the social and behavioral sciences is to explain human behavior, then researchers must also—in addition to conducting carefully controlled lab studies—deal with the "messy" real world and find ways to capture life as it naturally happens.

Mortensen and Cialdini (2010) refer to the dynamic give-and-take between laboratory and field research as "**full-cycle psychology**". Going full cycle, they suggest, means that "researchers use naturalistic observation to determine an effect's presence in the real world, theory to determine what processes underlie the effect, experimentation to verify the effect and its underlying processes, and a return to the natural environment to corroborate the experimental findings" (Mortensen & Cialdini, 2010, p. 53). To accomplish this, researchers have access to a toolbox of research methods for studying daily life that is now more diverse and more versatile than it has ever been before. So, all it takes is to go ahead and—literally—bring science to life.

Outside Resources

Website: Society for Ambulatory Assessment

http://www.ambulatory-assessment.org

Discussion Questions

1. What do you think about the tradeoff between unambiguously establishing cause and effect (internal validity) and ensuring that research findings apply to people's everyday lives (external validity)? Which one of these would you prioritize as a researcher? Why?
2. What challenges do you see that daily-life researchers may face in their studies? How can they be overcome?
3. What ethical issues can come up in daily-life studies? How can (or should) they be addressed?
4. How do you think smartphones and other mobile electronic devices will change psychological research? What are their promises for the field? And what are their pitfalls?

Vocabulary

Ambulatory assessment

An overarching term to describe methodologies that assess the behavior, physiology, experience, and environments of humans in naturalistic settings.

Daily Diary method

A methodology where participants complete a questionnaire about their thoughts, feelings, and behavior of the day at the end of the day.

Day reconstruction method (DRM)

A methodology where participants describe their experiences and behavior of a given day retrospectively upon a systematic reconstruction on the following day.

Ecological momentary assessment

An overarching term to describe methodologies that repeatedly sample participants' real-world experiences, behavior, and physiology in real time.

Ecological validity

The degree to which a study finding has been obtained under conditions that are typical for what happens in everyday life.

Electronically activated recorder, or EAR

A methodology where participants wear a small, portable audio recorder that intermittently records snippets of ambient sounds around them.

Experience-sampling method

A methodology where participants report on their momentary thoughts, feelings, and behaviors at different points in time over the course of a day.

External validity

The degree to which a finding generalizes from the specific sample and context of a study to some larger population and broader settings.

Full-cycle psychology

A scientific approach whereby researchers start with an observational field study to identify an effect in the real world, follow up with laboratory experimentation to verify the effect and isolate the causal mechanisms, and return to field research to corroborate their experimental findings.

Generalize

Generalizing, in science, refers to the ability to arrive at broad conclusions based on a smaller sample of observations. For these conclusions to be true the sample should accurately represent the larger population from which it is drawn.

Internal validity

The degree to which a cause-effect relationship between two variables has been unambiguously established.

Linguistic inquiry and word count

A quantitative text analysis methodology that automatically extracts grammatical and psychological information from a text by counting word frequencies.

Lived day analysis

A methodology where a research team follows an individual around with a video camera to objectively document a person's daily life as it is lived.

White coat hypertension

A phenomenon in which patients exhibit elevated blood pressure in the hospital or doctor's office but not in their everyday lives.

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1.5: Social Neuroscience

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This module provides an overview of the new field of social neuroscience, which combines the use of neuroscience methods and theories to understand how other people influence our thoughts, feelings, and behavior. The module reviews research measuring neural and hormonal responses to understand how we make judgments about other people and react to stress. Through these examples, it illustrates how social neuroscience addresses three different questions: (1) how our understanding of social behavior can be expanded when we consider neural and physiological responses, (2) what the actual biological systems are that implement social behavior (e.g., what specific brain areas are associated with specific social tasks), and (3) how biological systems are impacted by social processes.

learning objectives

- Define social neuroscience and describe its three major goals.
- Describe how measures of brain activity such as EEG and fMRI are used to make inferences about social processes.
- Discuss how social categorization occurs.
- Describe how simulation may be used to make inferences about others.
- Discuss the ways in which other people can cause stress and also protect us against stress.

Psychology has a long tradition of using our brains and body to better understand how we think and act. For example, in 1939 Heinrich Kluver and Paul Bucy removed (i.e. lesioned) the temporal lobes in some rhesus monkeys and observed the effect on behavior. Included in these **lesions** was a subcortical area of the brain called the **amygdala**. After surgery, the monkeys experienced profound behavioral changes, including loss of fear. These results provided initial evidence that the amygdala plays a role in emotional responses, a finding that has since been confirmed by subsequent studies (Phelps & LeDoux, 2005; Whalen & Phelps, 2009).

What Is Social Neuroscience?

Social neuroscience similarly uses the brain and body to understand how we think and act, with a focus on how we think about and act toward other people. More specifically, we can think of social neuroscience as an interdisciplinary field that uses a range of neuroscience measures to understand how other people influence our thoughts, feelings, and behavior. As such, social neuroscience studies the same topics as social psychology, but does so from a multilevel perspective that includes the study of the brain and body. Figure 12.9.1 shows the scope of social neuroscience with respect to the older fields of social psychology and neuroscience. Although the field is relatively new – the term first appeared in 1992 (Cacioppo & Berntson, 1992) – it has grown rapidly, thanks to technological advances making measures of the brain and body cheaper and more powerful than ever before, and to the recognition that neural and physiological information are critical to understanding how we interact with other people.

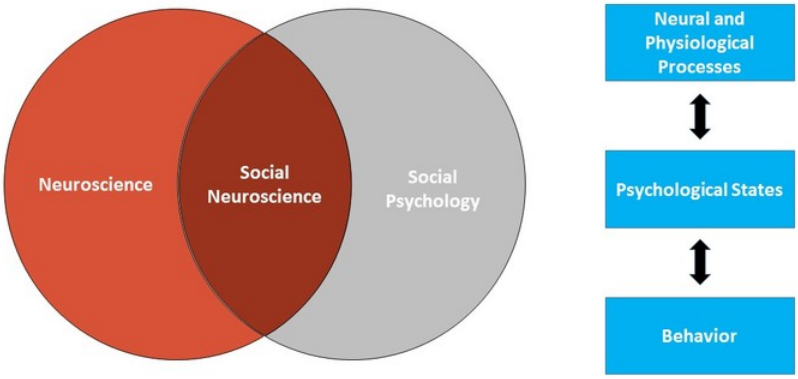


Figure 12.9.1: Social neuroscience is the intersection of social psychology and neuroscience. Under this multilevel approach, neural/physiological processes and behavior are two things we can measure or observe. Psychological states cannot be directly observed, but understanding them is the goal. Social neuroscientists use the observable neural/physiological processes and behavioral responses to make inferences about unobservable psychological states. The bidirectional arrows show that all levels of analysis are assumed to influence each other (e.g., psychological states can influence neural responses, and neural responses can influence psychological states).

Social neuroscience can be thought of as both a methodological approach (using measures of the brain and body to study social processes) and a theoretical orientation (seeing the benefits of integrating neuroscience into the study of social psychology). The overall approach in social neuroscience is to understand the psychological processes that underlie our social behavior. Because those psychological processes are intrapsychic phenomena that cannot be directly observed, social neuroscientists rely on a combination of measureable or observable neural and physiological responses as well as actual overt behavior to make inferences about psychological states (see Figure 1). Using this approach, social neuroscientists have been able to pursue three different types of questions: (1) What more can we learn about social behavior when we consider neural and physiological responses? (2) What are the actual biological systems that implement social behavior (e.g., what specific brain areas are associated with specific social tasks)? and (3) How are biological systems impacted by social processes?

In this module, we review three research questions that have been addressed with social neuroscience that illustrate the different goals of the field. These examples also expose you to some of the frequently used measures.

How Automatically Do We Judge Other People?

Social categorization is the act of mentally classifying someone as belonging in a group. Why do we do this? It is an effective mental shortcut. Rather than effortfully thinking about every detail of every person we encounter, social categorization allows us to rely on information we already know about the person's group. For example, by classifying your restaurant server as a man, you can quickly activate all the information you have stored about men and use it to guide your behavior. But this shortcut comes with potentially high costs. The stored group beliefs might not be very accurate, and even when they do accurately describe some group members, they are unlikely to be true for every member you encounter. In addition, many beliefs we associate with groups – called **stereotypes** – are negative. This means that relying on social categorization can often lead people to make negative assumptions about others.

The potential costs of social categorization make it important to understand how social categorization occurs. Is it rare or does it occur often? Is it something we can easily stop, or is it hard to override? One difficulty answering these questions is that people are not always consciously aware of what they are doing. In this case, we might not always realize when we are categorizing someone. Another concern is that even when people are aware of their behavior, they can be reluctant to accurately report it to an experimenter. In the case of social categorization, subjects might worry they will look bad if they accurately report classifying someone into a group associated with negative stereotypes. For instance, many racial groups are associated with some negative stereotypes, and subjects may worry that admitting to classifying someone into one of those groups means they believe and use those negative stereotypes.



Figure 12.9.2: This man is wearing an elastic electrode cap into which individual electrodes (inside the white circles) are sewn into standardized locations. [Image: Hans, CC0 Public Domain, goo.gl/m25gce]

Social neuroscience has been useful for studying how social categorization occurs without having to rely on self-report measures, instead measuring brain activity differences that occur when people encounter members of different social groups. Much of this work has been recorded using the **electroencephalogram**, or **EEG**. EEG is a measure of electrical activity generated by the brain's neurons. Comparing this electrical activity at a given point in time against what a person is thinking and doing at that same time allows us to make inferences about brain activity associated with specific psychological states. One particularly nice feature of EEG is that it provides very precise timing information about when brain activity occurs. EEG is measured non-invasively with small electrodes that rest on the surface of the scalp. This is often done with a stretchy elastic cap, like the one shown in Figure 12.9.2, into which the small electrodes are sewn. Researchers simply pull the cap onto the subject's head to get the electrodes into place; wearing it is similar to wearing a swim cap. The subject can then be asked to think about different topics or engage in different tasks as brain activity is measured.

To study social categorization, subjects have been shown pictures of people who belong to different social groups. Brain activity recorded from many individual trials (e.g., looking at lots of different Black individuals) is then averaged together to get an overall idea of how the brain responds when viewing individuals who belong to a particular social group. These studies suggest that social categorization is an **automatic process** – something that happens with little conscious awareness or control – especially for dimensions like gender, race, and age (Ito & Urland, 2003; Mouchetant-Rostaing & Giard, 2003). The studies specifically show that brain activity differs when subjects view members of different social groups (e.g., men versus women, Blacks versus Whites), suggesting that the group differences are being encoded and processed by the perceiver. One interesting finding is that these brain changes occur both when subjects are purposely asked to categorize the people into social groups (e.g., to judge whether the person is Black or White), and also when they are asked to do something that draws attention away from group classifications (e.g., making a personality judgment about the person) (Ito & Urland, 2005). This tells us that we do not have to intend to make group

classifications in order for them to happen. It is also very interesting to consider how quickly the changes in brain responses occur. Brain activity is altered by viewing members of different groups within 200 milliseconds of seeing a person's face. That is just two-tenths of a second. Such a fast response lends further support to the idea that social categorization occurs automatically and may not depend on conscious intention.

Overall, this research suggests that we engage in social categorization very frequently. In fact, it appears to happen automatically (i.e., without us consciously intending for it to happen) in most situations for dimensions like gender, age, and race. Since classifying someone into a group is the first step to activating a group stereotype, this research provides important information about how easily stereotypes can be activated. And because it is hard for people to accurately report on things that happen so quickly, this issue has been difficult to study using more traditional self-report measures. Using EEGs has, therefore, been helpful in providing interesting new insights into social behavior.

Do We Use Our Own Behavior to Help Us Understand Others?

Classifying someone into a social group then activating the associated stereotype is one way to make inferences about others. However, it is not the only method. Another strategy is to imagine what our own thoughts, feelings, and behaviors would be in a similar situation. Then we can use our simulated reaction as a best guess about how someone else will respond (Goldman, 2005). After all, we are experts in our own feelings, thoughts, and tendencies. It might be hard to know what other people are feeling and thinking, but we can always ask ourselves how we would feel and act if we were in their shoes.

There has been some debate about whether **simulation** is used to get into the minds of others (Carruthers & Smith, 1996; Gallese & Goldman, 1998). Social neuroscience research has addressed this question by looking at the brain areas used when people think about themselves and others. If the same brain areas are active for the two types of judgments, it lends support to the idea that the self may be used to make inferences about others via simulation.

We know that an area in the prefrontal cortex called the **medial prefrontal cortex** (mPFC) – located in the middle of the frontal lobe – is active when people think about themselves (Kelley, Macrae, Wyland, Caglar, Inati, & Heatherton, 2002). This conclusion comes from studies using **functional magnetic resonance imaging**, or fMRI. While EEG measures the brain's electrical activity, fMRI measures changes in the oxygenation of blood flowing in the brain. When neurons become more active, blood flow to the area increases to bring more oxygen and glucose to the active cells. fMRI allows us to image these changes in oxygenation by placing people in an fMRI machine or scanner (Figure 12.9.3), which consists of large magnets that create strong magnetic fields. The magnets affect the alignment of the oxygen molecules within the blood (i.e., how they are tilted). As the oxygen molecules move in and out of alignment with the magnetic fields, their nuclei produce energy that can be detected with special sensors placed close to the head. Recording fMRI involves having the subject lay on a small bed that is then rolled into the scanner. While fMRI does require subjects to lie still within the small scanner and the large magnets involved are noisy, the scanning itself is safe and painless. Like EEG, the subject can then be asked to think about different topics or engage in different tasks as brain activity is measured. If we know what a person is thinking or doing when fMRI detects a blood flow increase to a particular brain area, we can infer that part of the brain is involved with the thought or action. fMRI is particularly useful for identifying which particular brain areas are active at a given point in time.



Figure 12.9.3: Functional magnetic resonance imaging (fMRI) scanner used to image the brain while people perform tasks. The scanner allows researchers to view the changes in blood oxygenation in specific locations in the brain during a task. Images are collected using powerful magnets and radio waves that shift the position of atoms in oxygenated blood that rushes to areas involved in performing the task. MRIs are non-invasive and there are no known risks from exposure to the magnetic fields or radio waves. Subjects lay on the while bed with their head inside the head coil, then the bed is moved into the scanner. [Image: Janne Moren, https://goo.gl/MKb2jn, CC BY-NC-SA 2.0, goo.gl/Toc0ZF]

The conclusion that the mPFC is associated with the self comes from studies measuring fMRI while subjects think about themselves (e.g., saying whether traits are descriptive of themselves). Using this knowledge, other researchers have looked at whether the same brain area is active when people make inferences about others. Mitchell, Neil Macrae, and Banaji (2005) showed subjects pictures of strangers and had them judge either how pleased the person was to have his or her picture taken or how symmetrical the face appeared. Judging whether someone is pleased about being photographed requires making an inference about someone's internal feelings – we call this **mentalizing**. By contrast, facial symmetry judgments are based solely on physical appearances and do not involve mentalizing. A comparison of brain activity during the two types of judgments shows more activity in the mPFC when making the mental versus physical judgments, suggesting this brain area is involved when inferring the internal beliefs of others.

There are two other notable aspects of this study. First, mentalizing about others also increased activity in a variety of regions important for many aspects of social processing, including a region important in representing biological motion (**superior temporal sulcus** or STS), an area critical for emotional processing (amygdala), and a region also involved in thinking about the beliefs of others (**temporal parietal junction**, TPJ) (Gobbini & Haxby, 2007; Schultz, Imamizu, Kawato, & Frith, 2004) (Figure 12.9.4). This finding shows that a distributed and interacting set of brain areas is likely to be involved in social processing. Second, activity in the most ventral part of the mPFC (the part closer to the belly rather than toward the top of the head), which has been most consistently associated with thinking about the self, was particularly active when subjects mentalized about people they rated as similar to themselves. Simulation is thought to be most likely for similar others, so this finding lends support to the conclusion that we use simulation to mentalize about others. After all, if you encounter someone who has the same musical taste as you, you will probably assume you have other things in common with him. By contrast, if you learn that someone loves music that you hate, you might expect him to differ from you in other ways (Srivastava, Guglielmo, & Beer, 2010). Using a simulation of our own feelings and thoughts will be most accurate if we have reason to think the person's internal experiences are like our own. Thus, we may be most likely to use simulation to make inferences about others if we think they are similar to us.

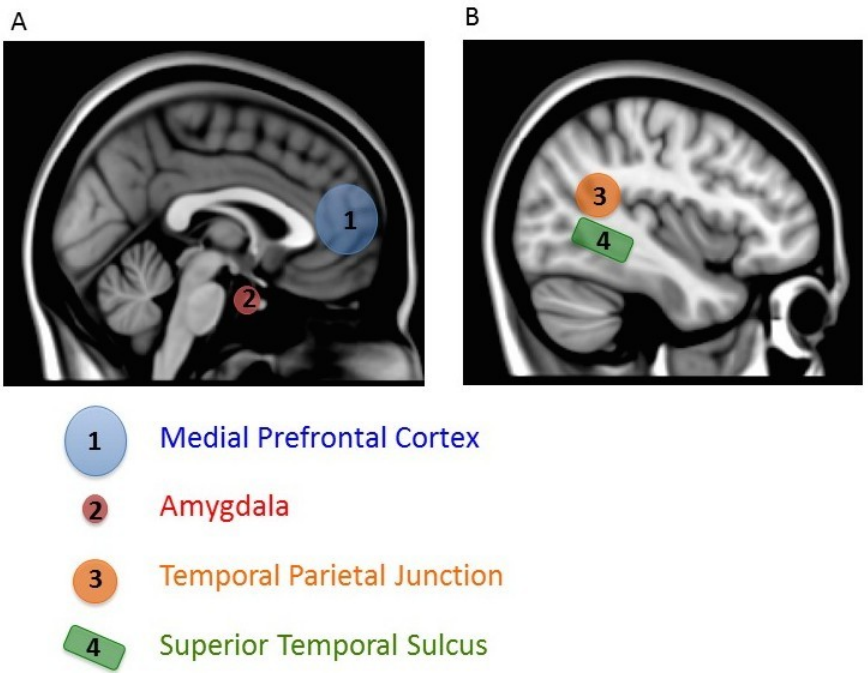


Figure 12.9.4: The areas of the brain most commonly associated with processing of self and others. Panel A is a sagittal view, looking at the inside of the brain as if it were sliced in half. Panel B is a lateral view, showing the brain from the outside. The medial prefrontal cortex (mPFC) (Structure 1) is commonly activated when thinking about one's self and when thinking about similar others. Additionally, the amygdala (Structure 2) is important for learning about and detecting important things in our environments and plays an important role in fear learning and expression. The temporal parietal junction (TPJ) (Structure 3), located at the intersection of the parietal and temporal lobes, is activated when people think about the beliefs of others. Activity in the superior temporal sulcus (STS) (Structure 4) is commonly observed when people view biological motion. The common activation of this network of regions when people think about the feelings, thoughts, and intentions of others indicates that the processing of others involves a number of complex psychological processes.

This research is a good example of how social neuroscience is revealing the **functional neuroanatomy** of social behavior. That is, it tells us which brain areas are involved with social behavior. The mPFC (as well as other areas such as the STS, amygdala, and TPJ) is involved in making judgments about the self and others. This research also provides new information about how inferences are made about others. Whereas some have doubted the widespread use of simulation as a means for making inferences about others, the activation of the mPFC when mentalizing about others, and the sensitivity of this activation to similarity between self and other, provides evidence that simulation occurs.

What Is the Cost of Social Stress?

Stress is an unfortunately frequent experience for many of us. **Stress** – which can be broadly defined as a threat or challenge to our well-being – can result from everyday events like a course exam or more extreme events such as experiencing a natural disaster. When faced with a stressor, **sympathetic nervous system** activity increases in order to prepare our body to respond to the challenge. This produces what Selye (1950) called a **fight or flight response**. The release of **hormones**, which act as messengers from one part of an organism (e.g., a cell or gland) to another part of the organism, is part of the stress response.

A small amount of stress can actually help us stay alert and active. In comparison, sustained stressors, or chronic stress, detrimentally affect our health and impair performance (Al'Absi, Hugdahl, & Lovallo, 2002; Black, 2002; Lazarus, 1974). This happens in part through the chronic secretion of stress-related hormones (e.g., Davidson, Pizzagalli, Nitschke, & Putnam, 2002; Dickerson, Gable, Irwin, Aziz, & Kemeny, 2009). In particular, stress activates the **hypothalamic-pituitary-adrenal (HPA) axis** to release **cortisol** (see Figure 12.9.5 for a discussion). Chronic stress, by way of increases in cortisol, impairs attention, memory, and self-control (Arnsten, 2009). Cortisol levels can be measured non-invasively in bodily fluids, including blood and saliva. Researchers often collect a cortisol sample before and after a potentially stressful task. In one common collection method, subjects place polymer swabs under their tongue for 1 to 2 minutes to soak up saliva. The saliva samples are then stored and analyzed later to determine the level of cortisol present at each time point.

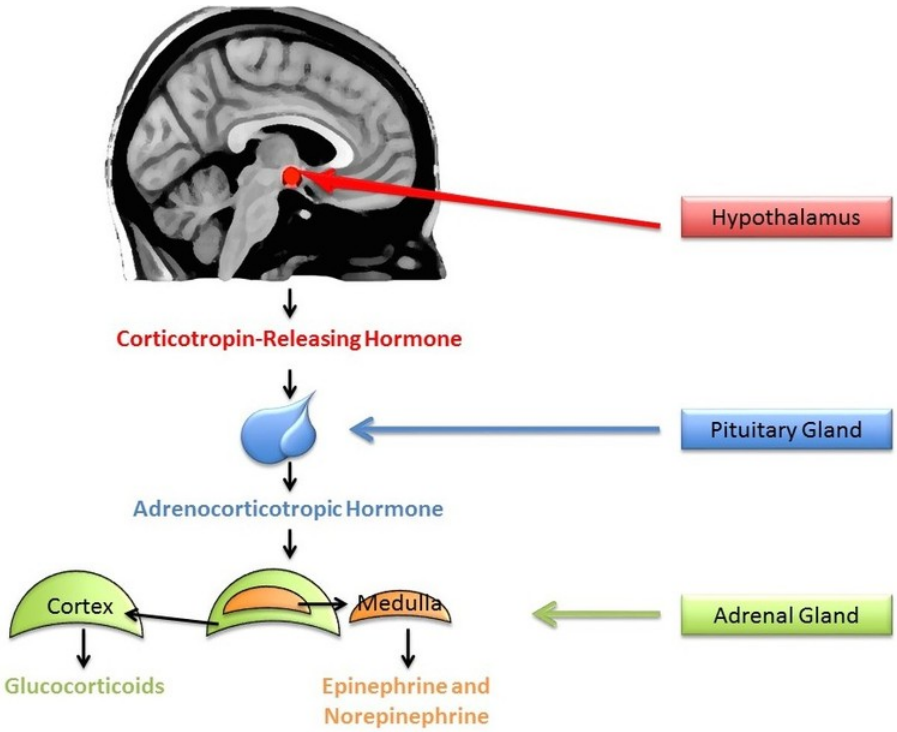


Figure 12.9.5: The Hypothalamic-pituitary-adrenal (HPA) axis. Black arrows represent the stress response pathway starting in the brain at the hypothalamus (an area within the brain). Stress triggers neurons in the hypothalamus to release corticotrophin-releasing hormone (CRH). The CRH is transported to the pituitary gland, another area in the brain, that activates the secretion of andrenocorticotropic hormone (ACTH). In turn, ACTH stimulates the adrenal glands that sit on top of the kidneys. The adrenal glands are composed of the outer adrenal cortex and inner adrenal medulla. The adrenal cortex secretes glucorcorticoids (including cortisol) and the medulla secretes epinephrine and norepinephrine. Stress, both psychological and physical, activates the HPA axis and results in the systemic release of cortisol, epinephrine, and norepinephrine.

Whereas early stress researchers studied the effects of physical stressors like loud noises, social neuroscientists have been instrumental in studying how our interactions with other people can cause stress. This question has been addressed through **neuroendocrinology**, or the study of how the brain and hormones act in concert to coordinate the physiology of the body. One contribution of this work has been in understanding the conditions under which other people can cause stress. In one study, Dickerson, Mycek, and Zaldivar (2008) asked undergraduates to deliver a speech either alone or to two other people. When the students gave the speech in front of others, there was a marked increase in cortisol compared with when they were asked to give a speech alone. This suggests that like chronic physical stress, everyday social stressors, like having your performance judged by others, induces a stress response. Interestingly, simply giving a speech in the same room with someone who is doing something else did not induce a stress response. This suggests that the mere presence of others is not stressful, but rather it is the potential for them to judge us that induces stress.

Worrying about what other people think of us is not the only source of social stress in our lives. Other research has shown that interacting with people who belong to different social groups than us – what social psychologists call **outgroup** members – can increase physiological stress responses. For example, cardiovascular responses associated with stress like contractility of the heart ventricles and the amount of blood pumped by the heart (what is called cardiac output) are increased when interacting with outgroup as compared with **ingroup** members (i.e., people who belong to the same social group we do) (Mendes, Blascovich, Likel, & Hunter, 2002). This stress may derive from the expectation that interactions with dissimilar others will be uncomfortable (Stephan & Stephan, 1985) or concern about being judged as unfriendly and prejudiced if the interaction goes poorly (Plant & Devine, 2003).

The research just reviewed shows that events in our social lives can be stressful, but are social interactions always bad for us? No. In fact, while others can be the source of much stress, they are also a major buffer against stress. Research on **social support** shows that relying on a network of individuals in tough times gives us tools for dealing with stress and can ward off loneliness (Cacioppo

& Patrick, 2008). For instance, people who report greater social support show a smaller increase in cortisol when performing a speech in front of two evaluators (Eisenberger, Taylor, Gable, Hilmert, & Lieberman, 2007).

What determines whether others will increase or decrease stress? What matters is the context of the social interaction. When it has potential to reflect badly on the self, social interaction can be stressful, but when it provides support and comfort, social interaction can protect us from the negative effects of stress. Using neuroendocrinology by measuring hormonal changes in the body has helped researchers better understand how social factors impact our body and ultimately our health.

Conclusions

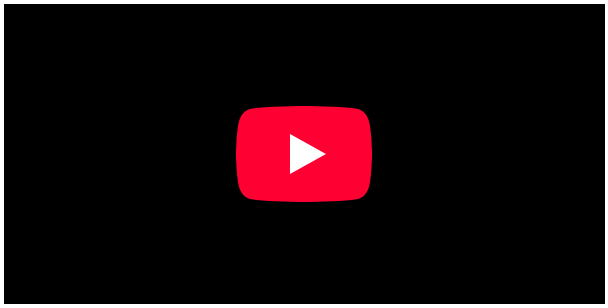
Human beings are intensely social creatures – our lives are intertwined with other people and our health and well-being depend on others. Social neuroscience helps us to understand the critical function of how we make sense of and interact with other people. This module provides an introduction to what social neuroscience is and what we have already learned from it, but there is much still to understand. As we move forward, one exciting future direction will be to better understand how different parts of the brain and body interact to produce the numerous and complex patterns of social behavior that humans display. We hinted at some of this complexity when we reviewed research showing that while the mPFC is involved in mentalizing, other areas such as the STS, amygdala, and TPJ are as well. There are likely additional brain areas involved as well, interacting in ways we do not yet fully understand. These brain areas in turn control other aspects of the body to coordinate our responses during social interactions. Social neuroscience will continue to investigate these questions, revealing new information about how social processes occur, while also increasing our understanding of basic neural and physiological processes.

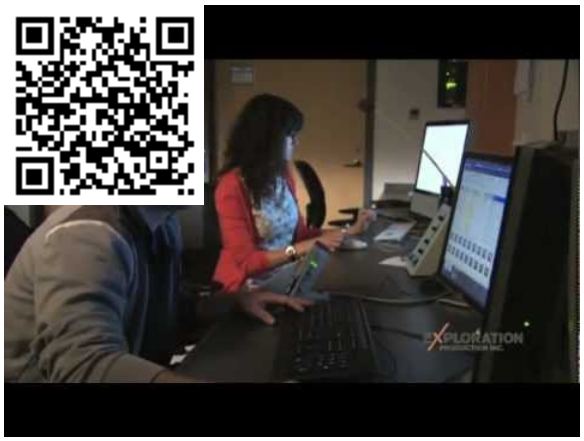
Outside Resources

Society for Social Neuroscience

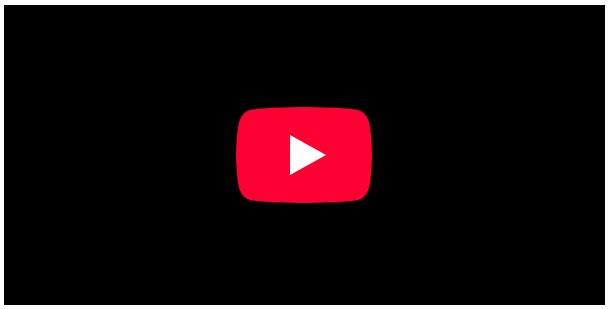
http://www.s4sn.org

Video: See a demonstration of fMRI data being collected.

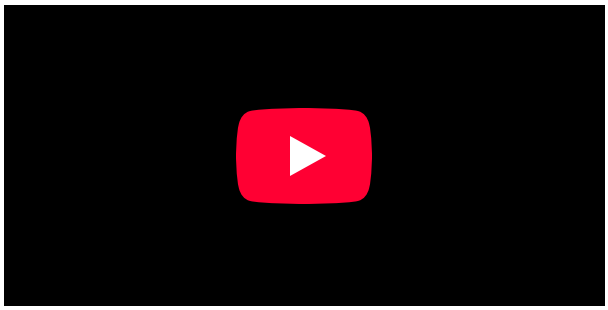




Video: See an example of EEG data being collected.



Vid ; frequently used in the lab to create stress – giving a speech in front of strangers, and doing math con l in front of others. Notice how some subjects show obvious signs of stress, but in some situations, cortisol changes suggest that even people who appear calm are experiencing a physiological response associated with stress.





Video: Watch a video used by Fritz Heider and Marianne Simmel in a landmark study on social perception published in 1944. Their goal was to investigate how we perceive other people, and they studied it by seeing how readily we apply people-like interpretations to non-social stimuli.

intentionperception.org/wp-co...ider_Flash.swf

Discussion Questions

1. Categorizing someone as a member of a social group can activate group stereotypes. EEG research suggests that social categorization occurs quickly and often automatically. What does this tell us about the likelihood of stereotyping occurring? How can we use this information to develop ways to stop stereotyping from happening?
2. Watch this video, similar to what was used by Fritz Heider and Marianne Simmel in a landmark study on social perception published in 1944, and imagine telling a friend what happened in the video. intentionperception.org/wp-co...ider_Flash.swf. After watching the video, think about the following: Did you describe the motion of the objects solely in geometric terms (e.g., a large triangle moved from the left to the right), or did you describe the movements as actions of animate beings, maybe even

of people (e.g., the circle goes into the house and shuts the door)? In the original research, 33 of 34 subjects described the action of the shapes using human terms. What does this tell us about our tendency to mentalize?

3. Consider the types of things you find stressful. How many of them are social in nature (e.g., are related to your interactions with other people)? Why do you think our social relations have such potential for stress? In what ways can social relations be beneficial and serve as a buffer for stress?

Vocabulary

Amygdala

A region located deep within the brain in the medial area (toward the center) of the temporal lobes (parallel to the ears). If you could draw a line through your eye sloping toward the back of your head and another line between your two ears, the amygdala would be located at the intersection of these lines. The amygdala is involved in detecting relevant stimuli in our environment and has been implicated in emotional responses.

Automatic process

When a thought, feeling, or behavior occurs with little or no mental effort. Typically, automatic processes are described as involuntary or spontaneous, often resulting from a great deal of practice or repetition.

Cortisol

A hormone made by the adrenal glands, within the cortex. Cortisol helps the body maintain blood pressure and immune function. Cortisol increases when the body is under stress.

Electroencephalogram

A measure of electrical activity generated by the brain's neurons.

Fight or flight response

The physiological response that occurs in response to a perceived threat, preparing the body for actions needed to deal with the threat.

Functional magnetic resonance imaging

A measure of changes in the oxygenation of blood flow as areas in the brain become active.

Functional neuroanatomy

Classifying how regions within the nervous system relate to psychology and behavior.

Hormones

Chemicals released by cells in the brain or body that affect cells in other parts of the brain or body.

Hypothalamic-pituitary-adrenal (HPA) axis

A system that involves the hypothalamus (within the brain), the pituitary gland (within the brain), and the adrenal glands (at the top of the kidneys). This system helps maintain homeostasis (keeping the body's systems within normal ranges) by regulating digestion, immune function, mood, temperature, and energy use. Through this, the HPA regulates the body's response to stress and injury.

Ingroup

A social group to which an individual identifies or belongs.

Lesions

Damage or tissue abnormality due, for example, to an injury, surgery, or a vascular problem.

Medial prefrontal cortex

An area of the brain located in the middle of the frontal lobes (at the front of the head), active when people mentalize about the self and others.

Mentalizing

The act of representing the mental states of oneself and others. Mentalizing allows humans to interpret the intentions, beliefs, and emotional states of others.

Neuroendocrinology

The study of how the brain and hormones act in concert to coordinate the physiology of the body.

Outgroup

A social group to which an individual does not identify or belong.

Simulation

Imaginary or real imitation of other people's behavior or feelings.

Social categorization

The act of mentally classifying someone into a social group (e.g., as female, elderly, a librarian).

Social support

A subjective feeling of psychological or physical comfort provided by family, friends, and others.

Stereotypes

The beliefs or attributes we associate with a specific social group. Stereotyping refers to the act of assuming that because someone is a member of a particular group, he or she possesses the group's attributes. For example, stereotyping occurs when we assume someone is unemotional just because he is man, or particularly athletic just because she is African American.

Stress

A threat or challenge to our well-being. Stress can have both a psychological component, which consists of our subjective thoughts and feelings about being threatened or challenged, as well as a physiological component, which consists of our body's response to the threat or challenge (see "fight or flight response").

Superior temporal sulcus

The sulcus (a fissure in the surface of the brain) that separates the superior temporal gyrus from the middle temporal gyrus. Located in the temporal lobes (parallel to the ears), it is involved in perception of biological motion or the movement of animate objects.

Sympathetic nervous system

A branch of the autonomic nervous system that controls many of the body's internal organs. Activity of the SNS generally mobilizes the body's fight or flight response.

Temporal parietal junction

The area where the temporal lobes (parallel to the ears) and partial lobes (at the top of the head toward the back) meet. This area is important in mentalizing and distinguishing between the self and others.

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CHAPTER OVERVIEW

2: UNDERSTANDING THE SELF AND OTHERS

2.1: Self and Identity

2.2: Social Cognition and Attitudes

2.3: Theory of Mind

2.4: Evolutionary Theories in Psychology

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2.1: Self and Identity

By Dan P. McAdams

Northwestern University

For human beings, the self is what happens when "I" encounters "Me." The central psychological question of selfhood, then, is this: How does a person apprehend and understand who he or she is? Over the past 100 years, psychologists have approached the study of self (and the related concept of identity) in many different ways, but three central metaphors for the self repeatedly emerge. First, the self may be seen as a social actor, who enacts roles and displays traits by performing behaviors in the presence of others. Second, the self is a motivated agent, who acts upon inner desires and formulates goals, values, and plans to guide behavior in the future. Third, the self eventually becomes an autobiographical author, too, who takes stock of life — past, present, and future — to create a story about who I am, how I came to be, and where my life may be going. This module briefly reviews central ideas and research findings on the self as an actor, an agent, and an author, with an emphasis on how these features of selfhood develop over the human life course.

learning objectives

- Explain the basic idea of reflexivity in human selfhood—how the "I" encounters and makes sense of itself (the "Me").
- Describe fundamental distinctions between three different perspectives on the self: the self as actor, agent, and author.
- Describe how a sense of self as a social actor emerges around the age of 2 years and how it develops going forward.
- Describe the development of the self's sense of motivated agency from the emergence of the child's theory of mind to the articulation of life goals and values in adolescence and beyond.
- Define the term narrative identity, and explain what psychological and cultural functions narrative identity serves.

Introduction

In the Temple of Apollo at Delphi, the ancient Greeks inscribed the words: "Know thy*self*." For at least 2,500 years, and probably longer, human beings have pondered the meaning of the ancient aphorism. Over the past century, psychological scientists have joined the effort. They have formulated many theories and tested countless hypotheses that speak to the central question of human selfhood: *How does a person know who he or she is?*



We work on ourselves as we would any other interesting project. And when we do we generally focus on three psychological categories - The Social Actor, The Motivated Agent, and The Autobiographical Author. [Image: MakuKulden, https://goo.gl/sMUsnJ, CC BY-NC 2.0, goo.gl/VnKlK8]

The ancient Greeks seemed to realize that the self is inherently **reflexive**—it reflects back on itself. In the disarmingly simple idea made famous by the great psychologist William James (1892/1963), the self is what happens when "I" reflects back upon "Me."

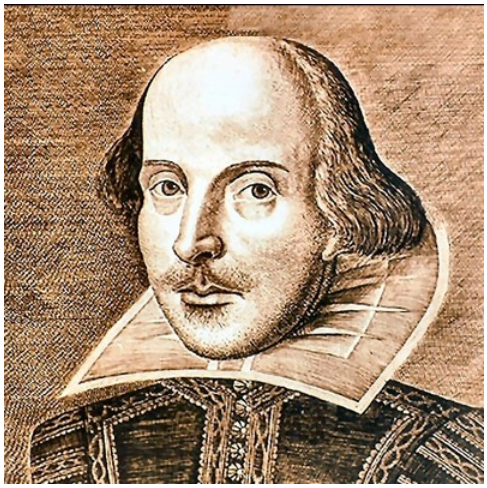
The self is both the I and the Me—it is the knower, and it is what the knower knows when the knower reflects upon itself. When you look back at yourself, what do you see? When you look inside, what do you find? Moreover, when you try to *change* your self in some way, what is it that you are trying to change? The philosopher Charles Taylor (1989) describes the self as a reflexive *project*. In modern life, Taylor agues, we often try to manage, discipline, refine, improve, or develop the self. We *work on* our selves, as we might work on any other interesting project. But what exactly is it that we work on?

Imagine for a moment that you have decided to improve your*self*. You might, say, go on a diet to improve your appearance. Or you might decide to be nicer to your mother, in order to improve that important social role. Or maybe the problem is at work—you need to find a better job or go back to school to prepare for a different career. Perhaps you just need to work harder. Or get organized. Or recommit yourself to religion. Or maybe the key is to begin thinking about your whole life story in a completely different way, in a way that you hope will bring you more happiness, fulfillment, peace, or excitement.

Although there are many different ways you might reflect upon and try to improve the self, it turns out that many, if not most, of them fall roughly into three broad psychological categories (McAdams & Cox, 2010). The I may encounter the Me as (a) a social actor, (b) a motivated agent, or (c) an autobiographical author.

The Social Actor

Shakespeare tapped into a deep truth about human nature when he famously wrote, “All the world’s a stage, and all the men and women merely players.” He was wrong about the “merely,” however, for there is nothing more important for human adaptation than the manner in which we perform our roles as actors in the everyday theatre of social life. What Shakespeare may have sensed but could not have fully understood is that human beings evolved to live in social groups. Beginning with Darwin (1872/1965) and running through contemporary conceptions of human evolution, scientists have portrayed human nature as profoundly *social* (Wilson, 2012). For a few million years, *Homo sapiens* and their evolutionary forerunners have survived and flourished by virtue of their ability to live and work together in complex social groups, cooperating with each other to solve problems and overcome threats and competing with each other in the face of limited resources. As social animals, human beings strive to *get along* and *get ahead* in the presence of each other (Hogan, 1982). Evolution has prepared us to care deeply about social acceptance and social status, for those unfortunate individuals who do not get along well in social groups or who fail to attain a requisite status among their peers have typically been severely compromised when it comes to survival and reproduction. It makes consummate evolutionary sense, therefore, that the human "I" should apprehend the "Me" first and foremost as a *social actor*.



In some ways people are just like actors on stage. We play roles and follow scripts every day. [Image: Brian, https://goo.gl/z0VI3t, CC BY-SA 2.0, goo.gl/i4GXf5]

For human beings, the sense of the self as a social actor begins to emerge around the age of 18 months. Numerous studies have shown that by the time they reach their second birthday most toddlers recognize themselves in mirrors and other reflecting devices (Lewis & Brooks-Gunn, 1979; Rochat, 2003). What they see is an embodied actor who moves through space and time. Many children begin to use words such as “me” and “mine” in the second year of life, suggesting that the I now has linguistic labels that can be applied reflexively to itself: I call myself “me.” Around the same time, children also begin to express social emotions such as embarrassment, shame, guilt, and pride (Tangney, Stuewig, & Mashek, 2007). These emotions tell the social actor how well he

or she is performing in the group. When I do things that win the approval of others, I feel proud of myself. When I fail in the presence of others, I may feel embarrassment or shame. When I violate a social rule, I may experience guilt, which may motivate me to make amends.

Many of the classic psychological theories of human selfhood point to the second year of life as a key developmental period. For example, Freud (1923/1961) and his followers in the psychoanalytic tradition traced the emergence of an autonomous **ego** back to the second year. Freud used the term "ego" (in German *das Ich*, which also translates into "the I") to refer to an executive self in the personality. Erikson (1963) argued that experiences of trust and interpersonal attachment in the first year of life help to consolidate the autonomy of the ego in the second. Coming from a more sociological perspective, Mead (1934) suggested that the I comes to know the Me through reflection, which may begin quite literally with mirrors but later involves the reflected appraisals of others. I come to know who I am as a social actor, Mead argued, by noting how *other people* in my social world react to my performances. In the development of the self as a social actor, other people function like mirrors—they reflect who I am back to me.

Research has shown that when young children begin to make attributions about themselves, they start simple (Harter, 2006). At age 4, Jessica knows that she has dark hair, knows that she lives in a white house, and describes herself to others in terms of simple behavioral *traits*. She may say that she is "nice," or "helpful," or that she is "a good girl most of the time." By the time, she hits fifth grade (age 10), Jessica sees herself in more complex ways, attributing traits to the self such as "honest," "moody," "outgoing," "shy," "hard-working," "smart," "good at math but not gym class," or "nice except when I am around my annoying brother." By late childhood and early adolescence, the personality traits that people attribute to themselves, as well as those attributed to them by others, tend to correlate with each other in ways that conform to a well-established taxonomy of five broad trait domains, repeatedly derived in studies of adult personality and often called the **Big Five**: (1) extraversion, (2) neuroticism, (3) agreeableness, (4) conscientiousness, and (5) openness to experience (Roberts, Wood, & Caspi, 2008). By late childhood, moreover, self-conceptions will likely also include important social *roles*: "I am a good student," "I am the oldest daughter," or "I am a good friend to Sarah."

Traits and roles, and variations on these notions, are the main currency of the **self as social actor** (McAdams & Cox, 2010). Trait terms capture perceived consistencies in social performance. They convey what I reflexively perceive to be my overall acting style, based in part on how I think others see me as an actor in many different social situations. Roles capture the quality, as I perceive it, of important structured relationships in my life. Taken together, traits and roles make up the main features of my **social reputation**, as I apprehend it in my own mind (Hogan, 1982).

If you have ever tried hard to change yourself, you may have taken aim at your social reputation, targeting your central traits or your social roles. Maybe you woke up one day and decided that you must become a more optimistic and emotionally upbeat person. Taking into consideration the reflected appraisals of others, you realized that even your friends seem to avoid you because you bring them down. In addition, it feels bad to feel so bad all the time: Wouldn't it be better to feel good, to have more energy and hope? In the language of traits, you have decided to "work on" your "neuroticism." Or maybe instead, your problem is the trait of "conscientiousness": You are undisciplined and don't work hard enough, so you resolve to make changes in that area. Self-improvement efforts such as these—aimed at changing one's traits to become a more effective social actor—are sometimes successful, but they are very hard—kind of like dieting. Research suggests that broad traits tend to be stubborn, resistant to change, even with the aid of psychotherapy. However, people often have more success working directly on their social roles. To become a more effective social actor, you may want to take aim at the important roles you play in life. What can I do to become a better son or daughter? How can I find new and meaningful roles to perform at work, or in my family, or among my friends, or in my church and community? By doing concrete things that enrich your performances in important social roles, you may begin to see yourself in a new light, and others will notice the change, too. Social actors hold the potential to transform their performances across the human life course. Each time you walk out on stage, you have a chance to start anew.

The Motivated Agent

Whether we are talking literally about the theatrical stage or more figuratively, as I do in this module, about the everyday social environment for human behavior, observers can never fully know what is in the actor's head, no matter how closely they watch. We can see actors act, but we cannot know for sure what they *want* or what they *value*, unless they tell us straightaway. As a social actor, a person may come across as friendly and compassionate, or cynical and mean-spirited, but in neither case can we infer their

motivations from their traits or their roles. What does the friendly person want? What is the cynical father trying to achieve? Many broad psychological theories of the self prioritize the motivational qualities of human behavior—the inner needs, wants, desires, goals, values, plans, programs, fears, and aversions that seem to give behavior its direction and purpose (Bandura, 1989; Deci & Ryan, 1991; Markus & Nurius, 1986). These kinds of theories explicitly conceive of the self as a *motivated agent.*



When we observe others we only see how they act but are never able to access the entirety of their internal experience. [Iamge: CC0 Public Domain, goo.gl/m25gce]

To be an agent is to act with direction and purpose, to move forward into the future in pursuit of self-chosen and valued goals. In a sense, human beings are agents even as infants, for babies can surely act in goal-directed ways. By age 1 year, moreover, infants show a strong preference for observing and imitating the goal-directed, intentional behavior of others, rather than random behaviors (Woodward, 2009). Still, it is one thing to act in goal-directed ways; it is quite another for the I to know itself (the Me) as an intentional and purposeful force who moves forward in life in pursuit of self-chosen goals, values, and other desired end states. In order to do so, the person must first realize that people indeed have desires and goals in their minds and that these inner desires and goals *motivate* (initiate, energize, put into motion) their behavior. According to a strong line of research in developmental psychology, attaining this kind of understanding means acquiring a **theory of mind** (Wellman, 1993), which occurs for most children by the age of 4. Once a child understands that other people's behavior is often motivated by inner desires and goals, it is a small step to apprehend the self in similar terms.

Building on theory of mind and other cognitive and social developments, children begin to construct the self as a motivated agent in the elementary school years, layered over their still-developing sense of themselves as social actors. Theory and research on what developmental psychologists call **the age 5-to-7 shift** converge to suggest that children become more planful, intentional, and systematic in their pursuit of valued goals during this time (Sameroff & Haith, 1996). Schooling reinforces the shift in that teachers and curricula place increasing demands on students to work hard, adhere to schedules, focus on goals, and achieve success in particular, well-defined task domains. Their relative success in achieving their most cherished goals, furthermore, goes a long way in determining children's **self-esteem** (Robins, Tracy, & Trzesniewski, 2008). Motivated agents feel good about themselves to the extent they believe that they are making good progress in achieving their goals and advancing their most important values.

Goals and values become even more important for the self in adolescence, as teenagers begin to confront what Erikson (1963) famously termed the developmental challenge of **identity**. For adolescents and young adults, establishing a psychologically efficacious identity involves exploring different options with respect to life goals, values, vocations, and intimate relationships and eventually committing to a motivational and ideological agenda for adult life—an integrated and realistic sense of what I want and value in life and how I plan to achieve it (Kroger & Marcia, 2011). Committing oneself to an integrated suite of life goals and values is perhaps the greatest achievement for the **self as motivated agent**. Establishing an adult identity has implications, as well, for how a person moves through life as a social actor, entailing new role commitments and, perhaps, a changing understanding of one's basic dispositional traits. According to Erikson, however, identity achievement is always provisional, for adults continue to work on their identities as they move into midlife and beyond, often relinquishing old goals in favor of new ones, investing themselves in new projects and making new plans, exploring new relationships, and shifting their priorities in response to changing life circumstances (Freund & Riediger, 2006; Josselson, 1996).

There is a sense whereby *any* time you try to change yourself, you are assuming the role of a motivated agent. After all, to strive to change something is inherently what an agent does. However, what particular feature of selfhood you try to change may correspond to your self as actor, agent, or author, or some combination. When you try to change your traits or roles, you take aim at the social

actor. By contrast, when you try to change your values or life goals, you are focusing on yourself as a motivated agent. Adolescence and young adulthood are periods in the human life course when many of us focus attention on our values and life goals. Perhaps you grew up as a traditional Catholic, but now in college you believe that the values inculcated in your childhood no longer function so well for you. You no longer believe in the central tenets of the Catholic Church, say, and are now working to replace your old values with new ones. Or maybe you still want to be Catholic, but you feel that your new take on faith requires a different kind of personal ideology. In the realm of the motivated agent, moreover, changing values can influence life goals. If your new value system prioritizes alleviating the suffering of others, you may decide to pursue a degree in social work, or to become a public interest lawyer, or to live a simpler life that prioritizes people over material wealth. 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.

The Autobiographical Author

Even as **the "I"**continues to develop a sense of **the "Me"** as both a social actor and a motivated agent, a third standpoint for selfhood gradually emerges in the adolescent and early-adult years. The third perspective is a response to Erikson's (1963) challenge of identity. According to Erikson, developing an identity involves more than the exploration of and commitment to life goals and values (the self as motivated agent), and more than committing to new roles and re-evaluating old traits (the self as social actor). It also involves achieving a sense of *temporal continuity* in life—a reflexive understanding of *how I have come to be the person I am becoming*, or put differently, how my past self has developed into my present self, and how my present self will, in turn, develop into an envisioned future self. In his analysis of identity formation in the life of the 15th-century Protestant reformer Martin Luther, Erikson (1958) describes the culmination of a young adult's search for identity in this way:

"To be adult means among other things to see one's own life in continuous perspective, both in retrospect and prospect. By accepting some definition of who he is, usually on the basis of a function in an economy, a place in the sequence of generations, and a status in the structure of society, the adult is able *to selectively reconstruct his past in such a way that, step for step, it seems to have planned him, or better, he seems to have planned it*. In this sense, psychologically we do choose our parents, our family history, and the history of our kings, heroes, and gods. By making them our own, we maneuver ourselves into the inner position of proprietors, of creators."

-- (Erikson, 1958, pp. 111–112; emphasis added).

In this rich passage, Erikson intimates that the development of a mature identity in young adulthood involves the I's ability to construct a retrospective and prospective *story* about the Me (McAdams, 1985). In their efforts to find a meaningful identity for life, young men and women begin "to selectively reconstruct" their past, as Erikson wrote, and imagine their future to create an integrative life story, or what psychologists today often call a **narrative identity**. A narrative identity is an internalized and evolving story of the self that reconstructs the past and anticipates the future in such a way as to provide a person's life with some degree of unity, meaning, and purpose over time (McAdams, 2008; McLean, Pasupathi, & Pals, 2007). The self typically becomes an *autobiographical author* in the early-adult years, a way of being that is layered over the motivated agent, which is layered over the social actor. In order to provide life with the sense of temporal continuity and deep meaning that Erikson believed identity should confer, we must author a personalized life story that integrates our understanding of who we once were, who we are today, and who we may become in the future. The story helps to explain, for the author and for the author's world, why the social actor does what it does and why the motivated agent wants what it wants, and how the person as a whole has developed over time, from the past's reconstructed beginning to the future's imagined ending.

By the time they are 5 or 6 years of age, children can tell well-formed stories about personal events in their lives (Fivush, 2011). By the end of childhood, they usually have a good sense of what a typical biography contains and how it is sequenced, from birth to death (Thomsen & Bernsten, 2008). But it is not until adolescence, research shows, that human beings express advanced storytelling skills and what psychologists call **autobiographical reasoning** (Habermas & Bluck, 2000; McLean & Fournier, 2008). In autobiographical reasoning, a narrator is able to derive substantive conclusions about the self from analyzing his or her own personal experiences. Adolescents may develop the ability to string together events into causal chains and inductively derive general themes about life from a sequence of chapters and scenes (Habermas & de Silveira, 2008). For example, a 16-year-old may be able to explain to herself and to others how childhood experiences in her family have shaped her vocation in life. Her parents were divorced when she was 5 years old, the teenager recalls, and this caused a great deal of stress in her family. Her mother often

seemed anxious and depressed, but she (the now-teenager when she was a little girl—the story's protagonist) often tried to cheer her mother up, and her efforts seemed to work. In more recent years, the teenager notes that her friends often come to her with their boyfriend problems. She seems to be very adept at giving advice about love and relationships, which stems, the teenager now believes, from her early experiences with her mother. Carrying this causal narrative forward, the teenager now thinks that she would like to be a marriage counselor when she grows up.



Young people often "try on" many variations of identities to see which best fits their private sense of themselves. [Image: Sangudo, https://goo.gl/Ay3UMR, CC BY-NC-SA 2.0, goo.gl/Toc0ZF]

Unlike children, then, adolescents can tell a full and convincing story about an entire human life, or at least a prominent line of causation within a full life, explaining continuity and change in the story's protagonist over time. Once the cognitive skills are in place, young people seek interpersonal opportunities to share and refine their developing sense of themselves as storytellers (the I) who tell stories about themselves (the Me). Adolescents and young adults author a narrative sense of the self by telling stories about their experiences to other people, monitoring the feedback they receive from the tellings, editing their stories in light of the feedback, gaining new experiences and telling stories about those, and on and on, as selves create stories that, in turn, create new selves (McLean et al., 2007). Gradually, in fits and starts, through conversation and introspection, the I develops a convincing and coherent narrative about the Me.

Contemporary research on the **self as autobiographical author** emphasizes the strong effect of *culture* on narrative identity (Hammack, 2008). Culture provides a menu of favored plot lines, themes, and character types for the construction of self-defining life stories. Autobiographical authors sample selectively from the cultural menu, appropriating ideas that seem to resonate well with their own life experiences. As such, life stories reflect the culture, wherein they are situated as much as they reflect the authorial efforts of the autobiographical I.

As one example of the tight link between culture and narrative identity, McAdams (2013) and others (e.g., Kleinfeld, 2012) have highlighted the prominence of **redemptive narratives** in American culture. Epitomized in such iconic cultural ideals as the American dream, Horatio Alger stories, and narratives of Christian atonement, redemptive stories track the move from suffering to an enhanced status or state, while scripting the development of a chosen protagonist who journeys forth into a dangerous and unredeemed world (McAdams, 2013). Hollywood movies often celebrate redemptive quests. Americans are exposed to similar narrative messages in self-help books, 12-step programs, Sunday sermons, and in the rhetoric of political campaigns. Over the past two decades, the world's most influential spokesperson for the power of redemption in human lives may be Oprah Winfrey, who tells her own story of overcoming childhood adversity while encouraging others, through her media outlets and philanthropy, to tell similar kinds of stories for their own lives (McAdams, 2013). Research has demonstrated that American adults who enjoy high levels of mental health and civic engagement tend to construct their lives as narratives of redemption, tracking the move from sin to salvation, rags to riches, oppression to liberation, or sickness/abuse to health/recovery (McAdams, Diamond, de St. Aubin, & Mansfield, 1997; McAdams, Reynolds, Lewis, Patten, & Bowman, 2001; Walker & Frimer, 2007). In American society, these kinds of stories are often seen to be inspirational.

At the same time, McAdams (2011, 2013) has pointed to shortcomings and limitations in the redemptive stories that many Americans tell, which mirror cultural biases and stereotypes in American culture and heritage. McAdams has argued that redemptive stories support happiness and societal engagement for some Americans, but the same stories can encourage moral righteousness and a naïve expectation that suffering will always be redeemed. For better and sometimes for worse, Americans seem to love stories of personal redemption and often aim to assimilate their autobiographical memories and aspirations to a redemptive form. Nonetheless, these same stories may not work so well in cultures that espouse different values and narrative ideals (Hammack, 2008). It is important to remember that every culture offers its own storehouse of favored narrative forms. It is also essential to know that no single narrative form captures all that is good (or bad) about a culture. In American society, the redemptive narrative is but one of many different kinds of stories that people commonly employ to make sense of their lives.

What is your story? What kind of a narrative are you working on? As you look to the past and imagine the future, what threads of continuity, change, and meaning do you discern? For many people, the most dramatic and fulfilling efforts to change the self happen when the I works hard, as an autobiographical author, to construct and, ultimately, to tell a new story about the Me. Storytelling may be the most powerful form of self-transformation that human beings have ever invented. Changing one's life story is at the heart of many forms of psychotherapy and counseling, as well as religious conversions, vocational epiphanies, and other dramatic transformations of the self that people often celebrate as turning points in their lives (Adler, 2012). Storytelling is often at the heart of the little changes, too, minor edits in the self that we make as we move through daily life, as we live and experience life, and as we later tell it to ourselves and to others.

Conclusion

For human beings, selves begin as social actors, but they eventually become motivated agents and autobiographical authors, too. The I first sees itself as an embodied actor in social space; with development, however, it comes to appreciate itself also as a forward-looking source of self-determined goals and values, and later yet, as a storyteller of personal experience, oriented to the reconstructed past and the imagined future. To "know thyself" in mature adulthood, then, is to do three things: (a) to apprehend and to perform with social approval my self-ascribed traits and roles, (b) to pursue with vigor and (ideally) success my most valued goals and plans, and (c) to construct a story about life that conveys, with vividness and cultural resonance, how I became the person I am becoming, integrating my past as I remember it, my present as I am experiencing it, and my future as I hope it to be.

Outside Resources

Web: The website for the Foley Center for the Study of Lives, at Northwestern University. The site contains research materials, interview protocols, and coding manuals for conducting studies of narrative identity.

http://www.sesp.northwestern.edu/foley/

Discussion Questions

1. Back in the 1950s, Erik Erikson argued that many adolescents and young adults experience a tumultuous identity crisis. Do you think this is true today? What might an identity crisis look and feel like? And, how might it be resolved?
2. Many people believe that they have a true self buried inside of them. From this perspective, the development of self is about discovering a psychological truth deep inside. Do you believe this to be true? How does thinking about the self as an actor, agent, and author bear on this question?
3. Psychological research shows that when people are placed in front of mirrors they often behave in a more moral and conscientious manner, even though they sometimes experience this procedure as unpleasant. From the standpoint of the self as a social actor, how might we explain this phenomenon?
4. By the time they reach adulthood, does everybody have a narrative identity? Do some people simply never develop a story for their life?
5. What happens when the three perspectives on self—the self as actor, agent, and author—conflict with each other? Is it necessary for people's self-ascribed traits and roles to line up well with their goals and their stories?
6. William James wrote that the self includes all things that the person considers to be "mine." If we take James literally, a person's self might extend to include his or her material possessions, pets, and friends and family. Does this make sense?
7. To what extent can we control the self? Are some features of selfhood easier to control than others?

8. What cultural differences may be observed in the construction of the self? How might gender, ethnicity, and class impact the development of the self as actor, as agent, and as author?

Vocabulary

Autobiographical reasoning

The ability, typically developed in adolescence, to derive substantive conclusions about the self from analyzing one's own personal experiences.

Big Five

A broad taxonomy of personality trait domains repeatedly derived from studies of trait ratings in adulthood and encompassing the categories of (1) extraversion vs. introversion, (2) neuroticism vs. emotional stability, (3) agreeable vs. disagreeableness, (4) conscientiousness vs. nonconscientiousness, and (5) openness to experience vs. conventionality. By late childhood and early adolescence, people's self-attributions of personality traits, as well as the trait attributions made about them by others, show patterns of intercorrelations that confirm with the five-factor structure obtained in studies of adults.

Ego

Sigmund Freud's conception of an executive self in the personality. Akin to this module's notion of "the I," Freud imagined the ego as observing outside reality, engaging in rational though, and coping with the competing demands of inner desires and moral standards.

Identity

Sometimes used synonymously with the term "self," identity means many different things in psychological science and in other fields (e.g., sociology). In this module, I adopt Erik Erikson's conception of identity as a developmental task for late adolescence and young adulthood. Forming an identity in adolescence and young adulthood involves exploring alternative roles, values, goals, and relationships and eventually committing to a realistic agenda for life that productively situates a person in the adult world of work and love. In addition, identity formation entails commitments to new social roles and reevaluation of old traits, and importantly, it brings with it a sense of temporal continuity in life, achieved though the construction of an integrative life story.

Narrative identity

An internalized and evolving story of the self designed to provide life with some measure of temporal unity and purpose. Beginning in late adolescence, people craft self-defining stories that reconstruct the past and imagine the future to explain how the person came to be the person that he or she is becoming.

Redemptive narratives

Life stories that affirm the transformation from suffering to an enhanced status or state. In American culture, redemptive life stories are highly prized as models for the good self, as in classic narratives of atonement, upward mobility, liberation, and recovery.

Reflexivity

The idea that the self reflects back upon itself; that the I (the knower, the subject) encounters the Me (the known, the object). Reflexivity is a fundamental property of human selfhood.

Self as autobiographical author

The sense of the self as a storyteller who reconstructs the past and imagines the future in order to articulate an integrative narrative that provides life with some measure of temporal continuity and purpose.

Self as motivated agent

The sense of the self as an intentional force that strives to achieve goals, plans, values, projects, and the like.

Self as social actor

The sense of the self as an embodied actor whose social performances may be construed in terms of more or less consistent self-ascribed traits and social roles.

Self-esteem

The extent to which a person feels that he or she is worthy and good. The success or failure that the motivated agent experiences in pursuit of valued goals is a strong determinant of self-esteem.

Social reputation

The traits and social roles that others attribute to an actor. Actors also have their own conceptions of what they imagine their respective social reputations indeed are in the eyes of others.

The Age 5-to-7 Shift

Cognitive and social changes that occur in the early elementary school years that result in the child's developing a more purposeful, planful, and goal-directed approach to life, setting the stage for the emergence of the self as a motivated agent.

The "I"

The self as knower, the sense of the self as a subject who encounters (knows, works on) itself (the Me).

The "Me"

The self as known, the sense of the self as the object or target of the I's knowledge and work.

Theory of mind

Emerging around the age of 4, the child's understanding that other people have minds in which are located desires and beliefs, and that desires and beliefs, thereby, motivate behavior.

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2.2: Social Cognition and Attitudes

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Social cognition is the area of social psychology that examines how people perceive and think about their social world. This module provides an overview of key topics within social cognition and attitudes, including judgmental heuristics, social prediction, affective and motivational influences on judgment, and explicit and implicit attitudes.

learning objectives

- Learn how we simplify the vast array of information in the world in a way that allows us to make decisions and navigate our environments efficiently.
- Understand some of the social factors that influence how we reason.
- Determine if our reasoning processes are always conscious, and if not, what some of the effects of automatic/nonconscious cognition are.
- Understand the difference between explicit and implicit attitudes, and the implications they have for behavior.

Introduction

Imagine you are walking toward your classroom and you see your teacher and a fellow student you know to be disruptive in class whispering together in the hallway. As you approach, both of them quit talking, nod to you, and then resume their urgent whispers after you pass by. What would you make of this scene? What story might you tell yourself to help explain this interesting and unusual behavior?

People know intuitively that we can better understand others' behavior if we know the thoughts contributing to the behavior. In this example, you might guess that your teacher harbors several concerns about the disruptive student, and therefore you believe their whispering is related to this. The area of social psychology that focuses on how people think about others and about the social world is called **social cognition**.

Researchers of social cognition study how people make sense of themselves and others to make judgments, form attitudes, and make predictions about the future. Much of the research in social cognition has demonstrated that humans are adept at distilling large amounts of information into smaller, more usable chunks, and that we possess many cognitive tools that allow us to efficiently navigate our environments. This research has also illuminated many social factors that can influence these judgments and predictions. Not only can our past experiences, expectations, motivations, and moods impact our reasoning, but many of our decisions and behaviors are driven by unconscious processes and implicit attitudes we are unaware of having. The goal of this module is to highlight the mental tools we use to navigate and make sense of our complex social world, and describe some of the emotional, motivational, and cognitive factors that affect our reasoning.

Simplifying Our Social World

Consider how much information you come across on any given day; just looking around your bedroom, there are hundreds of objects, smells, and sounds. How do we simplify all this information to attend to what is important and make decisions quickly and efficiently? In part, we do it by forming schemas of the various people, objects, situations, and events we encounter. A **schema** is a mental model, or representation, of any of the various things we come across in our daily lives. A schema (related to the word schematic) is kind of like a mental blueprint for how we expect something to be or behave. It is an organized body of general information or beliefs we develop from direct encounters, as well as from secondhand sources. Rather than spending copious amounts of time learning about each new individual object (e.g., each new dog we see), we rely on our schemas to tell us that a newly encountered dog probably barks, likes to fetch, and enjoys treats. In this way, our schemas greatly reduce the amount of cognitive work we need to do and allow us to "go beyond the information given" (Bruner, 1957).

We can hold schemas about almost anything—individual people (*person schemas*), ourselves (*self-schemas*), and recurring events (*event schemas*, or *scripts*). Each of these types of schemas is useful in its own way. For example, event schemas allow us to navigate new situations efficiently and seamlessly. A script for dining at a restaurant would indicate that one should wait to be seated by the host or hostess, that food should be ordered from a menu, and that one is expected to pay the check at the end of the

meal. Because the majority of dining situations conform to this general format, most diners just need to follow their mental scripts to know what to expect and how they should behave, greatly reducing their cognitive workload.



Does the person in this image fit reasonably into your heuristic of a librarian? How representative is he of that category? [Image: University Library of Kyiv-Mohyla Academy, https://goo.gl/LxQTuD, CC BY-NC-SA 2.0, goo.gl/Toc0ZF]

Another important way we simplify our social world is by employing **heuristics**, which are mental shortcuts that reduce complex problem-solving to more simple, rule-based decisions. For example, have you ever had a hard time trying to decide on a book to buy, then you see one ranked highly on a book review website? Although selecting a book to purchase can be a complicated decision, you might rely on the "rule of thumb" that a recommendation from a credible source is likely a safe bet—so you buy it. A common instance of using heuristics is when people are faced with judging whether an object belongs to a particular category. For example, you would easily classify a pit bull into the category of "dog." But what about a coyote? Or a fox? A plastic toy dog? In order to make this classification (and many others), people may rely on the **representativeness heuristic** to arrive at a quick decision (Kahneman & Tversky, 1972, 1973). Rather than engaging in an in-depth consideration of the object's attributes, one can simply judge the likelihood of the object belonging to a category, based on how similar it is to one's mental representation of that category. For example, a perceiver may quickly judge a female to be an athlete based on the fact that the female is tall, muscular, and wearing sports apparel—which fits the perceiver's representation of an athlete's characteristics.

In many situations, an object's similarity to a category is a good indicator of its membership in that category, and an individual using the representativeness heuristic will arrive at a correct judgment. However, when base-rate information (e.g., the actual percentage of athletes in the area and therefore the probability that this person actually *is* an athlete) conflicts with representativeness information, use of this heuristic is less appropriate. For example, if asked to judge whether a quiet, thin man who likes to read poetry is a classics professor at a prestigious university or a truck driver, the representativeness heuristic might lead one to guess he's a professor. However, considering the base-rates, we know there are far fewer university classics professors than truck drivers. Therefore, although the man fits the mental image of a professor, the actual probability of him being one (considering the number of professors out there) is lower than that of being a truck driver.

In addition to judging whether things belong to particular categories, we also attempt to judge the likelihood that things will happen. A commonly employed heuristic for making this type of judgment is called the **availability heuristic**. People use the

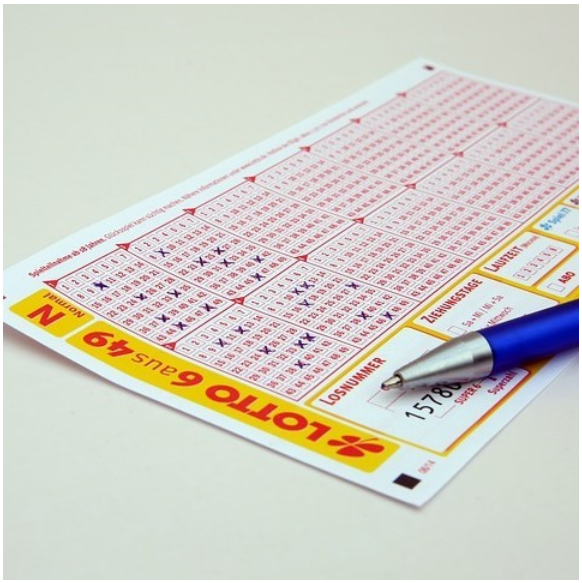
availability heuristic to evaluate the frequency or likelihood of an event based on how easily instances of it come to mind (Tversky & Kahneman, 1973). Because more commonly occurring events are more likely to be cognitively accessible (or, they come to mind more easily), use of the availability heuristic can lead to relatively good approximations of frequency. However, the heuristic can be less reliable when judging the frequency of relatively infrequent *but highly accessible* events. For example, do you think there are more words that begin with "k," or more that have "k" as the third letter? To figure this out, you would probably make a list of words that start with "k" and compare it to a list of words with "k" as the third letter. Though such a quick test may lead you to believe there are more words that begin with "k," the truth is that there are 3 times as many words that have "k" as the third letter (Schwarz et al., 1991). In this case, words beginning with "k" are more readily available to memory (i.e., more accessible), so they seem to be more numerous. Another example is the very common fear of flying: dying in a plane crash is extremely rare, but people often overestimate the probability of it occurring because plane crashes tend to be highly memorable and publicized.

In summary, despite the vast amount of information we are bombarded with on a daily basis, the mind has an entire kit of "tools" that allows us to navigate that information efficiently. In addition to category and frequency judgments, another common mental calculation we perform is predicting the future. We rely on our predictions about the future to guide our actions. When deciding what entrée to select for dinner, we may ask ourselves, "How happy will I be if I choose this over that?" The answer we arrive at is an example of a future prediction. In the next section, we examine individuals' ability to accurately predict others' behaviors, as well as their own future thoughts, feelings, and behaviors, and how these predictions can impact their decisions.

Making Predictions About the Social World

Whenever we face a decision, we predict our future behaviors or feelings in order to choose the best course of action. If you have a paper due in a week and have the option of going out to a party or working on the paper, the decision of what to do rests on a few things: the amount of time you predict you will need to write the paper, your prediction of how you will feel if you do poorly on the paper, and your prediction of how harshly the professor will grade it.

In general, we make predictions about others quickly, based on relatively little information. Research on "thin-slice judgments" has shown that perceivers are able to make surprisingly accurate inferences about another person's emotional state, personality traits, and even sexual orientation based on just snippets of information—for example, a 10-second video clip (Ambady, Bernieri, & Richeson, 2000; Ambady, Hallahan, & Conner, 1999; Ambady & Rosenthal, 1993). Furthermore, these judgments are predictive of the target's future behaviors. For example, one study found that students' ratings of a teacher's warmth, enthusiasm, and attentiveness from a 30-second video clip strongly predicted that teacher's final student evaluations after an entire semester (Ambady & Rosenthal, 1993). As might be expected, the more information there is available, the more accurate many of these judgments become (Carney, Colvin, & Hall, 2007).



Although we can be reasonably certain that a winning lottery ticket will make us feel good, we tend to overestimate both how good we'll feel and for how long. [Image: CC0 Public Domain, goo.gl/m25gce]

Because we seem to be fairly adept at making predictions about others, one might expect predictions about the self to be foolproof, given the considerable amount of information one has about the self compared to others. To an extent, research has supported this conclusion. For example, our own predictions of our future academic performance are more accurate than peers' predictions of our performance, and self-expressed interests better predict occupational choice than career inventories (Shrauger & Osberg, 1981). Yet, it is not always the case that we hold greater insight into ourselves. While our own assessment of our personality traits does predict certain behavioral tendencies better than peer assessment of our personality, for certain behaviors, peer reports are more accurate than self-reports (Kolar, Funder, & Colvin, 1996; Vazire, 2010). Similarly, although we are generally aware of our knowledge, abilities, and future prospects, our perceptions are often overly positive, and we display overconfidence in their accuracy and potential (Metcalfe, 1998). For example, we tend to underestimate how much time it will take us to complete a task, whether it is writing a paper, finishing a project at work, or building a bridge—a phenomenon known as the **planning fallacy** (Buehler, Griffin, & Ross, 1994). The planning fallacy helps explain why so many college students end up pulling all-nighters to finish writing assignments or study for exams. The tasks simply end up taking longer than expected. On the positive side, the planning fallacy can also lead individuals to pursue ambitious projects that may turn out to be worthwhile. That is, if they had accurately predicted how much time and work it would have taken them, they may have never started it in the first place.

The other important factor that affects decision-making is our ability to predict how we will *feel* about certain outcomes. Not only do we predict whether we will feel positively or negatively, we also make predictions about how strongly and for how long we will feel that way. Research demonstrates that these predictions of one's future feelings—known as **affective forecasting**—are accurate in some ways but limited in others (Gilbert & Wilson, 2007). We are adept at predicting whether a future event or situation will make us feel positively or negatively (Wilson & Gilbert, 2003), but we often incorrectly predict the strength or duration of those emotions. For example, you may predict that if your favorite sports team loses an important match, you will be devastated. Although you're probably right that you will feel negative (and not positive) emotions, will you be able to accurately estimate how negative you'll feel? What about how long those negative feelings will last?

Predictions about future feelings are influenced by the **impact bias** : the tendency for a person to overestimate the *intensity* of their future feelings. For example, by comparing people's estimates of how they expected to feel after a specific event to their actual feelings after the event, research has shown that people generally overestimate how badly they will feel after a negative event—such as losing a job—and they also overestimate how happy they will feel after a positive event—such as winning the lottery (Brickman, Coates, & Janoff-Bullman, 1978). Another factor in these estimations is the **durability bias**. The durability bias refers to the tendency for people to overestimate *how long* (or, the *duration*) positive and negative events will affect them. This bias is much greater for predictions regarding negative events than positive events, and occurs because people are generally unaware of the many psychological mechanisms that help us adapt to and cope with negative events (Gilbert, Pinel, Wilson, Blumberg, & Wheatley, 1998;Wilson, Wheatley, Meyers, Gilbert, & Axsom, 2000).

In summary, individuals form impressions of themselves and others, make predictions about the future, and use these judgments to inform their decisions. However, these judgments are shaped by our tendency to view ourselves in an overly positive light and our inability to appreciate our habituation to both positive and negative events. In the next section, we will discuss how motivations, moods, and desires also shape social judgment.

Hot Cognition: The Influence of Motivations, Mood, and Desires on Social Judgment

Although we may believe we are always capable of rational and objective thinking (for example, when we methodically weigh the pros and cons of two laundry detergents in an unemotional—i.e., "cold"—manner), our reasoning is often influenced by our motivations and mood. **Hot cognition** refers to the mental processes that are influenced by desires and feelings. For example, imagine you receive a poor grade on a class assignment. In this situation, your ability to reason objectively about the quality of your assignment may be limited by your anger toward the teacher, upset feelings over the bad grade, and your motivation to maintain your belief that you are a good student. In this sort of scenario, we may want the situation to turn out a particular way or our belief to be the truth. When we have these **directional goals**, we are motivated to reach a particular outcome or judgment and do not process information in a cold, objective manner.



Motivated skepticism is a bias that can easily impact our views of political candidates or issues. It may be more difficult to objectively evaluate the merits of a political argument if it comes from someone we don't expect to vote for. [Image: Senado Federal, https://goo.gl/slEPEv, CC BY-NC 2.0, goo.gl/VnKlK8]

Directional goals can bias our thinking in many ways, such as leading to **motivated skepticism**, whereby we are skeptical of evidence that goes against what we want to believe despite the strength of the evidence (Ditto & Lopez, 1992). For example, individuals trust medical tests less if the results suggest they have a deficiency compared to when the results suggest they are healthy. Through this motivated skepticism, people often continue to believe what they want to believe, even in the face of nearly incontrovertible evidence to the contrary.

There are also situations in which we do not have wishes for a particular outcome but our goals bias our reasoning, anyway. For example, being motivated to reach an accurate conclusion can influence our reasoning processes by making us more cautious—leading to indecision. In contrast, sometimes individuals are motivated to make a quick decision, without being particularly concerned about the quality of it. Imagine trying to choose a restaurant with a group of friends when you're really hungry. You may choose whatever's nearby without caring if the restaurant is the best or not. This **need for closure** (the desire to come to a firm conclusion) is often induced by time constraints (when a decision needs to be made quickly) as well as by individual differences in the need for closure (Webster & Kruglanski, 1997). Some individuals are simply more uncomfortable with ambiguity than others, and are thus more motivated to reach clear, decisive conclusions.

Just as our goals and motivations influence our reasoning, our moods and feelings also shape our thinking process and ultimate decisions. Many of our decisions are based in part on our memories of past events, and our retrieval of memories is affected by our current mood. For example, when you are sad, it is easier to recall the sad memory of your dog's death than the happy moment you received the dog. This tendency to recall memories similar in valence to our current mood is known as **mood-congruent memory** (Blaney, 1986; Bower 1981, 1991; DeSteno, Petty, Wegener, & Rucker, 2000; Forgas, Bower, & Krantz, 1984; Schwarz, Strack, Kommer, & Wagner, 1987). The mood we were in when the memory was recorded becomes a retrieval cue; our present mood primes these congruent memories, making them come to mind more easily (Fiedler, 2001). Furthermore, because the availability of events in our memory can affect their perceived frequency (the availability heuristic), the biased retrieval of congruent memories can then impact the subsequent judgments we make (Tversky & Kahneman, 1973). For example, if you are retrieving many sad memories, you might conclude that you have had a tough, depressing life.

In addition to our moods influencing the specific memories we retrieve, our moods can also influence the broader judgments we make. This sometimes leads to inaccuracies when our current mood is irrelevant to the judgment at hand. In a classic study demonstrating this effect, researchers found that study participants rated themselves as less-satisfied with their lives in general if they were asked on a day when it happened to be raining vs. sunny (Schwarz & Clore, 1983). However, this occurred only if the participants were not aware that the weather might be influencing their mood. In essence, participants were in worse moods on rainy days than sunny days, and, if unaware of the weather's effect on their mood, they incorrectly used their mood as evidence of their overall life satisfaction.

In summary, our mood and motivations can influence both the way we think and the decisions we ultimately make. Mood can shape our thinking even when the mood is irrelevant to the judgment, and our motivations can influence our thinking even if we have no particular preference about the outcome. Just as we might be unaware of how our reasoning is influenced by our motives and moods, research has found that our behaviors can be determined by unconscious processes rather than intentional decisions, an idea we will explore in the next section.

Automaticity

Do we actively choose and control all our behaviors or do some of these behaviors occur automatically? A large body of evidence now suggests that many of our behaviors are, in fact, **automatic**. A behavior or process is considered automatic if it is unintentional, uncontrollable, occurs outside of conscious awareness, or is cognitively efficient (Bargh & Chartrand, 1999). A process may be considered automatic even if it does not have all these features; for example, driving is a fairly automatic process, but is clearly intentional. Processes can become automatic through repetition, practice, or repeated associations. Staying with the driving example: although it can be very difficult and cognitively effortful at the start, over time it becomes a relatively automatic process, and aspects of it can occur outside conscious awareness.



Our tendency to subtly mimic the people we interact with is largely an unconscious behavior. [Image: Susan Sermoneta, https://goo.gl/6yQXYp, CC BY-NC-SA 2.0, goo.gl/Toc0ZF]

In addition to practice leading to the learning of automatic behaviors, some automatic processes, such as fear responses, appear to be innate. For example, people quickly detect negative stimuli, such as negative words, even when those stimuli are presented subliminally (Dijksterhuis & Aarts, 2003; Pratto & John, 1991). This may represent an evolutionarily adaptive response that makes individuals more likely to detect danger in their environment. Other innate automatic processes may have evolved due to their pro-social outcomes. The **chameleon effect**—where individuals nonconsciously mimic the postures, mannerisms, facial expressions, and other behaviors of their interaction partners—is an example of how people may engage in certain behaviors without conscious

intention or awareness (Chartrand & Bargh, 1999). For example, have you ever noticed that you've picked up some of the habits of your friends? Over time, but also in brief encounters, we will nonconsciously mimic those around us because of the positive social effects of doing so. That is, automatic mimicry has been shown to lead to more positive social interactions and to increase liking between the mimicked person and the mimicking person.

When concepts and behaviors have been repeatedly associated with each other, one of them can be **primed**—i.e., made more cognitively accessible—by exposing participants to the (strongly associated) other one. For example, by presenting participants with the concept of a doctor, associated concepts such as "nurse" or "stethoscope" are primed. As a result, participants recognize a word like "nurse" more quickly (Meyer, & Schvaneveldt, 1971). Similarly, stereotypes can automatically prime associated judgments and behaviors. **Stereotypes** are our general beliefs about a group of people and, once activated, they may guide our judgments outside of conscious awareness. Similar to schemas, stereotypes involve a mental representation of how we expect a person will think and behave. For example, someone's mental schema for women may be that they're caring, compassionate, and maternal; however, a stereotype would be that *all* women are examples of this schema. As you know, assuming all people are a certain way is not only wrong but insulting, especially if negative traits are incorporated into a schema and subsequent stereotype.

In a now classic study, Patricia Devine (1989) primed study participants with words typically associated with Blacks (e.g., "blues," "basketball") in order to activate the stereotype of Blacks. Devine found that study participants who were primed with the Black stereotype judged a target's ambiguous behaviors as being more hostile (a trait stereotypically associated with Blacks) than nonprimed participants. Research in this area suggests that our social context—which constantly bombards us with concepts—may prime us to form particular judgments and influence our thoughts and behaviors.

In summary, there are many cognitive processes and behaviors that occur outside of our awareness and despite our intentions. Because automatic thoughts and behaviors do not require the same level of cognitive processing as conscious, deliberate thinking and acting, automaticity provides an efficient way for individuals to process and respond to the social world. However, this efficiency comes at a cost, as unconsciously held stereotypes and attitudes can sometimes influence us to behave in unintended ways. We will discuss the consequences of both consciously and unconsciously held attitudes in the next section.

Attitudes and Attitude Measurement

When we encounter a new object or person, we often form an attitude toward it (him/her). An **attitude** is a "psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor" (Eagly & Chaiken, 1993, p. 1). In essence, our attitudes are our general evaluations of things (i.e., do you regard this thing positively or negatively?) that can bias us toward having a particular response to it. For example, a negative attitude toward mushrooms would predispose you to avoid them and think negatively of them in other ways. This bias can be long- or short-term and can be overridden by another experience with the object. Thus, if you encounter a delicious mushroom dish in the future, your negative attitude could change to a positive one.

Traditionally, attitudes have been measured through **explicit attitude** measures, in which participants are directly asked to provide their attitudes toward various objects, people, or issues (e.g., a survey).



The explicit attitudes expressed by voters are used to predict the outcomes of elections, however some people who respond to opinion questions that involve controversial issues may hide their true attitudes. [Image: SueWalkerWhite, https://goo.gl/1jL4WP, CC BY-NC 2.0, goo.gl/VnKlK8]

For example, in a semantic-differential scale, respondents are asked to provide evaluations of an attitude object using a series of negative to positive response scales—which have something like "unpleasant" at one end of the scale and "pleasant" at the other (Osgood, Suci, & Tannenbaum, 1957). In a Likert scale, respondents are asked to indicate their agreement level with various evaluative statements, such as, "I believe that psychology is the most interesting major" (Likert, 1932). Here, participants mark their selection between something like "strongly disagree" and "strongly agree." These explicit measures of attitudes can be used to predict people's actual behavior, but there are limitations to them. For one thing, individuals aren't always aware of their true attitudes, because they're either undecided or haven't given a particular issue much thought. Furthermore, even when individuals are aware of their attitudes, they might not want to admit to them, such as when holding a certain attitude is viewed negatively by their culture. For example, sometimes it can be difficult to measure people's true opinions on racial issues, because participants fear that expressing their true attitudes will be viewed as socially unacceptable. Thus, explicit attitude measures may be unreliable when asking about controversial attitudes or attitudes that are not widely accepted by society.

In order to avoid some of these limitations, many researchers use more subtle or covert ways of measuring attitudes that do not suffer from such self-presentation concerns (Fazio & Olson, 2003). An **implicit attitude** is an attitude that a person does not verbally or overtly express. For example, someone may have a positive, explicit attitude toward his job; however, nonconsciously, he may have a lot of negative associations with it (e.g., having to wake up early, the long commute, the office heating is broken) which results in an implicitly negative attitude. To learn what a person's implicit attitude is, you have to use **implicit measures of attitudes**. These measures infer the participant's attitude rather than having the participant explicitly report it. Many implicit measures accomplish this by recording the time it takes a participant (i.e., the reaction time) to label or categorize an attitude object (i.e., the person, concept, or object of interest) as positive or negative. For example, the faster someone categorizes his or her job (measured in milliseconds) as negative compared to positive, the more negative the implicit attitude is (i.e., because a faster categorization implies that the two concepts—"work" and "negative"—are closely related in one's mind).

One common implicit measure is the **Implicit Association Test** (IAT;Greenwald & Banaji, 1995; Greenwald, McGhee, & Schwartz, 1998), which does just what the name suggests, measuring how quickly the participant pairs a concept (e.g., cats) with an attribute (e.g., good or bad). The participant's response time in pairing the concept with the attribute indicates how strongly the participant associates the two. Another common implicit measure is the **evaluative priming task** (Fazio, Jackson, Dunton, & Williams, 1995), which measures how quickly the participant labels the valence (i.e., positive or negative) of the attitude object when it appears immediately after a positive or negative image. The more quickly a participant labels the attitude object after being primed with a positive versus negative image indicates how positively the participant evaluates the object.

Individuals' implicit attitudes are sometimes inconsistent with their explicitly held attitudes. Hence, implicit measures may reveal biases that participants do not report on explicit measures. As a result, implicit attitude measures are especially useful for examining the pervasiveness and strength of controversial attitudes and stereotypic associations, such as racial biases or associations between race and violence. For example, research using the IAT has shown that about 66% of white respondents have a negative bias toward Blacks (Nosek, Banaji, & Greenwald, 2002), that bias on the IAT against Blacks is associated with more discomfort during interracial interactions (McConnell, & Leibold, 2001), and that implicit associations linking Blacks to violence are associated with a greater tendency to shoot unarmed Black targets in a video game (Payne, 2001). Thus, even though individuals are often unaware of their implicit attitudes, these attitudes can have serious implications for their behavior, especially when these individuals do not have the cognitive resources available to override the attitudes' influence.

Conclusion

Decades of research on social cognition and attitudes have revealed many of the "tricks" and "tools" we use to efficiently process the limitless amounts of social information we encounter. These tools are quite useful for organizing that information to arrive at quick decisions. When you see an individual engage in a behavior, such as seeing a man push an elderly woman to the ground, you form judgments about his personality, predictions about the likelihood of him engaging in similar behaviors in the future, as well as predictions about the elderly woman's feelings and how you would feel if you were in her position. As the research presented in this module demonstrates, we are adept and efficient at making these judgments and predictions, but they are not made in a vacuum. Ultimately, our perception of the social world is a subjective experience, and, consequently, our decisions are influenced by our experiences, expectations, emotions, motivations, and current contexts. Being aware of when our judgments are most accurate, and how our judgments are shaped by social influences, prepares us to be in a much better position to appreciate, and potentially counter, their effects.

Outside Resources

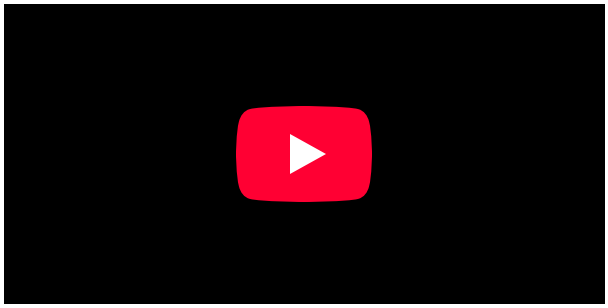
Video: Daniel Gilbert discussing affective forecasting.

www.dailymotion.com/video/xeb...e#.UQlwDx3WLm4

Video: Focus on heuristics.

http://study.com/academy/lesson/heuristics.html

Web: BBC Horizon documentary How to Make Better Decisions that discusses many module topics (Part 1).





Web: Implicit Attitudes Test.

https://implicit.harvard.edu/implicit/

Discussion Questions

1. Describe your event-schema, or script, for an event that you encounter regularly (e.g., dining at a restaurant). Now, attempt to articulate a script for an event that you have encountered only once or a few times. How are these scripts different? How confident are you in your ability to navigate these two events?
2. Think of a time when you made a decision that you thought would make you very happy (e.g., purchasing an item). To what extent were you accurate or inaccurate? In what ways were you wrong, and why do you think you were wrong?
3. What is an issue you feel strongly about (e.g., abortion, death penalty)? How would you react if research demonstrated that your opinion was wrong? What would it take before you would believe the evidence?
4. Take an implicit association test at the Project Implicit website (https://implicit.harvard.edu/implicit). How do your results match or mismatch your explicit attitudes.

Vocabulary

Affective forecasting

Predicting how one will feel in the future after some event or decision.

Attitude

A psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor.

Automatic

A behavior or process has one or more of the following features: unintentional, uncontrollable, occurring outside of conscious awareness, and cognitively efficient.

Availability heuristic

A heuristic in which the frequency or likelihood of an event is evaluated based on how easily instances of it come to mind.

Chameleon effect

The tendency for individuals to nonconsciously mimic the postures, mannerisms, facial expressions, and other behaviors of one’s interaction partners.

Directional goals

The motivation to reach a particular outcome or judgment.

Durability bias

A bias in affective forecasting in which one overestimates for how long one will feel an emotion (positive or negative) after some event.

Evaluative priming task

An implicit attitude task that assesses the extent to which an attitude object is associated with a positive or negative valence by measuring the time it takes a person to label an adjective as good or bad after being presented with an attitude object.

Explicit attitude

An attitude that is consciously held and can be reported on by the person holding the attitude.

Heuristics

A mental shortcut or rule of thumb that reduces complex mental problems to more simple rule-based decisions.

Hot cognition

The mental processes that are influenced by desires and feelings.

Impact bias

A bias in affective forecasting in which one overestimates the strength or intensity of emotion one will experience after some event.

Implicit Association Test

An implicit attitude task that assesses a person's automatic associations between concepts by measuring the response times in pairing the concepts.

Implicit attitude

An attitude that a person cannot verbally or overtly state.

Implicit measures of attitudes

Measures of attitudes in which researchers infer the participant's attitude rather than having the participant explicitly report it.

Mood-congruent memory

The tendency to be better able to recall memories that have a mood similar to our current mood.

Motivated skepticism

A form of bias that can result from having a directional goal in which one is skeptical of evidence despite its strength because it goes against what one wants to believe.

Need for closure

The desire to come to a decision that will resolve ambiguity and conclude an issue.

Planning fallacy

A cognitive bias in which one underestimates how long it will take to complete a task.

Primed

A process by which a concept or behavior is made more cognitively accessible or likely to occur through the presentation of an associated concept.

Representativeness heuristic

A heuristic in which the likelihood of an object belonging to a category is evaluated based on the extent to which the object appears similar to one's mental representation of the category.

Schema

A mental model or representation that organizes the important information about a thing, person, or event (also known as a script).

Social cognition

The study of how people think about the social world.

Stereotypes

Our general beliefs about the traits or behaviors shared by group of people.

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2.3: Theory of Mind

By Bertram Malle

Brown University

One of the most remarkable human capacities is to perceive and understand mental states. This capacity, often labeled "theory of mind," consists of an array of psychological processes that play essential roles in human social life. We review some of these roles, examine what happens when the capacity is deficient, and explore the many processes that make up the capacity to understand minds.

learning objectives

- Explain what theory of mind is.
- Enumerate the many domains of social life in which theory of mind is critical.
- Describe some characteristics of how autistic individuals differ in their processing of others' minds.
- Describe and explain some of the many concepts and processes that comprise the human understanding of minds.
- Have a basic understanding of how ordinary people explain unintentional and intentional behavior.

Introduction

One of the most fascinating human capacities is the ability to perceive and interpret other people's behavior in terms of their mental states. Having an appreciation for the workings of another person's mind is considered a prerequisite for natural language acquisition (Baldwin & Tomasello, 1998), strategic social interaction (Zhang, Hedden, & Chia, 2012), reflexive thought (Bogdan, 2000), and moral judgment (Guglielmo, Monroe, & Malle, 2009). This capacity develops from early beginnings in the first year of life to the adult's fast and often effortless understanding of others' thoughts, feelings, and intentions. And though we must speculate about its evolutionary origin, we do have indications that the capacity evolved sometime in the last few million years.

In this module we will focus on two questions: What is the role of understanding others' minds in human social life? And what is known about the mental processes that underlie such understanding? For simplicity, we will label this understanding "**theory of mind**," even though it is not literally a "theory" that people have about the mind; rather, it is a capacity that some scholars prefer to label "mentalizing" or "mindreading." But we will go behind all these labels by breaking down the capacity into distinct components: the specific concepts and mental processes that underlie the human understanding of minds.

First, let's get clear about the roles that this understanding plays in social life.



We rely on the theory of mind in social situations to infer what others are thinking and feeling. Among other things, this capability helps us work successfully in teams. [Image: Office of Public Affairs, https://goo.gl/O8zvFj, CC BY-SA 2.0, goo.gl/rxiUsF]

Put yourself in this scene: You observe two people's movements, one behind a large wooden object, the other reaching behind him and then holding a thin object in front of the other. Without a theory of mind you would neither understand what this movement stream meant nor be able to predict either person's likely responses. With the capacity to interpret certain physical movements in terms of mental states, perceivers can parse this complex scene into intentional actions of reaching and giving (Baird & Baldwin, 2001); they can interpret the actions as instances of offering and trading; and with an appropriate cultural script, they know that all that was going on was a customer pulling out her credit card with the intention to pay the cashier behind the register. People's theory of mind thus frames and interprets perceptions of human behavior in a particular way—as perceptions of agents who can act intentionally and who have desires, beliefs, and other mental states that guide their actions (Perner, 1991; Wellman, 1990).

Not only would social perceivers without a theory of mind be utterly lost in a simple payment interaction; without a theory of mind, there would probably be no such things as cashiers, credit cards, and payment (Tomasello, 2003). Plain and simple, humans need to understand minds in order to engage in the kinds of complex interactions that social communities (small and large) require. And it is these complex social interactions that have given rise, in human cultural evolution, to houses, cities, and nations; to books, money, and computers; to education, law, and science.

The list of social interactions that rely deeply on theory of mind is long; here are a few highlights.

- Teaching another person new actions or rules by taking into account what the learner knows or doesn't know and how one might best make him understand.
- Learning the words of a language by monitoring what other people attend to and are trying to do when they use certain words.
- Figuring out our social standing by trying to guess what others think and feel about us.
- Sharing experiences by telling a friend how much we liked a movie or by showing her something beautiful.

- Collaborating on a task by signaling to one another that we share a goal and understand and trust the other's intention to pursue this joint goal.

Autism and Theory of Mind



Individuals with autism can have a harder time using the theory of mind because it involves processing facial expressions and inferring people's intentions. A look that might convey a lot of meaning to most people conveys little or nothing to someone with autism. [Image: WarzauWynn, goo.gl/gUO8HE, CC BY-NC 2.0, goo.gl/tgFydH]

Another way of appreciating the enormous impact that theory of mind has on social interactions is to study what happens when the capacity is severely limited, as in the case of autism (Tager-Flusberg, 2007). In a fascinating discussion in which (high-functioning) autistic individuals talk about their difficulties with other people's minds (Blackburn, Gottschewski, George, & L—, 2000), one person reports: "I know people's faces down to the acne scars on the left corners of their chins . . . and how the hairs of their eyebrows curl. . . . The best I can do is start picking up bits of data during my encounter with them because there's not much else I can do. . . . I'm not sure what kind of information about them I'm attempting to process." What seems to be missing, as another person with autism remarks, is an "automatic processing of 'people information.'" Some autistic people report that they perceive others "in a more analytical way." This analytical mode of processing, however, is very tiresome and slow: "Given time I may be able to analyze someone in various ways, and seem to get good results, but may not pick up on certain aspects of an interaction until I am obsessing over it hours or days later" (Blackburn et al., 2000).

So what is this magical potion that allows most people to gain quick and automatic access to other people's minds and to recognize the meaning underlying human behavior? Scientific research has accumulated a good deal of knowledge in the past few decades, and here is a synopsis of what we know.

The Mental Processes Underlying Theory of Mind

The first thing to note is that "theory of mind" is not a single thing. What underlies people's capacity to recognize and understand mental states is a whole host of components—a toolbox, as it were, for many different but related tasks in the social world (Malle, 2008). Figure 7.4.1 shows some of the most important tools, organized in a way that reflects the complexity of involved processes: from simple and automatic on the bottom to complex and deliberate on the top. This organization also reflects development—from tools that infants master within the first 6–12 months to tools they need to acquire over the next 3–5 years. Strikingly, the organization also reflects evolution: monkeys have available the tools on the bottom; chimpanzees have available the tools at the second level; but only humans master the remaining tools above. Let's look at a few of them in more detail.

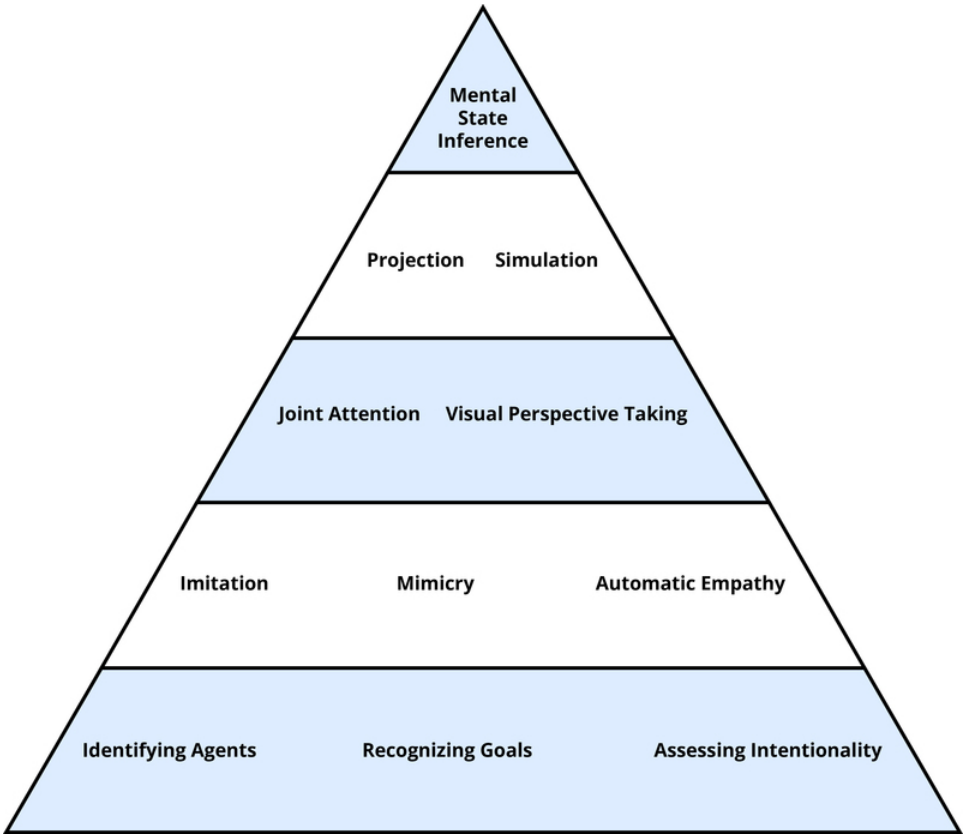


Figure 7.4.1: Some of the major tools of theory of mind, with the bottom showing simple, automatic, early developing, and evolutionarily old processes, and the top showing complex, more deliberate, late developing, and evolutionarily recent processes.

Agents, Goals, and Intentionality

The *agent* category allows humans to identify those moving objects in the world that can act on their own. Features that even very young children take to be indicators of being an agent include being self-propelled, having eyes, and reacting systematically to the interaction partner's behavior, such as following gaze or imitating (Johnson, 2000; Premack, 1990).

The process of *recognizing goals* builds on this agent category, because agents are characteristically directed toward goal objects, which means they seek out, track, and often physically contact said objects. Even before the end of their first year, infants recognize that humans reach toward an object they strive for even if that object changes location or if the path to the object contains obstacles (Gergely, Nádasdy, Csibra, & Bíró, 1995; Woodward, 1998). What it means to recognize goals, therefore, is to see the systematic and predictable relationship between a particular agent pursuing a particular object across various circumstances.

Through learning to recognize the many ways by which agents pursue goals, humans learn to pick out behaviors that are **intentional**. The concept of **intentionality** is more sophisticated than the *goal* concept. For one thing, human perceivers recognize that some behaviors can be unintentional even if they were goal-directed—such as when you unintentionally make a fool of yourself even though you had the earnest goal of impressing your date. To act intentionally you need, aside from a goal, the right kinds of beliefs about how to achieve the goal. Moreover, the adult concept of intentionality requires that an agent have the *skill* to perform the intentional action in question: If I am flipping a coin, trying to make it land on heads, and if I get it to land on heads on my first try, you would not judge my action of making it land on heads as intentional—you would say it was luck (Malle & Knobe, 1997).

Imitation, Synchrony, and Empathy



It's natural when having a conversation to unconsciously synchronize with our partners. [Image: Jacopo Aneghini Photos , https://goo.gl/QDpPln, CC BY-NC 2.0, goo.gl/VnKlK8]

Imitation and empathy are two other basic capacities that aid the understanding of mind from childhood on (Meltzoff & Decety, 2003). *Imitation* is the human tendency to carefully observe others' behaviors and do as they do—even if it is the first time the perceiver has seen this behavior. A subtle, automatic form of imitation is called **mimicry**, and when people mutually mimic one another they can reach a state of **synchrony**. Have you ever noticed when two people in conversation take on similar gestures, body positions, even tone of voice? They "synchronize" their behaviors by way of (largely) unconscious imitation. Such synchrony can happen even at very low levels, such as negative physiological arousal (Levenson & Ruef, 1992), though the famous claim of synchrony in women's menstrual cycles is a myth (Yang & Schank, 2006). Interestingly, people who enjoy an interaction synchronize their behaviors more, and increased synchrony (even manipulated in an experiment) makes people enjoy their interaction more (Chartrand & Bargh, 1999). Some research findings suggest that synchronizing is made possible by brain mechanisms that tightly link perceptual information with motor information (when I see you move your arm, my arm-moving program is activated). In monkeys, highly specialized so-called **mirror neurons** fire both when the monkey sees a certain action and when it performs that same action (Rizzolatti, Fogassi, & Gallese, 2001). In humans, however, things are a bit more complex. In many everyday settings, people perceive uncountable behaviors and fortunately don't copy all of them (just consider walking in a crowd—hundreds of your mirror neurons would fire in a blaze of confusion). Human imitation and mirroring is selective, triggering primarily actions that are relevant to the perceiver's current state or aim.

Automatic empathy builds on imitation and synchrony in a clever way. If Bill is sad and expresses this emotion in his face and body, and if Elena watches or interacts with Bill, then she will subtly imitate his dejected behavior and, through well-practiced associations of certain behaviors and emotions, she will feel a little sad as well (Sonnby-Borgström, Jönsson, & Svensson, 2003). Thus, she empathizes with him—whether she wants to or not. Try it yourself. Type "sad human faces" into your Internet search engine and select images from your results. Look at 20 photos and pay careful attention to what happens to your face and to your mood. Do you feel almost a "pull" of some of your facial muscles? Do you feel a tinge of melancholy?

Joint Attention, Visual Perspective Taking

Going beyond the automatic, humans are capable of actively engaging with other people's mental states, such as when they enter into situations of **joint attention**—like Marissa and Noah, who are each looking at an object and are both aware that each of them is looking at the object. This sounds more complicated than it really is. Just point to an object when a 3-year old is around and notice how both the child and you check in with each other, ensuring that you are really *jointly* engaging with the object. Such shared engagement is critical for children to learn the meaning of objects—both their value (is it safe and rewarding to approach?) and the words that refer to them (what do you call this?). When I hold up my keyboard and show it to you, we are jointly attending to it, and if I then say it's called "Tastatur" in German, you know that I am referring to the keyboard and not to the table on which it had been resting.

Another important capacity of engagement is **visual perspective taking**: You are sitting at a dinner table and advise another person on where the salt is—do you consider that it is to *her* left even though it is to *your* right? When we overcome our egocentric perspective this way, we imaginatively adopt the other person's spatial viewpoint and determine how the world looks from their perspective. In fact, there is evidence that we mentally "rotate" toward the other's spatial location, because the farther away the person sits (e.g., 60, 90, or 120 degrees away from you) the longer it takes to adopt the person's perspective (Michelon & Zacks, 2006).

Projection, Simulation (and the Specter of Egocentrism)

When imagining what it might be like to be in another person's *psychological* position, humans have to go beyond mental rotation. One tool to understand the other's thoughts or feelings is **simulation**—using one's own mental states as a model for others' mental states: "What would it feel like sitting across from the stern interrogator? *I* would feel scared . . ." An even simpler form of such modeling is the assumption that the other thinks, feels, wants what we do—which has been called the "like-me" assumption (Meltzoff, 2007) or the inclination toward *social* **projection** (Krueger, 2007). In a sense, this is an absence of perspective taking, because we assume that the other's perspective equals our own. This can be an effective strategy if we share with the other person the same environment, background, knowledge, and goals, but it gets us into trouble when this presumed common ground is in reality lacking. Let's say you know that Brianna doesn't like Fred's new curtains, but you hear her exclaim to Fred, "These are beautiful!" Now you have to predict whether Fred can figure out that Brianna was being sarcastic. It turns out that you will have a hard time suppressing your own knowledge in this case and you may overestimate how easy it is for Fred to spot the sarcasm (Keysar, 1994). Similarly, you will overestimate how visible that pimple is on your chin—even though it feels big and ugly to you, in reality very few people will ever notice it (Gilovich & Savitsky, 1999). So the next time when you spot a magnificent bird high up in the tree and you get impatient with your friend who just can't see what is clearly obvious, remember: it's obvious to *you*.

What all these examples show is that people use their own current state—of knowledge, concern, or perception—to grasp other people's mental states. And though they often do so correctly, they also get things wrong at times. This is why couples counselors, political advisors, and Buddhists agree on at least one thing: we all need to try harder to recognize our egocentrism and actively take other people's perspective—that is, grasp their actual mental states, even if (or especially when) they are different from our own.

Explicit Mental State Inference

The ability to truly take another person's perspective requires that we separate what we want, feel, and know from what the other person is likely to want, feel, and know. To do so humans make use of a variety of information. For one thing, they rely on stored knowledge—both general knowledge ("Everybody would be nervous when threatened by a man with a gun") and agent-specific knowledge ("Joe was fearless because he was trained in martial arts"). For another, they critically rely on perceived facts of the concrete situation—such as what is happening to the agent, the agent's facial expressions and behaviors, and what the person saw or didn't see.

This capacity of integrating multiple lines of information into a mental-state inference develops steadily within the first few years of life, and this process has led to a substantial body of research (Wellman, Cross, & Watson, 2001). The research began with a clever experiment by Wimmer and Perner (1983), who tested whether children can pass a **false-belief test** (see Figure 7.4.2). The child is shown a picture story of Sally, who puts her ball in a basket and leaves the room. While Sally is out of the room, Anne

comes along and takes the ball from the basket and puts it inside a box. The child is then asked *where* Sally thinks the ball is located when she comes back to the room. Is she going to look first *in the box* or *in the basket*?

The right answer is that she will look in the basket, because that's where she put it and thinks it is; but we have to infer this *false belief* against our own better knowledge that the ball is in the box. This is very difficult for children before the age of 4, and it usually takes some cognitive effort in adults (Epley, Morewedge, & Keysar, 2004).

The challenge is clear: People are good at automatically relating to other people, using their own minds as a fitting model for others' minds. But people need to recognize when to step out of their own perspective and truly represent the other person's perspective—which may harbor very different thoughts, feelings, and intentions.

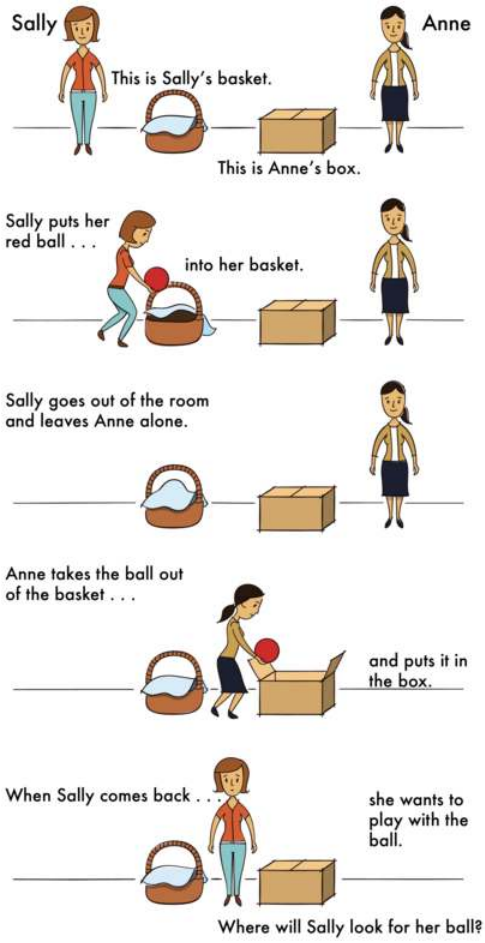


Figure 7.4.2: Sally–Anne task to test children's ability to infer false beliefs.

Tools in Summary

We have seen that the human understanding of other minds relies on many tools. People process such information as motion, faces, and gestures and categorize it into such concepts as agent, intentional action, or fear. They rely on relatively automatic psychological processes, such as imitation, joint attention, and projection. And they rely on more effortful processes, such as simulation and mental-state inference. These processes all link behavior that humans observe to mental states that humans infer. If we call this stunning capacity a "theory," it is a theory of mind *and* behavior.

Folk Explanations of Behavior

Nowhere is this mind–behavior link clearer than in **people's explanations of behavior**—when they try to understand why somebody acted or felt a certain way. People have a strong need to answer such "why" questions, from the trivial to the significant: why the neighbor's teenage daughter is wearing a short skirt in the middle of winter; why the policeman is suddenly so friendly; why the murderer killed three people. The need to explain this last behavior seems puzzling, because typical benefits of explanation

are absent: We do not need to predict or control the criminal's behavior since we will never have anything to do with him. Nonetheless, we have an insatiable desire to *understand*, to find *meaning* in this person's behavior—and in people's behavior generally.



When people behave in ways that don't make sense to us we often feel compelled to come up with reasonable explanations. What are their motives? What circumstances would lead to this? How could this happen? [Image: lwpkommunikacio, goo.gl/5x1SAN, CC BY 2.0, goo.gl/axKpvj]

Older theories of how people explain and understand behavior suggested that people merely identify causes of the behavior (e.g., Kelley, 1967). That is true for most unintentional behaviors—tripping, having a headache, calling someone by the wrong name. But to explain *intentional* behaviors, people use a more sophisticated framework of interpretation, which follows directly from their concept of intentionality and the associated mental states they infer (Malle, 2004). We have already mentioned the complexity of people's concept of intentionality; here it is in full (Malle & Knobe, 1997): For an agent to perform a behavior intentionally, she must have a desire for an outcome (what we had called a goal), beliefs about how a particular action leads to the outcome, and an intention to perform that action; if the agent then actually performs the action with awareness and skill, people take it to be an intentional action. To explain *why* the agent performed the action, humans try to make the inverse inference of *what desire* and *what beliefs* the agent had that led her to so act, and these inferred desires and beliefs are the *reasons* for which she acted. What was her reason for wearing a short skirt in the winter? "She wanted to annoy her mother." What was the policeman's reason for suddenly being so nice? "He thought he was speaking with an influential politician." What was his reason for killing three people? In fact, with such extreme actions, people are often at a loss for an answer. If they do offer an answer, they frequently retreat to "causal history explanations" (Malle, 1999), which step outside the agent's own reasoning and refer instead to more general background facts—for example, that he was mentally ill or a member of an extremist group. But people clearly prefer to explain others' actions by referring to their beliefs and desires, the specific reasons for which they acted.

By relying on a theory of mind, explanations of behavior make meaningful what would otherwise be inexplicable motions—just like in our initial example of two persons passing some object between them. We recognize that the customer wanted to pay and that's why she passed her credit card to the cashier, who in turn knew that he was given a credit card and swiped it. It all seems perfectly clear, almost trivial to us. But that is only because humans have a theory of mind and use it to retrieve the relevant knowledge, simulate the other people's perspective, infer beliefs and desires, and explain what a given action means. Humans do

this effortlessly and often accurately. Moreover, they do it within seconds or less. What's so special about that? Well, it takes years for a child to develop this capacity, and it took our species a few million years to evolve it. That's pretty special.

Outside Resources

Blog: On the debate about menstrual synchrony

http://blogs.scientificamerican.com/...ual-synchrony/

Blog: On the debates over mirror neurons

http://blogs.scientificamerican.com/...irror-neurons/

Book: First and last chapters of Zunshine, L. (2006). *Why we read fiction: Theory of mind and the novel*. Columbus, OH: Ohio State University Press.

ohiostatepress.org/Books/Book PDFs/Zunshine Why.pdf

Movie: A movie that portrays the social difficulties of a person with autism: *Adam* (Fox Searchlight Pictures, 2009)

http://www.imdb.com/title/tt1185836/?ref_=fn_tt_tt_1

ToM and Autism TEDx Talks

https://www.ted.com/playlists/153/the_autism_spectrum

Video: TED talk on autism

http://www.ted.com/talks/temple_gran..._of_minds.html

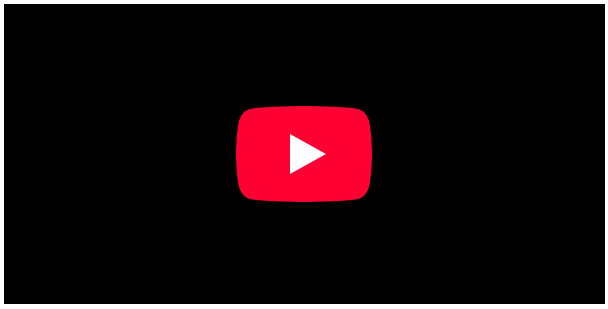
Video: TED talk on empathy

http://blog.ted.com/2011/04/18/a-rad...ds-at-ted-com/

Video: TED talk on theory of mind and moral judgment

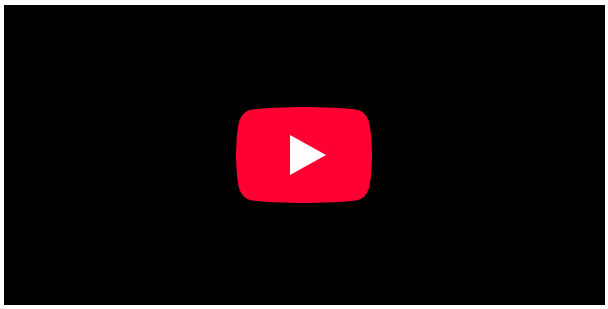
http://www.ted.com/talks/rebecca_sax...judgments.html

Video: Test used by Baron Cohen (prior to the core study) to investigate whether autistic children had a theory of mind by using a false belief task.





Video: Theory of mind development





Discussion Questions

1. Recall a situation in which you tried to infer what a person was thinking or feeling but you just couldn't figure it out, and recall another situation in which you tried the same but succeeded. Which tools were you able to use in the successful case that you didn't or couldn't use in the failed case?
2. Mindfulness training improves keen awareness of one's own mental states. Look up a few such training programs (easily found online) and develop a similar training program to improve awareness of other people's minds.
3. In the near future we will have robots that closely interact with people. Which theory of mind tools should a robot definitely have? Which ones are less important? Why?
4. Humans assume that everybody has the capacity to make choices and perform intentional actions. But in a sense, a choice is just a series of brain states, caused by previous brain states and states of the world, all governed by the physical laws of the universe. Is the concept of choice an illusion?
5. The capacity to understand others' minds is intimately related to another unique human capacity: language. How might these two capacities have evolved? Together? One before the other? Which one?

Vocabulary

Automatic empathy

A social perceiver unwittingly taking on the internal state of another person, usually because of mimicking the person's expressive behavior and thereby feeling the expressed emotion.

False-belief test

An experimental procedure that assesses whether a perceiver recognizes that another person has a false belief—a belief that contradicts reality.

Folk explanations of behavior

People's natural explanations for why somebody did something, felt something, etc. (differing substantially for unintentional and intentional behaviors).

Intention

An agent's mental state of committing to perform an action that the agent believes will bring about a desired outcome.

Intentionality

The quality of an agent's performing a behavior intentionally—that is, with skill and awareness and executing an intention (which is in turn based on a desire and relevant beliefs).

Joint attention

Two people attending to the same object and being aware that they both are attending to it.

Mimicry

Copying others' behavior, usually without awareness.

Mirror neurons

Neurons identified in monkey brains that fire both when the monkey performs a certain action and when it perceives another agent performing that action.

Projection

A social perceiver's assumption that the other person wants, knows, or feels the same as the perceiver wants, know, or feels.

Simulation

The process of representing the other person's mental state.

Synchrony

Two people displaying the same behaviors or having the same internal states (typically because of mutual mimicry).

Theory of mind

The human capacity to understand minds, a capacity that is made up of a collection of concepts (e.g., agent, intentionality) and processes (e.g., goal detection, imitation, empathy, perspective taking).

Visual perspective taking

Can refer to visual perspective taking (perceiving something from another person's spatial vantage point) or more generally to effortful mental state inference (trying to infer the other person's thoughts, desires, emotions).

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2.4: Evolutionary Theories in Psychology

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Evolution or change over time occurs through the processes of natural and sexual selection. In response to problems in our environment, we adapt both physically and psychologically to ensure our survival and reproduction. Sexual selection theory describes how evolution has shaped us to provide a mating advantage rather than just a survival advantage and occurs through two distinct pathways: intrasexual competition and intersexual selection. Gene selection theory, the modern explanation behind evolutionary biology, occurs through the desire for gene replication. Evolutionary psychology connects evolutionary principles with modern psychology and focuses primarily on psychological adaptations: changes in the way we think in order to improve our survival. Two major evolutionary psychological theories are described: Sexual strategies theory describes the psychology of human mating strategies and the ways in which women and men differ in those strategies. Error management theory describes the evolution of biases in the way we think about everything.

Learning objectives

- Learn what “evolution” means.
- Define the primary mechanisms by which evolution takes place.
- Identify the two major classes of adaptations.
- Define sexual selection and its two primary processes.
- Define gene selection theory.
- Understand psychological adaptations.
- Identify the core premises of sexual strategies theory.
- Identify the core premises of error management theory, and provide two empirical examples of adaptive cognitive biases.

Introduction



It may seem like just a casual date, but don't doubt that the forces of evolution are hard at work below the surface. [Image: Best Couples, https://goo.gl/aBMY6W, CC BY-SA 2.0, goo.gl/jSSrcO]

If you have ever been on a first date, you’re probably familiar with the anxiety of trying to figure out what clothes to wear or what perfume or cologne to put on. In fact, you may even consider flossing your teeth for the first time all year. When considering why

you put in all this work, you probably recognize that you're doing it to impress the other person. But how did you learn these particular behaviors? Where did you get the idea that a first date should be at a nice restaurant or someplace unique? It is possible that we have been taught these behaviors by observing others. It is also possible, however, that these behaviors—the fancy clothes, the expensive restaurant—are biologically programmed into us. That is, just as peacocks display their feathers to show how attractive they are, or some lizards do push-ups to show how strong they are, when we style our hair or bring a gift to a date, we're trying to communicate to the other person: "Hey, I'm a good mate! Choose me! Choose me!"

However, we all know that our ancestors hundreds of thousands of years ago weren't driving sports cars or wearing designer clothes to attract mates. So how could someone ever say that such behaviors are "biologically programmed" into us? Well, even though our ancestors might not have been doing these specific actions, these behaviors are the result of the same driving force: the powerful influence of **evolution**. Yes, evolution—certain traits and behaviors developing over time because they are advantageous to our survival. In the case of dating, doing something like offering a gift might represent more than a nice gesture. Just as chimpanzees will give food to mates to show they can provide for them, when you offer gifts to your dates, you are communicating that you have the money or "resources" to help take care of them. And even though the person receiving the gift may not realize it, the same evolutionary forces are influencing his or her behavior as well. The receiver of the gift evaluates not only the gift but also the gift-giver's clothes, physical appearance, and many other qualities, to determine whether the individual is a suitable mate. But because these evolutionary processes are hardwired into us, it is easy to overlook their influence.

To broaden your understanding of evolutionary processes, this module will present some of the most important elements of evolution as they impact psychology. Evolutionary theory helps us piece together the story of how we humans have prospered. It also helps to explain why we behave as we do on a daily basis in our modern world: why we bring gifts on dates, why we get jealous, why we crave our favorite foods, why we protect our children, and so on. Evolution may seem like a historical concept that applies only to our ancient ancestors but, in truth, it is still very much a part of our modern daily lives.

Basics of Evolutionary Theory

Evolution simply means change over time. Many think of evolution as the development of traits and behaviors that allow us to survive this "dog-eat-dog" world, like strong leg muscles to run fast, or fists to punch and defend ourselves. However, physical survival is only important if it eventually contributes to successful reproduction. That is, even if you live to be a 100-year-old, if you fail to mate and produce children, your genes will die with your body. Thus, *reproductive* success, not *survival* success, is the engine of evolution by **natural selection**. Every mating success by one person means the loss of a mating opportunity for another. Yet every living human being is an evolutionary success story. Each of us is descended from a long and unbroken line of ancestors who triumphed over others in the struggle to survive (at least long enough to mate) and reproduce. However, in order for our genes to endure over time—to survive harsh climates, to defeat predators—we have inherited adaptive, psychological processes designed to ensure success.

At the broadest level, we can think of organisms, including humans, as having two large classes of **adaptations**—or traits and behaviors that evolved over time to increase our reproductive success. The first class of adaptations are called survival adaptations: mechanisms that helped our ancestors handle the "hostile forces of nature." For example, in order to survive very hot temperatures, we developed sweat glands to cool ourselves. In order to survive very cold temperatures, we developed shivering mechanisms (the speedy contraction and expansion of muscles to produce warmth). Other examples of survival adaptations include developing a craving for fats and sugars, encouraging us to seek out particular foods rich in fats and sugars that keep us going longer during food shortages. Some threats, such as snakes, spiders, darkness, heights, and strangers, often produce fear in us, which encourages us to avoid them and thereby stay safe. These are also examples of survival adaptations. However, all of these adaptations are for physical *survival*, whereas the second class of adaptations are for *reproduction*, and help us compete for mates. These adaptations are described in an evolutionary theory proposed by Charles Darwin, called **sexual selection** theory.

Sexual Selection Theory

Darwin noticed that there were many traits and behaviors of organisms that could not be explained by "survival selection." For example, the brilliant plumage of peacocks should actually lower their rates of survival. That is, the peacocks' feathers act like a neon sign to predators, advertising "Easy, delicious dinner here!" But if these bright feathers only lower peacocks' chances at survival, why do they have them? The same can be asked of similar characteristics of other animals, such as the large antlers of male stags or the wattles of roosters, which also seem to be unfavorable to survival. Again, if these traits only make the animals less

likely to survive, why did they develop in the first place? And how have these animals continued to survive with these traits over thousands and thousands of years? Darwin's answer to this conundrum was the theory of sexual selection: the evolution of characteristics, not because of survival advantage, but because of *mating* advantage.



Modern sports like boxing can be seen as modified/stylized versions of the evolutionary behavior of intrasexual competition. [Image: Dave Hogg, https://goo.gl/fL5U2Z, CC BY 2.0, goo.gl/9uSnqN]

Sexual selection occurs through two processes. The first, intrasexual competition, occurs when members of one sex compete against each other, and the winner gets to mate with a member of the opposite sex. Male stags, for example, battle with their antlers, and the winner (often the stronger one with larger antlers) gains mating access to the female. That is, even though large antlers make it harder for the stags to run through the forest and evade predators (which lowers their survival success), they provide the stags with a better chance of attracting a mate (which increases their reproductive success). Similarly, human males sometimes also compete against each other in physical contests: boxing, wrestling, karate, or group-on-group sports, such as football. Even though engaging in these activities poses a "threat" to their survival success, as with the stag, the victors are often more attractive to potential mates, increasing their reproductive success. Thus, whatever qualities lead to success in **intrasexual competition** are then passed on with greater frequency due to their association with greater mating success.

The second process of sexual selection is preferential mate choice, also called **intersexual selection**. In this process, if members of one sex are attracted to certain qualities in mates—such as brilliant plumage, signs of good health, or even intelligence—those desired qualities get passed on in greater numbers, simply because their possessors mate more often. For example, the colorful plumage of peacocks exists due to a long evolutionary history of peahens' (the term for female peacocks) attraction to males with brilliantly colored feathers.

In all sexually-reproducing species, adaptations in both sexes (males and females) exist due to survival selection and sexual selection. However, unlike other animals where one sex has dominant control over mate choice, humans have "mutual mate choice." That is, both women and men typically have a say in choosing their mates. And both mates value qualities such as kindness, intelligence, and dependability that are beneficial to long-term relationships—qualities that make good partners and good parents.

Gene Selection Theory

In modern evolutionary theory, all evolutionary processes boil down to an organism's genes. Genes are the basic "units of heredity," or the information that is passed along in DNA that tells the cells and molecules how to "build" the organism and how that organism should behave. Genes that are better able to encourage the organism to reproduce, and thus replicate themselves in the organism's offspring, have an advantage over competing genes that are less able. For example, take female sloths: In order to attract a mate, they will scream as loudly as they can, to let potential mates know where they are in the thick jungle. Now, consider

two types of genes in female sloths: one gene that allows them to scream extremely loudly, and another that only allows them to scream moderately loudly. In this case, the sloth with the gene that allows her to shout louder will attract more mates—increasing reproductive success—which ensures that her genes are more readily passed on than those of the quieter sloth.

Essentially, genes can boost their own replicative success in two basic ways. First, they can influence the odds for survival and reproduction of the organism they are in (individual reproductive success or fitness—as in the example with the sloths). Second, genes can also influence the organism to help other organisms who also likely contain those genes—known as "genetic relatives"—to survive and reproduce (which is called inclusive fitness). For example, why do human parents tend to help their own kids with the financial burdens of a college education and not the kids next door? Well, having a college education increases one's attractiveness to other mates, which increases one's likelihood for reproducing and passing on genes. And because parents' genes are in their own children (and not the neighborhood children), funding their children's educations increases the likelihood that the parents' genes will be passed on.

Understanding gene replication is the key to understanding modern evolutionary theory. It also fits well with many evolutionary psychological theories. However, for the time being, we'll ignore genes and focus primarily on actual adaptations that evolved because they helped our ancestors survive and/or reproduce.

Evolutionary Psychology

Evolutionary psychology aims the lens of modern evolutionary theory on the workings of the human mind. It focuses primarily on **psychological adaptations**: mechanisms of the mind that have evolved to solve specific problems of survival or reproduction. These kinds of adaptations are in contrast to *physiological* adaptations, which are adaptations that occur in the body as a consequence of one's environment. One example of a physiological adaptation is how our skin makes calluses. First, there is an "input," such as repeated friction to the skin on the bottom of our feet from walking. Second, there is a "procedure," in which the skin grows new skin cells at the afflicted area. Third, an actual callus forms as an "output" to protect the underlying tissue—the final outcome of the physiological adaptation (i.e., tougher skin to protect repeatedly scraped areas). On the other hand, a *psychological* adaptation is a development or change of a mechanism in the mind. For example, take sexual jealousy. First, there is an "input," such as a romantic partner flirting with a rival. Second, there is a "procedure," in which the person evaluates the threat the rival poses to the romantic relationship. Third, there is a behavioral output, which might range from vigilance (e.g., snooping through a partner's email) to violence (e.g., threatening the rival).

Evolutionary psychology is fundamentally an *interactionist* framework, or a theory that takes into account multiple factors when determining the outcome. For example, jealousy, like a callus, doesn't simply pop up out of nowhere. There is an "interaction" between the environmental trigger (e.g., the flirting; the repeated rubbing of the skin) and the initial response (e.g., evaluation of the flirter's threat; the forming of new skin cells) to produce the outcome.

In evolutionary psychology, culture also has a major effect on psychological adaptations. For example, status within one's group is important in all cultures for achieving reproductive success, because higher status makes someone more attractive to mates. In individualistic cultures, such as the United States, status is heavily determined by individual accomplishments. But in more collectivist cultures, such as Japan, status is more heavily determined by contributions to the group and by that group's success. For example, consider a group project. If you were to put in most of the effort on a successful group project, the culture in the United States reinforces the psychological adaptation to try to claim that success for yourself (because individual achievements are rewarded with higher status). However, the culture in Japan reinforces the psychological adaptation to attribute that success to the whole group (because collective achievements are rewarded with higher status). Another example of cultural input is the importance of virginity as a desirable quality for a mate. Cultural norms that advise against premarital sex persuade people to ignore their own basic interests because they know that virginity will make them more attractive marriage partners. Evolutionary psychology, in short, does not predict rigid robotic-like "instincts." That is, there isn't one rule that works all the time. Rather, evolutionary psychology studies flexible, environmentally-connected and culturally-influenced adaptations that vary according to the situation.

Psychological adaptations are hypothesized to be wide-ranging, and include food preferences, habitat preferences, mate preferences, and specialized fears. These psychological adaptations also include many traits that improve people's ability to live in groups, such as the desire to cooperate and make friends, or the inclination to spot and avoid frauds, punish rivals, establish status hierarchies, nurture children, and help genetic relatives. Research programs in evolutionary psychology develop and empirically

test predictions about the nature of psychological adaptations. Below, we highlight a few evolutionary psychological theories and their associated research approaches.

Sexual Strategies Theory

Sexual strategies theory is based on sexual selection theory. It proposes that humans have evolved a list of different mating strategies, both short-term and long-term, that vary depending on culture, social context, parental influence, and personal mate value (desirability in the "mating market").

In its initial formulation, sexual strategies theory focused on the differences between men and women in mating preferences and strategies (Buss & Schmitt, 1993). It started by looking at the minimum parental investment needed to produce a child. For women, even the minimum investment is significant: after becoming pregnant, they have to carry that child for nine months inside of them. For men, on the other hand, the minimum investment to produce the same child is considerably smaller—simply the act of sex.



Because women bear responsibility for pregnancy, they may use different sexual selection strategies than men do. [Image: CC0 Public Domain, goo.gl/m25gce]

These differences in parental investment have an enormous impact on sexual strategies. For a woman, the risks associated with making a poor mating choice is high. She might get pregnant by a man who will not help to support her and her children, or who might have poor-quality genes. And because the stakes are higher for a woman, *wise* mating decisions for her are much more valuable. For men, on the other hand, the need to focus on making wise mating decisions isn't as important. That is, unlike women, men 1) don't biologically have the child growing inside of them for nine months, and 2) do not have as high a cultural expectation to raise the child. This logic leads to a powerful set of predictions: In short-term mating, women will likely be choosier than men (because the costs of getting pregnant are so high), while men, on average, will likely engage in more casual sexual activities (because this cost is greatly lessened). Due to this, men will sometimes deceive women about their long-term intentions for the benefit of short-term sex, and men are more likely than women to lower their mating standards for short-term mating situations.

An extensive body of empirical evidence supports these and related predictions (Buss & Schmitt, 2011). Men express a desire for a larger number of sex partners than women do. They let less time elapse before seeking sex. They are more willing to consent to sex with strangers and are less likely to require emotional involvement with their sex partners. They have more frequent sexual fantasies and fantasize about a larger variety of sex partners. They are more likely to regret missed sexual opportunities. And they lower their standards in short-term mating, showing a willingness to mate with a larger variety of women as long as the costs and risks are low.

However, in situations where both the man and woman are interested in long-term mating, both sexes tend to invest substantially in the relationship and in their children. In these cases, the theory predicts that both sexes will be extremely choosy when pursuing a long-term mating strategy. Much empirical research supports this prediction, as well. In fact, the qualities women and men generally look for when choosing long-term mates are very similar: both want mates who are intelligent, kind, understanding, healthy, dependable, honest, loyal, loving, and adaptable.

Nonetheless, women and men do differ in their preferences for a few key qualities in long-term mating, because of somewhat distinct adaptive problems. Modern women have inherited the evolutionary trait to desire mates who possess resources, have qualities linked with acquiring resources (e.g., ambition, wealth, industriousness), and are willing to share those resources with them. On the other hand, men more strongly desire youth and health in women, as both are cues to fertility. These male and female differences are universal in humans. They were first documented in 37 different cultures, from Australia to Zambia (Buss, 1989), and have been replicated by dozens of researchers in dozens of additional cultures (for summaries, see Buss, 2012).

As we know, though, just because we have these mating preferences (e.g., men with resources; fertile women), people don't always get what they want. There are countless other factors which influence who people ultimately select as their mate. For example, the sex ratio (the percentage of men to women in the mating pool), cultural practices (such as arranged marriages, which inhibit individuals' freedom to act on their preferred mating strategies), the strategies of others (e.g., if everyone else is pursuing short-term sex, it's more difficult to pursue a long-term mating strategy), and many others all influence who we select as our mates.

Sexual strategies theory—anchored in sexual selection theory— predicts specific similarities and differences in men and women's mating preferences and strategies. Whether we seek short-term or long-term relationships, many personality, social, cultural, and ecological factors will all influence who our partners will be.

Error Management Theory



If you were walking in the woods and heard a sound in the bushes you might be startled and act on the worst case scenario—such as the threat of a wild animal—by moving in the opposite direction. This is evolutionary psychology at work, keeping you safe so you can survive and reproduce. [Image: Nicholas T, https://goo.gl/gZ3zEL, CC BY 2.0, goo.gl/9uSnqN]

Error management theory (EMT) deals with the evolution of how we think, make decisions, and evaluate uncertain situations—that is, situations where there's no clear answer how we should behave. (Haselton & Buss, 2000; Haselton, Nettle, & Andrews, 2005). Consider, for example, walking through the woods at dusk. You hear a rustle in the leaves on the path in front of you. It could be a snake. Or, it could just be the wind blowing the leaves. Because you can't really tell why the leaves rustled, it's an uncertain situation. The important question then is, what are the costs of errors in judgment? That is, if you conclude that it's a dangerous snake so you avoid the leaves, the costs are minimal (i.e., you simply make a short detour around them). However, if you assume the leaves are safe and simply walk over them—when in fact it *is* a dangerous snake—the decision could cost you your life.

Now, think about our evolutionary history and how generation after generation was confronted with similar decisions, where one option had low cost but great reward (walking around the leaves and not getting bitten) and the other had a low reward but high cost (walking through the leaves and getting bitten). These kinds of choices are called “cost asymmetries.” If during our evolutionary history we encountered decisions like these generation after generation, over time an adaptive bias would be created: we would make sure to err in favor of the least costly (in this case, least dangerous) option (e.g., walking around the leaves). To put it another way, EMT predicts that whenever uncertain situations present us with a safer versus more dangerous decision, we will psychologically adapt to prefer choices that minimize the cost of errors.

EMT is a general evolutionary psychological theory that can be applied to many different domains of our lives, but a specific example of it is the *visual descent illusion*. To illustrate: Have you ever thought it would be no problem to jump off of a ledge, but as soon as you stood up there, it suddenly looked much higher than you thought? The visual descent illusion (Jackson & Cormack, 2008) states that people will overestimate the distance when looking down from a height (compared to looking up) so that people will be especially wary of falling from great heights—which would result in injury or death. Another example of EMT is the *auditory looming bias*: Have you ever noticed how an ambulance seems closer when it's coming toward you, but suddenly seems far away once it's immediately passed? With the auditory looming bias, people overestimate how close objects are when the sound is moving toward them compared to when it is moving away from them. From our evolutionary history, humans learned, "It’s better to be safe than sorry." Therefore, if we think that a threat is closer to us when it’s moving toward us (because it seems louder), we will be quicker to act and escape. In this regard, there may be times we ran away when we didn’t need to (a false alarm), but wasting that time is a less costly mistake than not acting in the first place when a real threat does exist.

EMT has also been used to predict adaptive biases in the domain of mating. Consider something as simple as a smile. In one case, a smile from a potential mate could be a sign of sexual or romantic interest. On the other hand, it may just signal friendliness. Because of the costs to men of missing out on chances for reproduction, EMT predicts that men have a *sexual overperception bias*: they often misread sexual interest from a woman, when really it’s just a friendly smile or touch. In the mating domain, the sexual overperception bias is one of the best-documented phenomena. It’s been shown in studies in which men and women rated the sexual interest between people in photographs and videotaped interactions. As well, it’s been shown in the laboratory with participants engaging in actual “speed dating,” where the men interpret sexual interest from the women more often than the women actually intended it (Perilloux, Easton, & Buss, 2012). In short, EMT predicts that men, more than women, will over-infer sexual interest based on minimal cues, and empirical research confirms this adaptive mating bias.

Conclusion

Sexual strategies theory and error management theory are two evolutionary psychological theories that have received much empirical support from dozens of independent researchers. But, there are many other evolutionary psychological theories, such as social exchange theory for example, that also make predictions about our modern day behavior and preferences, too. The merits of each evolutionary psychological theory, however, must be evaluated separately and treated like any scientific theory. That is, we should only trust their predictions and claims to the extent they are supported by scientific studies. However, even if the theory is scientifically grounded, just because a psychological adaptation was advantageous in our history, it doesn't mean it's still useful today. For example, even though women may have preferred men with resources in generations ago, our modern society has advanced such that these preferences are no longer apt or necessary. Nonetheless, it's important to consider how our evolutionary history has shaped our automatic or "instinctual" desires and reflexes of today, so that we can better shape them for the future ahead.

Outside Resources

FAQs

http://www.anth.ucsb.edu/projects/human/evpsychfaq.html

Web: Articles and books on evolutionary psychology

http://homepage.psy.utexas.edu/homep...Group/BussLAB/

Web: Main international scientific organization for the study of evolution and human behavior, HBES

http://www.hbes.com/

Discussion Questions

1. How does change take place over time in the living world?
2. Which two potential psychological adaptations to problems of survival are not discussed in this module?
3. What are the psychological and behavioral implications of the fact that women bear heavier costs to produce a child than men do?
4. Can you formulate a hypothesis about an error management bias in the domain of social interaction?

Vocabulary

Adaptations

Evolved solutions to problems that historically contributed to reproductive success.

Error management theory (EMT)

A theory of selection under conditions of uncertainty in which recurrent cost asymmetries of judgment or inference favor the evolution of adaptive cognitive biases that function to minimize the more costly errors.

Evolution

Change over time. Is the definition changing?

Gene Selection Theory

The modern theory of evolution by selection by which differential gene replication is the defining process of evolutionary change.

Intersexual selection

A process of sexual selection by which evolution (change) occurs as a consequences of the mate preferences of one sex exerting selection pressure on members of the opposite sex.

Intrasexual competition

A process of sexual selection by which members of one sex compete with each other, and the victors gain preferential mating access to members of the opposite sex.

Natural selection

Differential reproductive success as a consequence of differences in heritable attributes.

Psychological adaptations

Mechanisms of the mind that evolved to solve specific problems of survival or reproduction; conceptualized as information processing devices.

Sexual selection

The evolution of characteristics because of the mating advantage they give organisms.

Sexual strategies theory

A comprehensive evolutionary theory of human mating that defines the menu of mating strategies humans pursue (e.g., short-term casual sex, long-term committed mating), the adaptive problems women and men face when pursuing these strategies, and the evolved solutions to these mating problems.

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CHAPTER OVERVIEW

3: GROUPS AND GROUP PROCESSES

3.1: The Psychology of Groups

3.2: The Family

3.3: Culture

3.4: Social Comparison

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3.1: The Psychology of Groups

By Donelson R. Forsyth

University of Richmond

This module assumes that a thorough understanding of people requires a thorough understanding of groups. Each of us is an autonomous individual seeking our own objectives, yet we are also members of groups—groups that constrain us, guide us, and sustain us. Just as each of us influences the group and the people in the group, so, too, do groups change each one of us. Joining groups satisfies our need to belong, gain information and understanding through social comparison, define our sense of self and social identity, and achieve goals that might elude us if we worked alone. Groups are also practically significant, for much of the world's work is done by groups rather than by individuals. Success sometimes eludes our groups, but when group members learn to work together as a cohesive team their success becomes more certain. People also turn to groups when important decisions must be made, and this choice is justified as long as groups avoid such problems as group polarization and groupthink.

learning objectives

- Review the evidence that suggests humans have a fundamental need to belong to groups.
- Compare the sociometer model of self-esteem to a more traditional view of self-esteem.
- Use theories of social facilitation to predict when a group will perform tasks slowly or quickly (e.g., students eating a meal as a group, workers on an assembly line, or a study group).
- Summarize the methods used by Latané, Williams, and Harkins to identify the relative impact of social loafing and coordination problems on group performance.
- Describe how groups change over time.
- Apply the theory of groupthink to a well-known decision-making group, such as the group of advisors responsible for planning the Bay of Pigs operation.
- List and discuss the factors that facilitate and impede group performance and decision making.
- Develop a list of recommendations that, if followed, would minimize the possibility of groupthink developing in a group.

The Psychology of Groups



How many groups are you a part of on a daily basis? Whether it's family, class, work, social, sports, church or other areas, we typically spend a good deal of our time and attention each day interacting with others in groups. [Image: CC0 Public Domain, goo.gl/m25gce]

Psychologists study groups because nearly all human activities—working, learning, worshiping, relaxing, playing, and even sleeping—occur in groups. The lone individual who is cut off from all groups is a rarity. Most of us live out our lives in groups, and these groups have a profound impact on our thoughts, feelings, and actions. Many psychologists focus their attention on single individuals, but social psychologists expand their analysis to include groups, organizations, communities, and even cultures.

This module examines the psychology of groups and group membership. It begins with a basic question: What is the psychological significance of groups? People are, undeniably, more often in groups rather than alone. What accounts for this marked gregariousness and what does it say about our psychological makeup? The module then reviews some of the key findings from studies of groups. Researchers have asked many questions about people and groups: Do people work as hard as they can when they are in groups? Are groups more cautious than individuals? Do groups make wiser decisions than single individuals? In many cases the answers are not what common sense and folk wisdom might suggest.

The Psychological Significance of Groups

Many people loudly proclaim their autonomy and independence. Like Ralph Waldo Emerson, they avow, "I must be myself. I will not hide my tastes or aversions . . . . I will seek my own" (1903/2004, p. 127). Even though people are capable of living separate and apart from others, they join with others because groups meet their psychological and social needs.

The Need to Belong



The need to belong is a strong psychological motivation. [Image: CC0 Public Domain, goo.gl/m25gce]

Across individuals, societies, and even eras, humans consistently seek inclusion over exclusion, membership over isolation, and acceptance over rejection. As Roy Baumeister and Mark Leary conclude, humans have a *need to belong*: "a pervasive drive to form and maintain at least a minimum quantity of lasting, positive, and impactful interpersonal relationships" (1995, p. 497). And most of us satisfy this need by joining groups. When surveyed, 87.3% of Americans reported that they lived with other people, including family members, partners, and roommates (Davis & Smith, 2007). The majority, ranging from 50% to 80%, reported regularly doing things in groups, such as attending a sports event together, visiting one another for the evening, sharing a meal together, or going out as a group to see a movie (Putnam, 2000).

People respond negatively when their need to belong is unfulfilled. For example, college students often feel homesick and lonely when they first start college, but not if they belong to a cohesive, socially satisfying group (Buote et al., 2007). People who are accepted members of a group tend to feel happier and more satisfied. But should they be rejected by a group, they feel unhappy, helpless, and depressed. Studies of **ostracism**—the deliberate exclusion from groups—indicate this experience is highly stressful and can lead to depression, confused thinking, and even aggression (Williams, 2007). When researchers used a functional magnetic resonance imaging scanner to track neural responses to exclusion, they found that people who were left out of a group activity

displayed heightened cortical activity in two specific areas of the brain—the dorsal anterior cingulate cortex and the anterior insula. These areas of the brain are associated with the experience of physical pain sensations (Eisenberger, Lieberman, & Williams, 2003). It hurts, quite literally, to be left out of a group.

Affiliation in Groups

Groups not only satisfy the need to belong, they also provide members with information, assistance, and social support. Leon Festinger's theory of **social comparison** (1950, 1954) suggested that in many cases people join with others to evaluate the accuracy of their personal beliefs and attitudes. Stanley Schachter (1959) explored this process by putting individuals in ambiguous, stressful situations and asking them if they wished to wait alone or with others. He found that people *affiliate* in such situations—they seek the company of others.

Although any kind of companionship is appreciated, we prefer those who provide us with reassurance and support as well as accurate information. In some cases, we also prefer to join with others who are even worse off than we are. Imagine, for example, how you would respond when the teacher hands back the test and yours is marked 85%. Do you want to affiliate with a friend who got a 95% or a friend who got a 78%? To maintain a sense of self-worth, people seek out and compare themselves to the less fortunate. This process is known as *downward social comparison*.

Identity and Membership

Groups are not only founts of information during times of ambiguity, they also help us answer the existentially significant question, "Who am I?" Common sense tells us that our sense of self is our private definition of who we are, a kind of archival record of our experiences, qualities, and capabilities. Yet, the self also includes all those qualities that spring from memberships in groups. People are defined not only by their traits, preferences, interests, likes, and dislikes, but also by their friendships, social roles, family connections, and group memberships. The self is not just a "me," but also a "we."

Even demographic qualities such as sex or age can influence us if we categorize ourselves based on these qualities. **Social identity theory**, for example, assumes that we don't just classify *other* people into such social categories as man, woman, Anglo, elderly, or college student, but we also categorize ourselves. Moreover, if we strongly identify with these categories, then we will ascribe the characteristics of the typical member of these groups to ourselves, and so stereotype ourselves. If, for example, we believe that college students are intellectual, then we will assume we, too, are intellectual if we identify with that group (Hogg, 2001).

Groups also provide a variety of means for maintaining and enhancing a sense of self-worth, as our assessment of the quality of groups we belong to influences our **collective self-esteem** (Crocker & Luhtanen, 1990). If our self-esteem is shaken by a personal setback, we can focus on our group's success and prestige. In addition, by comparing our group to other groups, we frequently discover that we are members of the better group, and so can take pride in our superiority. By denigrating other groups, we elevate both our personal and our collective self-esteem (Crocker & Major, 1989).

Mark Leary's **sociometer model** goes so far as to suggest that "self-esteem is part of a sociometer that monitors peoples' relational value in other people's eyes" (2007, p. 328). He maintains self-esteem is not just an index of one's sense of personal value, but also an indicator of acceptance into groups. Like a gauge that indicates how much fuel is left in the tank, a dip in self-esteem indicates exclusion from our group is likely. Disquieting feelings of self-worth, then, prompt us to search for and correct characteristics and qualities that put us at risk of social exclusion. Self-esteem is not just high self-regard, but the self-approbation that we feel when included in groups (Leary & Baumeister, 2000).

Evolutionary Advantages of Group Living

Groups may be humans' most useful invention, for they provide us with the means to reach goals that would elude us if we remained alone. Individuals in groups can secure advantages and avoid disadvantages that would plague the lone individuals. In his theory of social integration, Moreland concludes that groups tend to form whenever "people become dependent on one another for the satisfaction of their needs" (1987, p. 104). The advantages of group life may be so great that humans are biologically prepared to seek membership and avoid isolation. From an evolutionary psychology perspective, because groups have increased humans' overall fitness for countless generations, individuals who carried genes that promoted solitude-seeking were less likely to survive and procreate compared to those with genes that prompted them to join groups (Darwin, 1859/1963). This process of natural selection culminated in the creation of a modern human who seeks out membership in groups instinctively, for most of us are descendants of "joiners" rather than "loners."

Motivation and Performance

Groups usually exist for a reason. In groups, we solve problems, create products, create standards, communicate knowledge, have fun, perform arts, create institutions, and even ensure our safety from attacks by other groups. But do groups always outperform individuals?

Social Facilitation in Groups

Do people perform more effectively when alone or when part of a group? Norman Triplett (1898) examined this issue in one of the first empirical studies in psychology. While watching bicycle races, Triplett noticed that cyclists were faster when they competed against other racers than when they raced alone against the clock. To determine if the presence of others leads to the psychological stimulation that enhances performance, he arranged for 40 children to play a game that involved turning a small reel as quickly as possible (see Figure 11.2.1). When he measured how quickly they turned the reel, he confirmed that children performed slightly better when they played the game in pairs compared to when they played alone (see Stroebe, 2012; Strube, 2005).

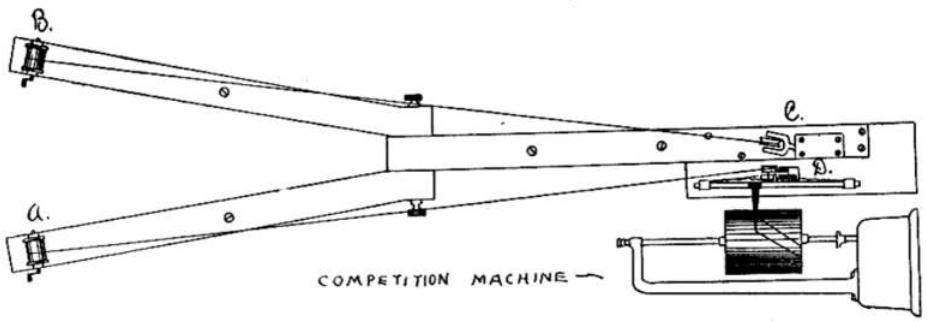


Figure 11.2.1: The "competition machine" Triplett used to study the impact of competition on performance. Triplett's study was one of the first laboratory studies conducted in the field of social psychology. Triplett, N. (1898)

Triplett succeeded in sparking interest in a phenomenon now known as **social facilitation**: the enhancement of an individual's performance when that person works in the presence of other people. However, it remained for Robert Zajonc (1965) to specify when social facilitation does and does not occur. After reviewing prior research, Zajonc noted that the facilitating effects of an audience usually only occur when the task requires the person to perform dominant responses, i.e., ones that are well-learned or based on instinctive behaviors. If the task requires nondominant responses, i.e., novel, complicated, or untried behaviors that the organism has never performed before or has performed only infrequently, then the presence of others inhibits performance. Hence, students write poorer quality essays on complex philosophical questions when they labor in a group rather than alone (Allport, 1924), but they make fewer mistakes in solving simple, low-level multiplication problems with an audience or a coactor than when they work in isolation (Dashiell, 1930).

Social facilitation, then, depends on the task: other people facilitate performance when the task is so simple that it requires only dominant responses, but others interfere when the task requires nondominant responses. However, a number of psychological processes combine to influence when social facilitation, not social interference, occurs. Studies of the challenge-threat response and brain imaging, for example, confirm that we respond physiologically and neurologically to the presence of others (Blascovich, Mendes, Hunter, & Salomon, 1999). Other people also can trigger *evaluation apprehension*, particularly when we feel that our individual performance will be known to others, and those others might judge it negatively (Bond, Atoum, & VanLeeuwen, 1996). The presence of other people can also cause perturbations in our capacity to concentrate on and process information (Harkins, 2006). Distractions due to the presence of other people have been shown to improve performance on certain tasks, such as the *Stroop task*, but undermine performance on more cognitively demanding tasks(Huguet, Galvaing, Monteil, & Dumas, 1999).

Social Loafing

Groups usually outperform individuals. A single student, working alone on a paper, will get less done in an hour than will four students working on a group project. One person playing a tug-of-war game against a group will lose. A crew of movers can pack up and transport your household belongings faster than you can by yourself. As the saying goes, "Many hands make light the work" (Littlepage, 1991; Steiner, 1972).

Groups, though, tend to be underachievers. Studies of social facilitation confirmed the positive motivational benefits of working with other people on well-practiced tasks in which each member's contribution to the collective enterprise can be identified and evaluated. But what happens when tasks require a truly collective effort? First, when people work together they must coordinate their individual activities and contributions to reach the maximum level of efficiency—but they rarely do (Diehl & Stroebe, 1987). Three people in a tug-of-war competition, for example, invariably pull and pause at slightly different times, so their efforts are uncoordinated. The result is *coordination loss*: the three-person group is stronger than a single person, but not three times as strong. Second, people just don't exert as much effort when working on a collective endeavor, nor do they expend as much cognitive effort trying to solve problems, as they do when working alone. They display **social loafing**(Latané, 1981).

Bibb Latané, Kip Williams, and Stephen Harkins (1979) examined both coordination losses and social loafing by arranging for students to cheer or clap either alone or in groups of varying sizes. The students cheered alone or in 2- or 6-person groups, or they were lead to believe they were in 2- or 6-person groups (those in the "pseudo-groups" wore blindfolds and headsets that played masking sound). As Figure 11.2.2 indicates, groups generated more noise than solitary subjects, but the productivity dropped as the groups became larger in size. In dyads, each subject worked at only 66% of capacity, and in 6-person groups at 36%. Productivity also dropped when subjects merely believed they were in groups. If subjects thought that one other person was shouting with them, they shouted 82% as intensely, and if they thought five other people were shouting, they reached only 74% of their capacity. These loses in productivity were not due to coordination problems; this decline in production could be attributed only to a reduction in effort—to social loafing (Latané et al., 1979, Experiment 2).

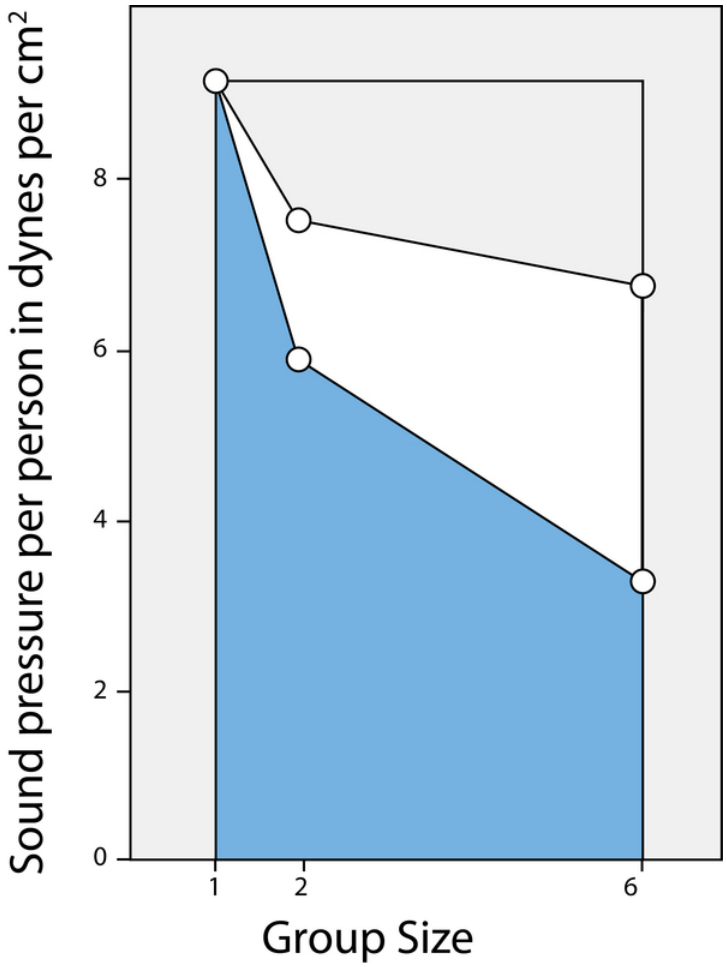


Figure 11.2.2: Sound pressure per person as a function of group or pseudo group size. Latane, B. (1981)



Social loafing can be a problem. One way to overcome it is by recognizing that each group member has an important part to play in the success of the group. [Image: Marc Dalmulder, https://goo.gl/Xa5aiE, CC BY 2.0, goo.gl/BRvSA7]

Social loafing is no rare phenomenon. When sales personnel work in groups with shared goals, they tend to "take it easy" if another salesperson is nearby who can do their work (George, 1992). People who are trying to generate new, creative ideas in group brainstorming sessions usually put in less effort and are thus less productive than people who are generating new ideas individually (Paulus & Brown, 2007). Students assigned group projects often complain of inequity in the quality and quantity of each member's contributions: Some people just don't work as much as they should to help the group reach its learning goals (Neu, 2012). People carrying out all sorts of physical and mental tasks expend less effort when working in groups, and the larger the group, the more they loaf (Karau & Williams, 1993).

Groups can, however, overcome this impediment to performance through **teamwork**. A group may include many talented individuals, but they must learn how to pool their individual abilities and energies to maximize the team's performance. Team goals must be set, work patterns structured, and a sense of group identity developed. Individual members must learn how to coordinate their actions, and any strains and stresses in interpersonal relations need to be identified and resolved (Salas, Rosen, Burke, & Goodwin, 2009).

Researchers have identified two key ingredients to effective teamwork: a shared mental representation of the task and group unity. Teams improve their performance over time as they develop a shared understanding of the team and the tasks they are attempting. Some semblance of this **shared mental model** is present nearly from its inception, but as the team practices, differences among the members in terms of their understanding of their situation and their team diminish as a consensus becomes implicitly accepted (Tindale, Stawiski, & Jacobs, 2008).

Effective teams are also, in most cases, cohesive groups (Dion, 2000). **Group cohesion** is the integrity, solidarity, social integration, or unity of a group. In most cases, members of cohesive groups like each other and the group and they also are united

in their pursuit of collective, group-level goals. Members tend to enjoy their groups more when they are cohesive, and cohesive groups usually outperform ones that lack cohesion.

This cohesion-performance relationship, however, is a complex one. Meta-analytic studies suggest that cohesion improves teamwork among members, but that performance quality influences cohesion more than cohesion influences performance (Mullen & Copper, 1994; Mullen, Driskell, & Salas, 1998; see Figure 11.2.3). Cohesive groups also can be spectacularly unproductive if the group's norms stress low productivity rather than high productivity (Seashore, 1954).

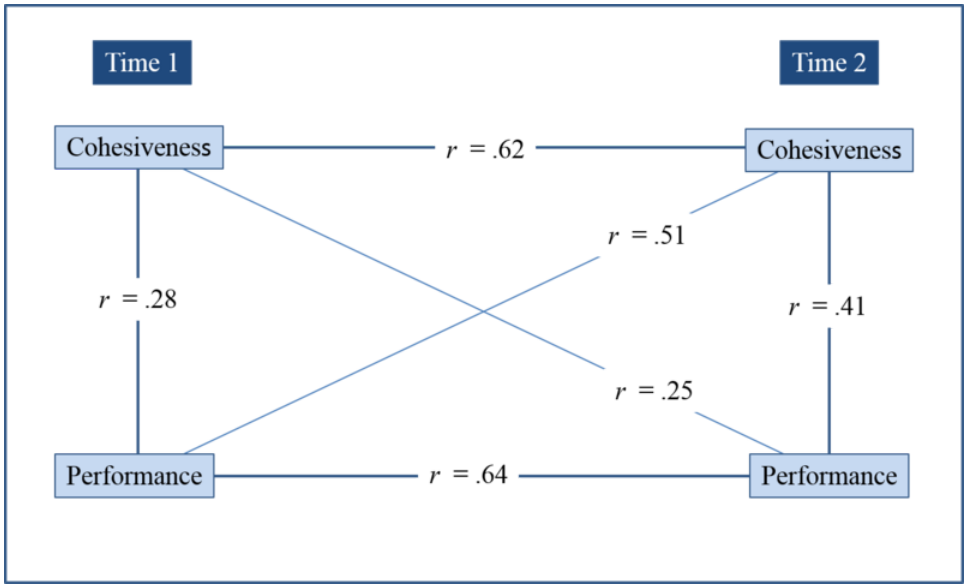


Figure 11.2.3: The relationship between group cohesion and performance over time. Groups that are cohesive do tend to perform well on tasks now (Time1) and in the future (Time 2). Notice, though, that the relationship between Performance at Time 1 and Cohesiveness at Time 2 is greater (r=.51) than the relationship between Cohesion at Time 1 and Performance at Time 2 (r=.25). These findings suggest that cohesion improves performance, but that a group that performs well is likely to also become more cohesive. Mullen, Driskell, & Salas (1998)

Group Development

In most cases groups do not become smooth-functioning teams overnight. As Bruce Tuckman's (1965) theory of group development suggests, groups usually pass through several stages of development as they change from a newly formed group into an effective team. As noted in Focus Topic 1, in the *forming* phase, the members become oriented toward one another. In the *storming* phase, the group members find themselves in conflict, and some solution is sought to improve the group environment. In the *norming*, phase standards for behavior and roles develop that regulate behavior. In the *performing*, phase the group has reached a point where it can work as a unit to achieve desired goals, and the *adjourning* phase ends the sequence of development; the group disbands. Throughout these stages groups tend to oscillate between the task-oriented issues and the relationship issues, with members sometimes working hard but at other times strengthening their interpersonal bonds (Tuckman & Jensen, 1977).

Focus Topic 1: Group Development Stages and Characteristics

Stage 1 – "Forming". Members expose information about themselves in polite but tentative interactions. They explore the purposes of the group and gather information about each other's interests, skills, and personal tendencies.

Stage 2 – "Storming". Disagreements about procedures and purposes surface, so criticism and conflict increase. Much of the conflict stems from challenges between members who are seeking to increase their status and control in the group.

Stage 3 – "Norming". Once the group agrees on its goals, procedures, and leadership, norms, roles, and social relationships develop that increase the group's stability and cohesiveness.

Stage 4 – "Performing". The group focuses its energies and attention on its goals, displaying higher rates of task-orientation, decision-making, and problem-solving.

Stage 5 – "Adjourning". The group prepares to disband by completing its tasks, reduces levels of dependency among members, and dealing with any unresolved issues.

Sources based on Tuckman (1965) and Tuckman & Jensen (1977)

We also experience change as we pass through a group, for we don't become full-fledged members of a group in an instant. Instead, we gradually become a part of the group and remain in the group until we leave it. Richard Moreland and John Levine's (1982) model of group socialization describes this process, beginning with initial entry into the group and ending when the member exits it. For example, when you are thinking of joining a new group—a social club, a professional society, a fraternity or sorority, or a sports team—you investigate what the group has to offer, but the group also investigates you. During this investigation stage you are still an outsider: interested in joining the group, but not yet committed to it in any way. But once the group accepts you and you accept the group, socialization begins: you learn the group's norms and take on different responsibilities depending on your role. On a sports team, for example, you may initially hope to be a star who starts every game or plays a particular position, but the team may need something else from you. In time, though, the group will accept you as a full-fledged member and both sides in the process—you and the group itself—increase their commitment to one another. When that commitment wanes, however, your membership may come to an end as well.

Making Decisions in Groups

Groups are particularly useful when it comes to making a decision, for groups can draw on more resources than can a lone individual. A single individual may know a great deal about a problem and possible solutions, but his or her information is far surpassed by the combined knowledge of a group. Groups not only generate more ideas and possible solutions by discussing the problem, but they can also more objectively evaluate the options that they generate during discussion. Before accepting a solution, a group may require that a certain number of people favor it, or that it meets some other standard of acceptability. People generally feel that a group's decision will be superior to an individual's decision.

Groups, however, do not always make good decisions. Juries sometimes render verdicts that run counter to the evidence presented. Community groups take radical stances on issues before thinking through all the ramifications. Military strategists concoct plans that seem, in retrospect, ill-conceived and short-sighted. Why do groups sometimes make poor decisions?

Group Polarization

Let's say you are part of a group assigned to make a presentation. One of the group members suggests showing a short video that, although amusing, includes some provocative images. Even though initially you think the clip is inappropriate, you begin to change your mind as the group discusses the idea. The group decides, eventually, to throw caution to the wind and show the clip—and your instructor is horrified by your choice.

This hypothetical example is consistent with studies of groups making decisions that involve risk. Common sense notions suggest that groups exert a moderating, subduing effect on their members. However, when researchers looked at groups closely, they discovered many groups shift toward more extreme decisions rather than less extreme decisions after group interaction. Discussion, it turns out, doesn't moderate people's judgments after all. Instead, it leads to **group polarization**: judgments made after group discussion will be more extreme in the same direction as the average of individual judgments made prior to discussion (Myers & Lamm, 1976). If a majority of members feel that taking risks is more acceptable than exercising caution, then the group will become riskier after a discussion. For example, in France, where people generally like their government but dislike Americans, group discussion improved their attitude toward their government but exacerbated their negative opinions of Americans (Moscovici & Zavalloni, 1969). Similarly, prejudiced people who discussed racial issues with other prejudiced individuals became even more negative, but those who were relatively unprejudiced exhibited even more acceptance of diversity when in groups (Myers & Bishop, 1970).

Common Knowledge Effect

One of the advantages of making decisions in groups is the group's greater access to information. When seeking a solution to a problem, group members can put their ideas on the table and share their knowledge and judgments with each other through discussions. But all too often groups spend much of their discussion time examining common knowledge—information that two or more group members know in common—rather than unshared information. This **common knowledge effect** will result in a bad outcome if something known by only one or two group members is very important.

Researchers have studied this bias using the *hidden profile task*. On such tasks, information known to many of the group members suggests that one alternative, say Option A, is best. However, Option B is definitely the better choice, but all the facts that support

Option B are only known to individual groups members—they are not common knowledge in the group. As a result, the group will likely spend most of its time reviewing the factors that favor Option A, and never discover any of its drawbacks. In consequence, groups often perform poorly when working on problems with nonobvious solutions that can only be identified by extensive information sharing (Stasser & Titus, 1987).

Groupthink



Groupthink helps us blend in and feel accepted and validated but it can also lead to problems. [Image: CC0 Public Domain, goo.gl/m25gce]

Groups sometimes make spectacularly bad decisions. In 1961, a special advisory committee to President John F. Kennedy planned and implemented a covert invasion of Cuba at the Bay of Pigs that ended in total disaster. In 1986, NASA carefully, and incorrectly, decided to launch the Challenger space shuttle in temperatures that were too cold.

Irving Janis (1982), intrigued by these kinds of blundering groups, carried out a number of case studies of such groups: the military experts that planned the defense of Pearl Harbor; Kennedy's Bay of Pigs planning group; the presidential team that escalated the war in Vietnam. Each group, he concluded, fell prey to a distorted style of thinking that rendered the group members incapable of making a rational decision. Janis labeled this syndrome **groupthink**: "a mode of thinking that people engage in when they are deeply involved in a cohesive in-group, when the members' strivings for unanimity override their motivation to realistically appraise alternative courses of action" (p. 9).

Janis identified both the telltale symptoms that signal the group is experiencing groupthink and the interpersonal factors that combine to cause groupthink. To Janis, groupthink is a disease that infects healthy groups, rendering them inefficient and unproductive. And like the physician who searches for symptoms that distinguish one disease from another, Janis identified a number of symptoms that should serve to warn members that they may be falling prey to groupthink. These symptoms include overestimating the group's skills and wisdom, biased perceptions and evaluations of other groups and people who are outside of the group, strong conformity pressures within the group, and poor decision-making methods.

Janis also singled out four group-level factors that combine to cause groupthink: cohesion, isolation, biased leadership, and decisional stress.

- *Cohesion*: Groupthink only occurs in cohesive groups. Such groups have many advantages over groups that lack unity. People enjoy their membership much more in cohesive groups, they are less likely to abandon the group, and they work harder in pursuit of the group's goals. But extreme cohesiveness can be dangerous. When cohesiveness intensifies, members become more likely to accept the goals, decisions, and norms of the group without reservation. Conformity pressures also rise as members become reluctant to say or do anything that goes against the grain of the group, and the number of internal disagreements—necessary for good decision making—decreases.
- *Isolation.* Groupthink groups too often work behind closed doors, keeping out of the limelight. They isolate themselves from outsiders and refuse to modify their beliefs to bring them into line with society's beliefs. They avoid leaks by maintaining strict

confidentiality and working only with people who are members of their group.

- *Biased leadership*. A biased leader who exerts too much authority over group members can increase conformity pressures and railroad decisions. In groupthink groups, the leader determines the agenda for each meeting, sets limits on discussion, and can even decide who will be heard.
- *Decisional stress.* Groupthink becomes more likely when the group is stressed, particularly by time pressures. When groups are stressed they minimize their discomfort by quickly choosing a plan of action with little argument or dissension. Then, through collective discussion, the group members can rationalize their choice by exaggerating the positive consequences, minimizing the possibility of negative outcomes, concentrating on minor details, and overlooking larger issues.

You and Your Groups



Even groups that like one another and work well together in most situations can be victims of groupthink or the common knowledge effect. But knowing that these pitfalls exist is the first step to overcoming them. [Image: CC0 Public Domain, goo.gl/m25gce]

Most of us belong to at least one group that must make decisions from time to time: a community group that needs to choose a fund-raising project; a union or employee group that must ratify a new contract; a family that must discuss your college plans; or the staff of a high school discussing ways to deal with the potential for violence during football games. Could these kinds of groups experience groupthink? Yes they could, if the symptoms of groupthink discussed above are present, combined with other contributing causal factors, such as cohesiveness, isolation, biased leadership, and stress. To avoid polarization, the common knowledge effect, and groupthink, groups should strive to emphasize open inquiry of all sides of the issue while admitting the possibility of failure. The leaders of the group can also do much to limit groupthink by requiring full discussion of pros and cons, appointing devil's advocates, and breaking the group up into small discussion groups.

If these precautions are taken, your group has a much greater chance of making an informed, rational decision. Furthermore, although your group should review its goals, teamwork, and decision-making strategies, the human side of groups—the strong friendships and bonds that make group activity so enjoyable—shouldn't be overlooked. Groups have instrumental, practical value, but also emotional, psychological value. In groups we find others who appreciate and value us. In groups we gain the support we need in difficult times, but also have the opportunity to influence others. In groups we find evidence of our self-worth, and secure ourselves from the threat of loneliness and despair. For most of us, groups are the secret source of well-being.

Outside Resources

Audio: This American Life. Episode 109 deals with the motivation and excitement of joining with others at summer camp.

http://www.thisamericanlife.org/radi.../notes-on-camp

Audio: This American Life. Episode 158 examines how people act when they are immersed in a large crowd.

http://www.thisamericanlife.org/radi.../mob-mentality

Audio: This American Life. Episode 61 deals with fiascos, many of which are perpetrated by groups.

http://www.thisamericanlife.org/radi...sode/61/fiasco

Audio: This American Life. Episode 74 examines how individuals act at conventions, when they join with hundreds or thousands of other people who are similar in terms of their avocations or employment.

http://www.thisamericanlife.org/radi...74/conventions

Forsyth, D. (2011). Group Dynamics. In R. Miller, E. Balcetis, S. Burns, D. Daniel, B. Saville, & W. Woody (Eds.), Promoting student engagement: Volume 2: Activities, exercises and demonstrations for psychology courses. (pp. 28-32) Washington, DC: Society for the Teaching of Psychology, American Psychological Association.

http://teachpsych.org/ebooks/pse2011/vol2/index.php

Forsyth, D.R. (n.d.) Group Dynamics: Instructional Resources.

facultystaff.richmond.edu/~d...ources2014.pdf

Journal Article: The Dynamogenic Factors in Pacemaking and Competition presents Norman Triplett's original paper on what would eventually be known as social facilitation.

http://psychclassics.yorku.ca/Triplett/

Resources for the Teaching of Social Psychology.

http://jfmueller.faculty.noctrl.edu/crow/group.htm

Social Psychology Network Student Activities

http://www.socialpsychology.org/teac...ent-activities

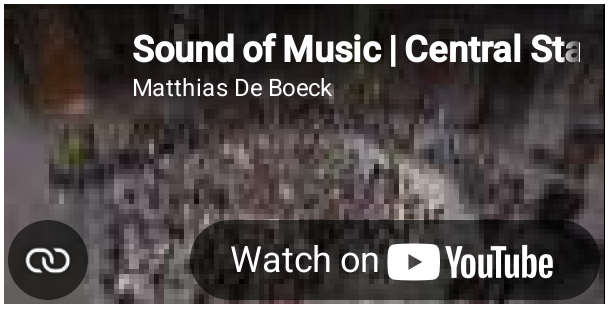
Society for Social and Personality Psychology

http://www.spsp.org

Tablante, C. B., & Fiske, S. T. (2015). Teaching social class. Teaching of Psychology, 42, 184-190. doi:10.1177/0098628315573148 The abstract to the article can be found at the following link, however your library will likely provide you access to the full text version.

http://top.sagepub.com/content/42/2/184.abstract

Video: Flash mobs illustrate the capacity of groups to organize quickly and complete complex tasks. One well-known example of a pseudo-flash mob is the rendition of "Do Re Mi" from the Sound of Music in the Central Station of Antwerp in 2009.





Web: Group Development - This is a website developed by James Atherton that provides detailed information about group development, with application to the lifecycle of a typical college course.

www.learningandteaching.info/teaching/group_ development.htm

Web: Group Dynamics- A general repository of links, short articles, and discussions examining groups and group processes, including such topics as crowd behavior, leadership, group structure, and influence.

http://donforsythgroups.wordpress.com/

Web: Stanford Crowd Project - This is a rich resource of information about all things related to crowds, with a particular emphasis on crowds and collective behavior in literature and the arts.

press-media.stanford.edu/crowds/main.html

Working Paper: Law of Group Polarization, by Cass Sunstein, is a wide-ranging application of the concept of polarization to a variety of legal and political decisions.

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=199668

Discussion Questions

1. What are the advantages and disadvantages of sociality? Why do people often join groups?
2. Is self-esteem shaped by your personality qualities or by the value and qualities of groups to which you belong?
3. In what ways does membership in a group change a person's self-concept and social identity?
4. What steps would you take if you were to base a self-esteem enrichment program in schools on the sociometer model of self-worth?
5. If you were a college professor, what would you do to increase the success of in-class learning teams?
6. What are the key ingredients to transforming a working group into a true team?
7. Have you ever been part of a group that made a poor decision and, if so, were any of the symptoms of groupthink present in your group?

Vocabulary

Collective self-esteem

Feelings of self-worth that are based on evaluation of relationships with others and membership in social groups.

Common knowledge effect

The tendency for groups to spend more time discussing information that all members know (shared information) and less time examining information that only a few members know (unshared).

Group cohesion

The solidarity or unity of a group resulting from the development of strong and mutual interpersonal bonds among members and group-level forces that unify the group, such as shared commitment to group goals.

Group polarization

The tendency for members of a deliberating group to move to a more extreme position, with the direction of the shift determined by the majority or average of the members' predeliberation preferences.

Groupthink

A set of negative group-level processes, including illusions of invulnerability, self-censorship, and pressures to conform, that occur when highly cohesive groups seek concurrence when making a decision.

Ostracism

Excluding one or more individuals from a group by reducing or eliminating contact with the person, usually by ignoring, shunning, or explicitly banishing them.

Shared mental model

Knowledge, expectations, conceptualizations, and other cognitive representations that members of a group have in common pertaining to the group and its members, tasks, procedures, and resources.

Social comparison

The process of contrasting one's personal qualities and outcomes, including beliefs, attitudes, values, abilities, accomplishments, and experiences, to those of other people.

Social facilitation

Improvement in task performance that occurs when people work in the presence of other people.

Social identity theory

A theoretical analysis of group processes and intergroup relations that assumes groups influence their members' self-concepts and self-esteem, particularly when individuals categorize themselves as group members and identify with the group.

Social loafing

The reduction of individual effort exerted when people work in groups compared with when they work alone.

Sociometer model

A conceptual analysis of self-evaluation processes that theorizes self-esteem functions to psychologically monitor of one's degree of inclusion and exclusion in social groups.

Teamwork

The process by which members of the team combine their knowledge, skills, abilities, and other resources through a coordinated series of actions to produce an outcome.

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3.2: The Family

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Each and every one of us has a family. However, these families exist in many variations around the world. In this module, we discuss definitions of family, family forms, the developmental trajectory of families, and commonly used theories to understand families. We also cover factors that influence families such as culture and societal expectations while incorporating the latest family relevant statistics.

learning objectives

- Understand the various family forms.
- Describe attachment theory.
- Identify different parenting styles.
- Know the typical developmental trajectory of families.
- Understand cultural differences in dating, marriage, and divorce.
- Explain the influence of children and aging parents on families.
- Know concrete tips for increasing happiness within your family.

It is often said that humans are social creatures. We make friends, live in communities, and connect to acquaintances through shared interests. In recent times, social media has become a new way for people to connect with childhood peers, friends of friends, and even strangers. Perhaps nothing is more central to the social world than the concept of family. Our families represent our earliest relationships and—often—our most enduring ones. In this module, you will learn about the psychology of families. Our discussion will begin with a basic definition of family and how this has changed across time and place. Next, we move on to a discussion of family roles and how families evolve across the lifespan. Finally, we conclude with issues such as divorce and abuse that are important factors in the psychological health of families.

What is Family?

In J.K. Rowling's famous Harry Potter novels, the boy magician lives in a cupboard under the stairs. His unfortunate situation is the result of his wizarding parents having been killed in a duel, causing the young Potter to be subsequently shipped off to live with his cruel aunt and uncle. Although family may not be the central theme of these wand and sorcery novels, Harry's example raises a compelling question: what, exactly, counts as family?



A traditional family has a somewhat narrow definition that includes only relationships of blood, marriage, and occasionally adoption. More recently, in many societies, the definition of family has expanded. A modern family may include less traditional variations based on strong commitment and emotional ties. [Image: 10070052 moodboard, http://goo.gl/2xAZGA, CC BY 2.0, goo.gl/v4Y0Zv]

The definition of family changes across time and across culture. **Traditional family** has been defined as two or more people who are related by blood, marriage, and—occasionally—adoption (Murdock, 1949). Historically, the most standard version of the traditional family has been the **two-parent family**. Are there people in your life you consider family who are not necessarily

related to you in the traditional sense? Harry Potter would undoubtedly call his schoolmates Ron Weasley and Hermione Granger family, even though they do not fit the traditional definition. Likewise, Harry might consider Hedwig, his snowy owl, a family member, and he would not be alone in doing so. Research from the US (Harris, 2015) and Japan (Veldkamp, 2009) finds that many pet owners consider their pets to be members of the family. Another traditional form of family is the **joint family**, in which three or more generations of blood relatives live in a single household or compound. Joint families often include cousins, aunts and uncles, and other relatives from the extended family. Versions of the joint family system exist around the globe including in South Asia, Southern Europe, the South Pacific and other locations.

In more modern times, the traditional definition of family has been criticized as being too narrow. **Modern families**—especially those in industrialized societies—exist in many forms, including the **single parent family**, foster families, same-sex couples, childfree families, and many other variations from traditional norms. Common to each of these family forms is commitment, caring, and close emotional ties—which are increasingly the defining characteristics of family (Benokraitis, 2015). The changing definition of family has come about, in part, because of factors such as divorce and re-marriage. In many cases, people do not grow up with their family of orientation, but become part of a **stepfamily** or **blended family**. Whether a single-parent, joint, or two-parent family, a person's **family of orientation**, or the family into which he or she is born, generally acts as the social context for young children learning about relationships.

According to Bowen (1978), each person has a role to play in his or her family, and each role comes with certain rules and expectations. This system of rules and roles is known as **family systems theory**. The goal for the family is stability: rules and expectations that work for all. When the role of one member of the family changes, so do the rules and expectations. Such changes ripple through the family and cause each member to adjust his or her own role and expectations to compensate for the change.



There are many variations of modern families, including blended or stepfamilies where two families combine. In a combined family the roles of individuals may be different than in their original family of orientation. [Image: Doc List, http://goo.gl/5FpSeU, CC BY-NC-SA 2.0, goo.gl/iF4hmM]

Take, for example, the classic story of Cinderella. Cinderella's initial role is that of a child. Her parents' expectations of her are what would be expected of a growing and developing child. But, by the time Cinderella reaches her teen years, her role has changed considerably. Both of her biological parents have died and she has ended up living with her stepmother and stepsisters. Cinderella's role shifts from being an adored child to acting as the household servant. The stereotype of stepfamilies as being emotionally toxic is, of course, not true. You might even say there are often-overlooked instructive elements in the Cinderella story:

Her role in the family has become not only that of servant but also that of caretaker-- the others expecting her to cook and clean while in return they treat her with spite and cruelty. When Cinderella finds her prince and leaves to start her own family—known as a **family of procreation**—it is safe to assume that the roles of her stepmother and stepsisters will change—suddenly having to cook and clean for themselves.

Gender has been one factor by which family roles have long been assigned. Traditional roles have historically placed housekeeping and childrearing squarely in the realm of women's responsibilities. Men, by contrast, have been seen as protectors and as providers of resources including money. Increasingly, families are crossing these traditional roles with women working outside the home and men contributing more to domestic and childrearing responsibilities. Despite this shift toward more egalitarian roles, women still tend to do more housekeeping and childrearing tasks than their husbands (known as the **second shift**) (Hochschild & Machung, 2012).

Interestingly, parental roles have an impact on the ambitions of their children. Croft and her colleagues (2014) examined the beliefs of more than 300 children. The researchers discovered that when fathers endorsed more equal sharing of household duties and when mothers were more workplace oriented it influenced how their daughters thought. In both cases, daughters were more likely to have ambitions toward working outside the home and working in less gender-stereotyped professions.

How Families Develop

Our families are so familiar to us that we can sometimes take for granted the idea that families develop over time. **Nuclear families**, those core units of parents and children, do not simply pop into being. The parents meet one another, they court or date one another, and they make the decision to have children. Even then the family does not quit changing. Children grow up and leave home and the roles shift yet again.

Intimacy



According to Attachment Theory, the type of care that we receive as infants can have a significant influence on the intimate relationships that we have as adults. [Image: Muriel HEARD-COLLIER, http://goo.gl/BK7WUm, CC BY-NC-SA 2.0, goo.gl/iF4hmM]

In a psychological sense, families begin with intimacy. The need for intimacy, or close relationships with others, is universal. We seek out close and meaningful relationships over the course of our lives. 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**. 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.

Early Attachment and Adult Intimacy
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."

Table 1: Early attachment and adult intimacy

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).

Dating, Courtship, and Cohabitation

Over time, the process of finding a mate has changed dramatically. In Victorian England, for instance, young women in high society trained for years in the arts—to sing, play music, dance, compose verse, etc. These skills were thought to be vital to the courtship ritual—a demonstration of feminine worthiness. Once a woman was of marriageable age, she would attend dances and other public events as a means of displaying her availability. A young couple interested in one another would find opportunities to spend time together, such as taking a walk. That era had very different dating practices from today, in which teenagers have more freedom, more privacy, and can date more people.

One major difference in the way people find a mate these days is the way we use technology to both expand and restrict the **marriage market**—the process by which potential mates compare assets and liabilities of available prospects and choose the best option (Benokraitis, 2015). Comparing marriage to a market might sound unromantic, but think of it as a way to illustrate how people seek out attractive qualities in a mate. Modern technology has allowed us to expand our "market" by allowing us to search for potential partners all over the world—as opposed to the days when people mostly relied on local dating pools. Technology also allows us to filter out undesirable (albeit available) prospects at the outset, based on factors such as shared interests, age, and other features.

The use of filters to find the most desirable partner is a common practice, resulting in people marrying others very similar to themselves—a concept called **homogamy**; the opposite is known as **heterogamy** (Burgess & Wallin, 1943). In his 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).

In many countries, technology is increasingly used to help single people find each other, and this may be especially true of older adults who are divorced or widowed, as there are few societally-structured activities for older singles. For example, younger people in school are usually surrounded with many potential dating partners of a similar age and background. As we get older, this is less true, as we focus on our careers and find ourselves surrounded by co-workers of various ages, marital statuses, and backgrounds.



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, goo.gl/iF4hmM]

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.

In terms of other notable shifts in attitude seen around the world, an increase in cohabitation has been documented. **Cohabitation** is defined as an arrangement in which two people who are romantically live together even though they are not married (Prinz, 1995). 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.

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 for women has increased from 21.8 to 24.7 years. Men have seen a similar increase in age at first marriage.



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, goo.gl/T4qgSp]

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?

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. The average age for first-time mothers is 25 in the United States (up from 21 in 1970), 29.4 in Switzerland, and 29.2 in Japan (Matthews & Hamilton, 2014).

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. **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 his/her child's behavior. Children who have authoritative parents are generally happy, capable, and successful (Maccoby, 1992).

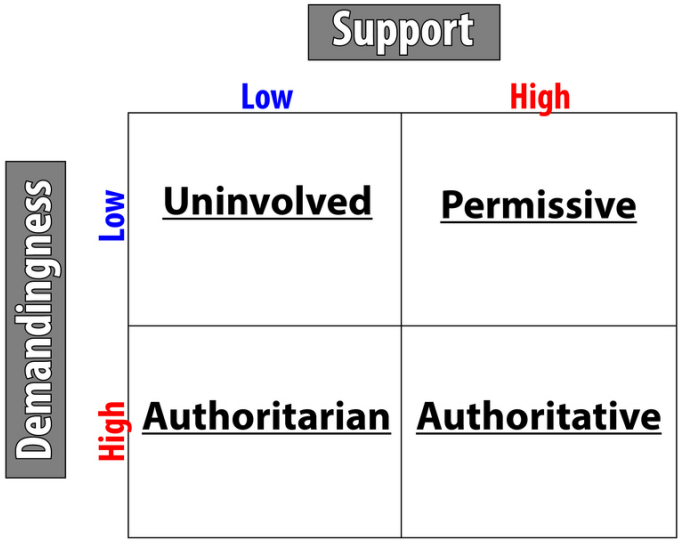


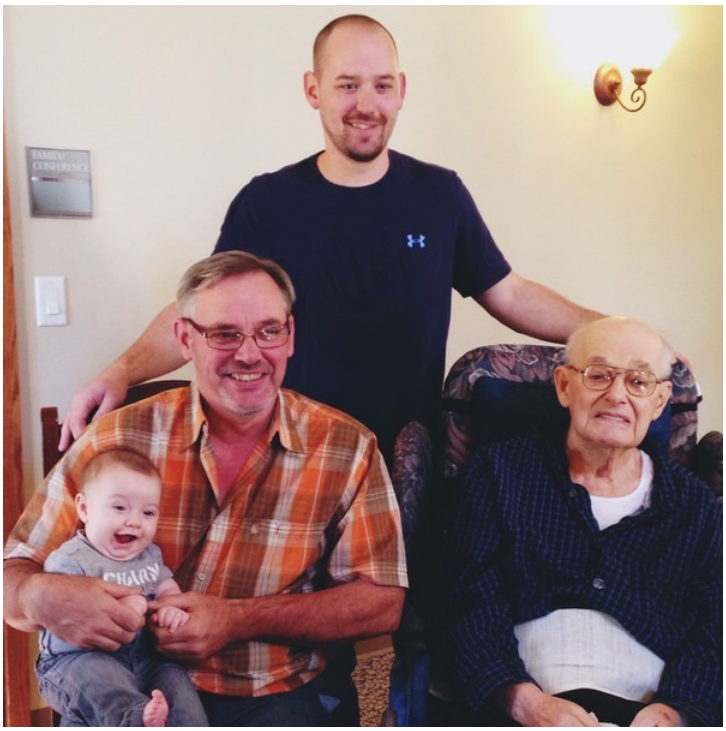
Table 2: Four parenting styles

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).

Parenting in Later Life

Just because children grow up does not mean their family stops being a family. The concept of family persists across the entire lifespan, but the specific roles and expectations of its members change over time. One major change comes when a child reaches adulthood and moves away. When exactly children leave home varies greatly depending on societal norms and expectations, as well as on economic conditions such as employment opportunities and affordable housing options. Some parents may experience sadness when their adult children leave the home—a situation known as **Empty Nest**.



When one's children reach adulthood it doesn't mean that parenting stops. Boomerang kids and multigenerational households that include aging parents are increasingly common. [Image: davidmulder61, goo.gl/eGPT5i, CC BY-SA 2.0, goo.gl/S6i0RI]

Many parents are also finding that their grown children are struggling to launch into independence. It's an increasingly common story: a child goes off to college and, upon graduation, is unable to find steady employment. In such instances, a frequent outcome is for the child to return home, becoming a "boomerang kid." The **boomerang generation**, as the phenomenon has come to be known, refers to young adults, mostly between the ages of 25 and 34, who return home to live with their parents while they strive for stability in their lives—often in terms of finances, living arrangements, and sometimes romantic relationships. These boomerang kids can be both good and bad for families. Within American families, 48% of boomerang kids report having paid rent to their parents, and 89% say they help out with household expenses—a win for everyone (Parker, 2012). On the other hand, 24% of boomerang kids report that returning home hurts their relationship with their parents (Parker, 2012). For better or for worse, the number of children returning home has been increasing around the world.

In addition to middle-aged parents spending more time, money, and energy taking care of their adult children, they are also increasingly taking care of their own aging and ailing parents. Middle-aged people in this set of circumstances are commonly referred to as the **sandwich generation** (Dukhovnov & Zagheni, 2015). Of course, cultural norms and practices again come into play. In some Asian and Hispanic cultures, the expectation is that adult children are supposed to take care of aging parents and parents-in-law. In other Western cultures—cultures that emphasize individuality and self-sustainability—the expectation has historically been that elders either **age in place**, modifying their home and receiving services to allow them to continue to live independently, or enter long-term care facilities. However, given financial constraints, many families find themselves taking in and caring for their aging parents, increasing the number of **multigenerational homes** around the world.

Family Issues and Considerations

Divorce

Divorce refers to the legal dissolution of a marriage. Depending on societal factors, divorce may be more or less of an option for married couples. Despite popular belief, divorce rates in the United States actually declined for many years during the 1980s and 1990s, and only just recently started to climb back up—landing at just below 50% of marriages ending in divorce today (Marriage & Divorce, 2016); however, it should be noted that divorce rates increase for each subsequent marriage, and there is considerable debate about the exact divorce rate. Are there specific factors that can predict divorce? Are certain types of people or certain types of relationships more or less at risk for breaking up? Indeed, there are several factors that appear to be either risk factors or protective factors.

Pursuing education decreases the risk of divorce. So too does waiting until we are older to marry. Likewise, if our parents are still married we are less likely to divorce. Factors that increase our risk of divorce include having a child before marriage and living with multiple partners before marriage, known as serial cohabitation (cohabitation with one's expected martial partner does not appear to have the same effect). And, of course, societal and religious attitudes must also be taken into account. In societies that are more accepting of divorce, divorce rates tend to be higher. Likewise, in religions that are less accepting of divorce, divorce rates tend to be lower. See Lyngstad & Jalovaara (2010) for a more thorough discussion of divorce risk.

Divorce Factors	
Protective Factors	**Risk Factors**
• Higher-levels of education	• Children before marriage
• Marrying at older age	• Co-habitation
• Parents remain married	• Live in a society accepting of divorce
• Member of religious group less accepting of divorce	

Table 3: Divorce Factors

If a couple does divorce, there are specific considerations they should take into account to help their children cope. Parents should reassure their children that both parents will continue to love them and that the divorce is in no way the children's fault. Parents should also encourage open communication with their children and be careful not to bias them against their "ex" or use them as a means of hurting their "ex" (Denham, 2013; Harvey & Fine, 2004; Pescosoido, 2013).

Abuse

Abuse can occur in multiple forms and across all family relationships. Breiding, Basile, Smith, Black, & Mahendra (2015) define the forms of abuse as:

- **Physical abuse**, the use of intentional physical force to cause harm. Scratching, pushing, shoving, throwing, grabbing, biting, choking, shaking, slapping, punching, and hitting are common forms of physical abuse;
- **Sexual abuse**, the act of forcing someone to participate in a sex act against his or her will. Such abuse is often referred to as sexual assault or rape. A marital relationship does not grant anyone the right to demand sex or sexual activity from anyone, even a spouse;
- **Psychological abuse**, aggressive behavior that is intended to control someone else. Such abuse can include threats of physical or sexual abuse, manipulation, bullying, and stalking.

Abuse between partners is referred to as **intimate partner violence**; however, such abuse can also occur between a parent and child (**child abuse**), adult children and their aging parents (**elder abuse**), and even between siblings.

The most common form of abuse between parents and children is actually that of neglect. **Neglect** refers to a family's failure to provide for a child's basic physical, emotional, medical, or educational needs (DePanfilis, 2006). Harry Potter's aunt and uncle, as well as Cinderella's stepmother, could all be prosecuted for neglect in the real world.

Abuse is a complex issue, especially within families. There are many reasons people become abusers: poverty, stress, and substance abuse are common characteristics shared by abusers, although abuse can happen in any family. There are also many reasons adults stay in abusive relationships: (a) **learned helplessness** (the abused person believing he or she has no control over the situation); (b)

the belief that the abuser can/will change; (c) shame, guilt, self-blame, and/or fear; and (d) economic dependence. All of these factors can play a role.

Children who experience abuse may “act out” or otherwise respond in a variety of unhealthful ways. These include acts of self-destruction, withdrawal, and aggression, as well as struggles with depression, anxiety, and academic performance. Researchers have found that abused children’s brains may produce higher levels of stress hormones. These hormones can lead to decreased brain development, lower stress thresholds, suppressed immune responses, and lifelong difficulties with learning and memory (Middlebrooks & Audage, 2008).

Adoption

Divorce and abuse are important concerns, but not all family hurdles are negative. One example of a positive family issue is adoption. **Adoption** has long historical roots (it is even mentioned in the Bible) and involves taking in and raising someone else’s child legally as one’s own. Becoming a parent is one of the most fulfilling things a person can do (Gallup & Newport, 1990), but even with modern reproductive technologies, not all couples who would like to have children (which is still most) are able to. For these families, adoption often allows them to feel whole—by completing their family.

In 2013, in the United States, there were over 100,000 children in **foster care** (where children go when their biological families are unable to adequately care for them) available for adoption (Soronen, 2013). In total, about 2% of the U.S. child population is adopted, either through foster care or through private domestic or international adoption (Adopted Children, 2012). Adopting a child from the foster care system is relatively inexpensive, costing $0-$2,500, with many families qualifying for state-subsidized support (Soronen, 2013).



Adoption is an important option for creating or expanding a family. Foster care adoptions and international adoptions are both common. Regardless of why a family chooses to adopt and from where, traits such as patience, flexibility and strong problem-solving skills are desirable for adoptive parents. [Image: Steven Depolo, https://goo.gl/ElGvwe, CC BY 2.0, goo.gl/BRvSA7]

For years, international adoptions have been popular. In the United States, between 1999 and 2014, 256,132 international adoptions occurred, with the largest number of children coming from China (73,672) and Russia (46,113) (Intercountry Adoption, 2016). People in the United States, Spain, France, Italy, and Canada adopt the largest numbers of children (Selman, 2009). More recently, however, international adoptions have begun to decrease. One significant complication is that each country has its own set of

requirements for adoption, as does each country from which an adopted child originates. As such, the adoption process can vary greatly, especially in terms of cost, and countries are able to police who adopts their children. For example, single, obese, or over-50 individuals are not allowed to adopt a child from China (Bartholet, 2007).

Regardless of why a family chooses to adopt, traits such as flexibility, patience, strong problem-solving skills, and a willingness to identify local community resources are highly favorable for the prospective parents to possess. Additionally, it may be helpful for adoptive parents to recognize that they do not have to be “perfect” parents as long as they are loving and willing to meet the unique challenges their adopted child may pose.

Happy Healthy Families

Our families play a crucial role in our overall development and happiness. They can support and validate us, but they can also criticize and burden us. For better or worse, we all have a family. In closing, here are strategies you can use to increase the happiness of your family:

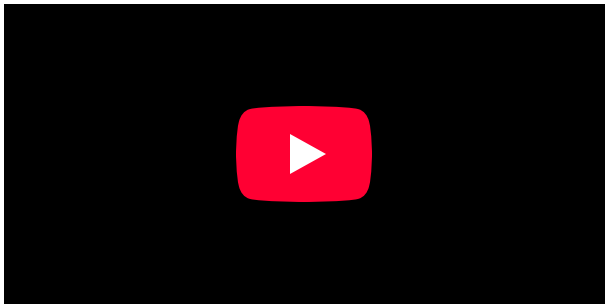
- Teach morality—fostering a sense of moral development in children can promote well-being (Damon, 2004).
- Savor the good—celebrate each other’s successes (Gable, Gonzaga & Strachman, 2006).
- Use the extended family network—family members of all ages, including older siblings and grandparents, who can act as caregivers can promote family well-being (Armstrong, Birnie-Lefcovitch & Ungar, 2005).
- Create family identity—share inside jokes, fond memories, and frame the story of the family (McAdams, 1993).
- Forgive—Don’t hold grudges against one another (McCullough, Worthington & Rachal, 1997).

Outside Resources

Article: Social Trends Institute: The Sustainable Demographic Dividend

http://sustaindemographicdividend.org/articles/international-family-indicators/global-family-culture

Video: TED Talk: What Makes a Good Life? Lessons from the Longest Study on Happiness





Web: Child Trends and Social Trends Institute: Mapping Family Change and Well-Being Outcomes

http://worldfamilymap.ifstudies.org/2015/

Web: Pew Research Center: Family and Relationships

http://www.pewresearch.org/topics/fa...relationships/

Web: PSYCHALIVE: Psychology for Everyday Life: Relationships

http://www.psychalive.org/category/alive-to-intimacy/

Web: United States Census Bureau: Families and Living Arrangements

http://www.census.gov/topics/families.html

Discussion Questions

1. Throughout this module many 'shifts' are mentioned—shifts in division of labor, family roles, marital expectations, divorce, and societal and cultural norms, among others, were discussed. What shift do you find most interesting and why? What types of shifts do you think we might see in the future?
2. In the reading we discuss different parenting practices. Much of the literature suggests that authoritative parenting is best. Do you agree? Why or why not? Are there times when you think another parenting style would be better?
3. The section on divorce discusses specific factors that increase or decrease the chances of divorce. Based on your background, are you more or less at risk for divorce? Consider things about your family of orientation, culture, religious practices and beliefs, age, and educational goals. How does this risk make you feel?
4. The module ends with some tips for happy, healthy families. Are there specific things you could be doing in your own life to make for a happier, healthier family? What are some concrete things you could start doing immediately to increase happiness in your family?

Vocabulary

Adoption

To take in and raise a child of other parents legally as one's own.

Age in place

The trend toward making accommodations to ensure that aging people can stay in their homes and live independently.

Anxious-avoidant

Attachment style that involves suppressing one's own feelings and desires, and a difficulty depending on others.

Anxious-resistant

Attachment style that is self-critical, insecure, and fearful of rejection.

Attachment theory

Theory that describes the enduring patterns of relationships from birth to death.

Authoritarian parenting

Parenting style that is high is demandingness and low in support.

Authoritative parenting

A parenting style that is high in demandingness and high in support.

Blended family

A family consisting of an adult couple and their children from previous relationships.

Boomerang generation

Term used to describe young adults, primarily between the ages of 25 and 34, who return home after previously living on their own.

Child abuse

Injury, death, or emotional harm to a child caused by a parent or caregiver, either intentionally or unintentionally.

Childfree

Term used to describe people who purposefully choose not to have children.

Childless

Term used to describe people who would like to have children but are unable to conceive.

Cohabitation

Arrangement where two unmarried adults live together.

Coherence

Within attachment theory, the gaining of insight into and reconciling one's childhood experiences.

Elder abuse

Any form of mistreatment that results in harm to an elder person, often caused by his/her adult child.

Empty Nest

Feelings of sadness and loneliness that parents may feel when their adult children leave the home for the first time.

Engagement

Formal agreement to get married.

Family of orientation

The family one is born into.

Family of procreation

The family one creates, usually through marriage.

Family systems theory

Theory that says a person cannot be understood on their own, but as a member of a unit.

Foster care

Care provided by alternative families to children whose families of orientation cannot adequately care for them; often arranged through the government or a social service agency.

Heterogamy

Partnering with someone who is unlike you in a meaningful way.

Homogamy

Partnering with someone who is like you in a meaningful way.

Intimate partner violence

Physical, sexual, or psychological abuse inflicted by a partner.

Joint family

A family comprised of at least three generations living together. Joint families often include many members of the extended family.

Learned helplessness

The belief, as someone who is abused, that one has no control over his or her situation.

Marriage market

The process through which prospective spouses compare assets and liabilities of available partners and choose the best available mate.

Modern family

A family based on commitment, caring, and close emotional ties.

Multigenerational homes

Homes with more than one adult generation.

Neglect

Failure to care for someone properly.

Nuclear families

A core family unit comprised of only the parents and children.

Permissive parenting

Parenting that is low in demandingness and high in support.

Physical abuse

The use of intentional physical force to cause harm.

Psychological abuse

Aggressive behavior intended to control a partner.

Sandwich generation

Generation of people responsible for taking care of their own children as well as their aging parents.

Second shift

Term used to describe the unpaid work a parent, usually a mother, does in the home in terms of housekeeping and childrearing.

Secure attachments

Attachment style that involves being comfortable with depending on your partner and having your partner depend on you.

Sexual abuse

The act of forcing a partner to take part in a sex act against his or her will.

Single parent family

An individual parent raising a child or children.

Stepfamily

A family formed, after divorce or widowhood, through remarriage.

Traditional family

Two or more people related by blood, marriage, and—occasionally-- by adoption.

Two-parent family

A family consisting of two parents—typical both of the biological parents-- and their children.

Uninvolved parenting

Parenting that is low in demandingness and low in support.

Working models

An understanding of how relationships operate; viewing oneself as worthy of love and others as trustworthy.

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3.3: Culture

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Although the most visible elements of culture are dress, cuisine and architecture, culture is a highly psychological phenomenon. Culture is a pattern of meaning for understanding how the world works. This knowledge is shared among a group of people and passed from one generation to the next. This module defines culture, addresses methodological issues, and introduces the idea that culture is a process. Understanding cultural processes can help people get along better with others and be more socially responsible.

learning objectives

- Appreciate culture as an evolutionary adaptation common to all humans.
- Understand cultural processes as variable patterns rather than as fixed scripts.
- Understand the difference between cultural and cross-cultural research methods.
- Appreciate cultural awareness as a source of personal well-being, social responsibility, and social harmony.
- Explain the difference between individualism and collectivism.
- Define “self-construal” and provide a real life example.

Introduction

When you think about different cultures, you likely picture their most visible features, such as differences in the way people dress, or in the architectural styles of their buildings. You might consider different types of food, or how people in some cultures eat with chopsticks while people in others use forks. There are differences in body language, religious practices, and wedding rituals. While these are all obvious examples of cultural differences, many distinctions are harder to see because they are psychological in nature.



Culture goes beyond the way people dress and the food they eat. It also stipulates morality, identity, and social roles. [Image: Faizal Riza MOHD RAF, https://goo.gl/G7cbZh, CC BY-NC 2.0, goo.gl/VnKlK8]

Just as culture can be seen in dress and food, it can also be seen in morality, identity, and gender roles. People from around the world differ in their views of premarital sex, religious tolerance, respect for elders, and even the importance they place on having fun. Similarly, many behaviors that may seem innate are actually products of culture. Approaches to punishment, for example,

often depend on cultural norms for their effectiveness. In the United States, people who ride public transportation without buying a ticket face the possibility of being fined. By contrast, in some other societies, people caught dodging the fare are socially shamed by having their photos posted publicly. The reason this campaign of "name and shame" might work in one society but not in another is that members of different cultures differ in how comfortable they are with being singled out for attention. This strategy is less effective for people who are not as sensitive to the threat of public shaming.

The psychological aspects of culture are often overlooked because they are often invisible. The way that gender roles are learned is a cultural process as is the way that people think about their own sense of duty toward their family members. In this module, you will be introduced to one of the most fascinating aspects of social psychology: the study of cultural processes. You will learn about research methods for studying culture, basic definitions related to this topic, and about the ways that culture affects a person's sense of self.

Social Psychology Research Methods

Social psychologists are interested in the ways that cultural forces influence psychological processes. They study culture as a means of better understanding the ways it affects our emotions, identity, relationships, and decisions. Social psychologists generally ask different types of questions and use different methods than do anthropologists. Anthropologists are more likely to conduct **ethnographic studies**. In this type of research, the scientist spends time observing a culture and conducting interviews. In this way, anthropologists often attempt to understand and appreciate culture from the point of view of the people within it. Social psychologists who adopt this approach are often thought to be studying **cultural psychology**. They are likely to use interviews as a primary research methodology.

For example, in a 2004 study Hazel Markus and her colleagues wanted to explore class culture as it relates to well-being. The researchers adopted a cultural psychology approach and interviewed participants to discover—in the participants own words—what "the good life" is for Americans of different social classes. Dozens of participants answered 30 **open ended questions** about well-being during recorded, face-to-face interviews. After the interview data were collected the researchers then read the transcripts. From these, they agreed on common themes that appeared important to the participants. These included, among others, "health," "family," "enjoyment," and "financial security."

The Markus team discovered that people with a Bachelor's Degree were more likely than high school educated participants to mention "enjoyment" as a central part of the good life. By contrast, those with a high school education were more likely to mention "financial security" and "having basic needs met." There were similarities as well: participants from both groups placed a heavy emphasis on relationships with others. Their understanding of *how* these relationships are tied to well-being differed, however. The college educated—especially men—were more likely to list "advising and respecting" as crucial aspects of relationships while their high school educated counterparts were more likely to list "loving and caring" as important. As you can see, cultural psychological approaches place an emphasis on the participants' own definitions, language, and understanding of their own lives. In addition, the researchers were able to make comparisons between the groups, but these comparisons were based on loose themes created by the researchers.

Cultural psychology is distinct from **cross-cultural psychology**, and this can be confusing. **Cross-cultural studies**are those that use standard forms of measurement, such as Likert scales, to compare people from different cultures and identify their differences. Both cultural and cross-cultural studies have their own advantages and disadvantages (see Table 1).

	Ethnographic Study	Cross-Cultural Study
Advantages	Culturally sensitive, studies people in their natural environments	Able to make comparisons between groups
Disadvantages	Difficult to make comparisons between cultures	Vulnerable to ethnocentric bias

Table 1: Summary of advantages and disadvantages of ethnographic study and cross-cultural study.

Interestingly, researchers—and the rest of us!—have as much to learn from **cultural similarities** as **cultural differences**, and both require comparisons across cultures. For example, Diener and Oishi (2000) were interested in exploring the relationship between money and happiness. They were specifically interested in cross-cultural differences in levels of life satisfaction between people from different cultures. To examine this question they used international surveys that asked all participants the exact same question, such as "All things considered, how satisfied are you with your life as a whole these days?" and used a **standard scale** for answers; in this case one that asked people to use a 1-10 scale to respond. They also collected data on average income levels in each nation, and adjusted these for local differences in how many goods and services that money can buy.

The Diener research team discovered that, across more than 40 nations there was a tendency for money to be associated with higher life satisfaction. People from richer countries such as Denmark, Switzerland and Canada had relatively high satisfaction while their counterparts from poorer countries such as India and Belarus had lower levels. There were some interesting exceptions, however. People from Japan—a wealthy nation—reported lower satisfaction than did their peers in nations with similar wealth. In addition, people from Brazil—a poorer nation—had unusually high scores compared to their income counterparts.

One problem with cross-cultural studies is that they are vulnerable to **ethnocentric bias**. This means that the researcher who designs the study might be influenced by personal biases that could affect research outcomes—without even being aware of it. For example, a study on happiness across cultures might investigate the ways that personal freedom is associated with feeling a sense of purpose in life. The researcher might assume that when people are free to choose their own work and leisure, they are more likely to pick options they care deeply about. Unfortunately, this researcher might overlook the fact that in much of the world it is considered important to sacrifice some personal freedom in order to fulfill one's duty to the group (Triandis, 1995). Because of the danger of this type of bias, social psychologists must continue to improve their methodology.

What is Culture?

Defining Culture

Like the words "happiness" and "intelligence," the word "culture" can be tricky to define. **Culture** is a word that suggests *social patterns of shared meaning*. In essence, it is a collective understanding of the way the world works, shared by members of a group and passed down from one generation to the next. For example, members of the Yanomamö tribe, in South America, share a cultural understanding of the world that includes the idea that there are four parallel levels to reality that include an abandoned level, and earthly level and heavenly and hell-like levels. Similarly, members of surfing culture understand their athletic pastime as being worthwhile and governed by formal rules of etiquette known only to insiders. There are several features of culture that are central to understanding the uniqueness and diversity of the human mind:

1. *Versatility*: Culture can change and adapt. Someone from the state of Orissa, in India, for example, may have multiple identities. She might see herself as Oriya when at home and speaking her native language. At other times, such as during the national cricket match against Pakistan, she might consider herself Indian. This is known as **situational identity**.
2. *Sharing*: Culture is the product of people sharing with one another. Humans cooperate and share knowledge and skills with other members of their networks. The ways they share, and the content of what they share, helps make up culture. Older adults, for instance, remember a time when long-distance friendships were maintained through letters that arrived in the mail every few months. Contemporary youth culture accomplishes the same goal through the use of instant text messages on smart phones.
3. *Accumulation*: Cultural knowledge is cumulative. That is, information is "stored." This means that a culture's collective learning grows across generations. We understand more about the world today than we did 200 years ago, but that doesn't mean the culture from long ago has been erased by the new. For instance, members of the Haida culture—a First Nations people in British Columbia, Canada—profit from both ancient and modern experiences. They might employ traditional fishing practices and wisdom stories while also using modern technologies and services.
4. *Patterns*: There are systematic and predictable ways of behavior or thinking across members of a culture. Patterns emerge from adapting, sharing, and storing cultural information. Patterns can be both similar and different across cultures. For example, in both Canada and India it is considered polite to bring a small gift to a host's home. In Canada, it is more common to bring a bottle of wine and for the gift to be opened right away. In India, by contrast, it is more common to bring sweets, and often the gift is set aside to be opened later.

Understanding the changing nature of culture is the first step toward appreciating how it helps people. The concept of **cultural intelligence** is the ability to understand why members of other cultures act in the ways they do. Rather than dismissing foreign

behaviors as weird, inferior, or immoral, people high in cultural intelligence can appreciate differences even if they do not necessarily share another culture's views or adopt its ways of doing things.

Thinking about Culture

One of the biggest problems with understanding culture is that the word itself is used in different ways by different people. When someone says, "My company has a competitive culture," does it mean the same thing as when another person says, "I'm taking my children to the museum so they can get some culture"? The truth is, there are many ways to think about culture. Here are three ways to parse this concept:

1. *Progressive cultivation*: This refers to a relatively small subset of activities that are intentional and aimed at "being refined." Examples include learning to play a musical instrument, appreciating visual art, and attending theater performances, as well as other instances of so-called "high art." This was the predominant use of the word culture through the mid-19th century. This notion of culture formed the basis, in part, of a superior mindset on the behalf of people from the upper economic classes. For instance, many tribal groups were seen as lacking cultural sophistication under this definition. In the late 19th century, as global travel began to rise, this understanding of culture was largely replaced with an understanding of it as a way of life.
2. *Ways of Life*: This refers to distinct patterns of beliefs and behaviors widely shared among members of a culture. The "ways of life" understanding of culture shifts the emphasis to patterns of belief and behavior that persist over many generations. Although cultures can be small—such as "school culture"—they usually describe larger populations, such as nations. People occasionally confuse national identity with culture. There are similarities in culture between Japan, China, and Korea, for example, even though politically they are very different. Indeed, each of these nations also contains a great deal of cultural variation within themselves.
3. *Shared Learning*: In the 20th century, anthropologists and social psychologists developed the concept of **enculturation** to refer to the ways people learn about and shared cultural knowledge. Where "ways of life" is treated as a noun "enculturation" is a verb. That is, enculturation is a fluid and dynamic process. That is, it emphasizes that culture is a process that can be learned. As children are raised in a society, they are taught how to behave according to regional cultural norms. As immigrants settle in a new country, they learn a new set of rules for behaving and interacting. In this way, it is possible for a person to have multiple **cultural scripts**.

Culture Concept	Examples	Social Impact	Highlighted Themes
Progressive Cultivation	• College education • Advanced technology • Ballet • Formal etiquette	A distinction between elites and the masses, between "higher civilizations" and "barbarians," between old and young, or between men and women	Deliberate pursuit of mental refinement; efforts to create and improve abilities that seem to offer better prospects of wellbeing, power, or dignity
Way of Life	• National traditions • Religious doctrines • Organizational culture	Geographical or ethnic distinctions between large and spatially segregated populations	Similar beliefs and values within populations, but differences between them; strong cultural identity and stereotyping of out-group members; stability of culture over time
Shared Learning and Enculturation	• Parenting • Teaching • Apprenticeship • Information-sharing and influencing through social networks	Emphasis on the developmental potential of everyone and on the different ways in which individuals develop, depending on different forms of enculturation	An understanding of diversity within populations, individual exposure to multiple cultural influences, negotiation and debating about cultural values and identities.

Table 2: Culture concepts and their application

The understanding of culture as a learned pattern of views and behaviors is interesting for several reasons. First, it highlights the ways groups can come into conflict with one another. Members of different cultures simply learn different ways of behaving. Modern youth culture, for instance, interacts with technologies such as smart phones using a different set of rules than people who are in their 40s, 50s, or 60s. Older adults might find texting in the middle of a face-to-face conversation rude while younger people often do not. These differences can sometimes become politicized and a source of tension between groups. One example of this is Muslim women who wear a *hijab*, or head scarf. Non-Muslims do not follow this practice, so occasional misunderstandings arise about the appropriateness of the tradition. Second, understanding that culture is learned is important because it means that people can adopt an appreciation of patterns of behavior that are different than their own. For example, non-Muslims might find it helpful to learn about the hijab. Where did this tradition come from? What does it mean and what are various Muslim opinions about

wearing one? Finally, understanding that culture is learned can be helpful in developing self-awareness. For instance, people from the United States might not even be aware of the fact that their attitudes about public nudity are influenced by their cultural learning. While women often go topless on beaches in Europe and women living a traditional tribal existence in places like the South Pacific also go topless, it is illegal for women in some of the United States to do so. These cultural norms for modesty—reflected in government laws and policies-- also enter the discourse on social issues such as the appropriateness of breast-feeding in public. Understanding that your preferences are—in many cases—the products of cultural learning might empower you to revise them if doing so will lead to a better life for you or others.

The Self and Culture



In a world that is increasingly connected by travel, technology, and business the ability to understand and appreciate the differences between cultures is more important than ever. Psychologists call this capability "cultural intelligence". [Image: https://goo.gl/SkXR07, CC0 Public Domain, goo.gl/m25gce]

Traditionally, social psychologists have thought about how patterns of behavior have an overarching effect on populations' attitudes. Harry Triandis, a cross-cultural psychologist, has studied culture in terms of individualism and collectivism. Triandis became interested in culture because of his unique upbringing. Born in Greece, he was raised under both the German and Italian occupations during World War II. The Italian soldiers broadcast classical music in the town square and built a swimming pool for the townspeople. Interacting with these foreigners—even though they were an occupying army—sparked Triandis' curiosity about other cultures. He realized that he would have to learn English if he wanted to pursue academic study outside of Greece and so he practiced with the only local who knew the language: a mentally ill 70 year old who was incarcerated for life at the local hospital. He went on to spend decades studying the ways people in different cultures define themselves (Triandis, 2008).

So, what exactly were these two patterns of culture Triandis focused on: **individualism** and **collectivism**? Individualists, such as most people born and raised in Australia or the United States, define themselves as individuals. They seek personal freedom and prefer to voice their own opinions and make their own decisions. By contrast, collectivists—such as most people born and raised in Korea or in Taiwan— are more likely to emphasize their connectedness to others. They are more likely to sacrifice their personal preferences if those preferences come in conflict with the preferences of the larger group (Triandis, 1995).

Both individualism and collectivism can further be divided into *vertical* and *horizontal* dimensions (Triandis, 1995). Essentially, these dimensions describe social status among members of a society. People in vertical societies differ in status, with some people being more highly respected or having more privileges, while in horizontal societies people are relatively equal in status and privileges. These dimensions are, of course, simplifications.

Neither individualism nor collectivism is the "correct way to live." Rather, they are two separate patterns with slightly different emphases. People from individualistic societies often have more social freedoms, while collectivistic societies often have better social safety nets.

	Individualist	**Collectivist**
Vertical	People are unique; some distinguish themselves and enjoy higher status. **Example: United States**	People emphasize their connectedness and must do their duty; some enjoy higher status. **Example: Japan**
Horizontal	People are unique; most people have the same status. **Example: Denmark**	People emphasize their connectedness and work toward common goals; most people have the same status. **Example: Israeli kibbutz**

Table 3: Individualist and collectivist cultures

There are yet other ways of thinking about culture, as well. The cultural patterns of individualism and collectivism are linked to an important psychological phenomenon: the way that people understand themselves. Known as **self-construal**, this is the way people define the way they "fit" in relation to others. Individualists are more likely to define themselves in terms of an **independent self**. This means that people see themselves as A) being a unique individual with a stable collection of personal traits, and B) that these traits drive behavior. By contrast, people from collectivist cultures are more likely to identify with the **interdependent self**. This means that people see themselves as A) defined differently in each new social context and B) social context, rather than internal traits, are the primary drivers of behavior (Markus & Kitiyama, 1991).

What do the independent and interdependent self look like in daily life? One simple example can be seen in the way that people describe themselves. Imagine you had to complete the sentence starting with "I am…..". And imagine that you had to do this 10 times. People with an independent sense of self are more likely to describe themselves in terms of traits such as "I am honest," "I am intelligent," or "I am talkative." On the other hand, people with a more interdependent sense of self are more likely to describe themselves in terms of their relation to others such as "I am a sister," "I am a good friend," or "I am a leader on my team" (Markus, 1977).

The psychological consequences of having an independent or interdependent self can also appear in more surprising ways. Take, for example, the emotion of anger. In Western cultures, where people are more likely to have an independent self, anger arises when people's personal wants, needs, or values are attacked or frustrated (Markus & Kitiyama, 1994). Angry Westerners sometimes complain that they have been "treated unfairly." Simply put, anger—in the Western sense—is the result of violations of the self. By contrast, people from interdependent self cultures, such as Japan, are likely to experience anger somewhat differently. They are more likely to feel that anger is unpleasant not because of some personal insult but because anger represents a lack of harmony between people. In this instance, anger is particularly unpleasant when it interferes with close relationships.

Culture is Learned

It's important to understand that culture is learned. People aren't born using chopsticks or being good at soccer simply because they have a genetic predisposition for it. They learn to excel at these activities because they are born in countries like Argentina, where playing soccer is an important part of daily life, or in countries like Taiwan, where chopsticks are the primary eating utensils. So, how are such cultural behaviors learned? It turns out that cultural skills and knowledge are learned in much the same way a person

might learn to do algebra or knit. They are acquired through a combination of explicit teaching and implicit learning—by observing and copying.

Cultural teaching can take many forms. It begins with parents and caregivers, because they are the primary influence on young children. Caregivers teach kids, both directly and by example, about how to behave and how the world works. They encourage children to be polite, reminding them, for instance, to say "Thankyou." They teach kids how to dress in a way that is appropriate for the culture. They introduce children to religious beliefs and the rituals that go with them. They even teach children how to think and feel! Adult men, for example, often exhibit a certain set of emotional expressions—such as being tough and not crying—that provides a model of masculinity for their children. This is why we see different ways of expressing the same emotions in different parts of the world.



Culture teaches us what behaviors and emotions are appropriate or expected in different situations. [Image: Portal de Copa, https://goo.gl/iEoW6X, CC BY 3.0, goo.gl/b58TcB]

In some societies, it is considered appropriate to conceal anger. Instead of expressing their feelings outright, people purse their lips, furrow their brows, and say little. In other cultures, however, it is appropriate to express anger. In these places, people are more likely to bare their teeth, furrow their brows, point or gesture, and yell (Matsumoto, Yoo, & Chung, 2010). Such patterns of behavior are learned. Often, adults are not even aware that they are, in essence, teaching psychology—because the lessons are happening through **observational learning**.

Let's consider a single example of a way you behave that is learned, which might surprise you. All people gesture when they speak. We use our hands in fluid or choppy motions—to point things out, or to pantomime actions in stories. Consider how you might throw your hands up and exclaim, "I have no idea!" or how you might motion to a friend that it's time to go. Even people who are born blind use hand gestures when they speak, so to some degree this is a *universal behavior*, meaning all people naturally do it. However, social researchers have discovered that culture influences how a person gestures. Italians, for example, live in a society full of gestures. In fact, they use about 250 of them (Poggi, 2002)! Some are easy to understand, such as a hand against the belly, indicating hunger. Others, however, are more difficult. For example, pinching the thumb and index finger together and drawing a line backwards at face level means "perfect," while knocking a fist on the side of one's head means "stubborn."

Beyond observational learning, cultures also use **rituals** to teach people what is important. For example, young people who are interested in becoming Buddhist monks often have to endure rituals that help them shed feelings of specialness or superiority—feelings that run counter to Buddhist doctrine. To do this, they might be required to wash their teacher's feet, scrub toilets, or perform other menial tasks. Similarly, many Jewish adolescents go through the process of *bar* and *bat mitzvah*. This is a ceremonial

reading from scripture that requires the study of Hebrew and, when completed, signals that the youth is ready for full participation in public worship.

Cultural Relativism

When social psychologists research culture, they try to avoid making value judgments. This is known as **value-free research** and is considered an important approach to scientific objectivity. But, while such objectivity is the goal, it is a difficult one to achieve. With this in mind, anthropologists have tried to adopt a sense of empathy for the cultures they study. This has led to **cultural relativism**, the principle of regarding and valuing the practices of a culture from the point of view of that culture. It is a considerate and practical way to avoid hasty judgments. Take for example, the common practice of same-sex friends in India walking in public while holding hands: this is a common behavior and a sign of connectedness between two people. In England, by contrast, holding hands is largely limited to romantically involved couples, and often suggests a sexual relationship. These are simply two different ways of understanding the meaning of holding hands. Someone who does not take a *relativistic* view might be tempted to see their own understanding of this behavior as superior and, perhaps, the foreign practice as being immoral.

Despite the fact that cultural relativism promotes the appreciation for cultural differences, it can also be problematic. At its most extreme it leaves no room for criticism of other cultures, even if certain cultural practices are horrific or harmful. Many practices have drawn criticism over the years. In Madagascar, for example, the *famahidana* funeral tradition includes bringing bodies out from tombs once every seven years, wrapping them in cloth, and dancing with them. Some people view this practice as disrespectful to the body of a deceased person. Another example can be seen in the historical Indian practice of *sati*—the burning to death of widows on their deceased husband's funeral pyre. This practice was outlawed by the British when they colonized India. Today, a debate rages about the ritual cutting of genitals of children in several Middle Eastern and African cultures. To a lesser extent, this same debate arises around the circumcision of baby boys in Western hospitals. When considering harmful cultural traditions, it can be patronizing to the point of racism to use cultural relativism as an excuse for avoiding debate. To assume that people from other cultures are neither mature enough nor responsible enough to consider criticism from the outside is demeaning.



In some cultures, it's perfectly normal for same-sex friends to hold hands while in others, handholding is restricted to romantically involved individuals only. [Image: Subharnab Majumdar, http://goo.gl/0Ghfof, CC BY-2.0, goo.gl/T4qgSp]

Positive cultural relativism is the belief that the world would be a better place if everyone practiced some form of intercultural empathy and respect. This approach offers a potentially important contribution to theories of cultural progress: to better understand human behavior, people should avoid adopting extreme views that block discussions about the basic morality or usefulness of cultural practices.

Conclusion

We live in a unique moment in history. We are experiencing the rise of a global culture in which people are connected and able to exchange ideas and information better than ever before. International travel and business are on the rise. Instantaneous communication and social media are creating networks of contacts who would never otherwise have had a chance to connect. Education is expanding, music and films cross national borders, and state-of-the-art technology affects us all. In this world, an

understanding of what culture is and how it happens, can set the foundation for acceptance of differences and respectful disagreements. The science of social psychology—along with the other culture-focused sciences, such as anthropology and sociology—can help produce insights into cultural processes. These insights, in turn, can be used to increase the quality of intercultural dialogue, to preserve cultural traditions, and to promote self-awareness.

Outside Resources

Articles: International Association of Cross-Cultural Psychology (IACCP) [Wolfgang Friedlmeier, ed] Online Readings in Psychology and Culture (ORPC)

http://scholarworks.gvsu.edu/orpc/

Database: Human Relations Area Files (HRAF) 'World Cultures' database

http://hraf.yale.edu/

Organization: Plous, Scott, et al, Social Psychology Network, Cultural Psychology Links by Subtopic

https://www.socialpsychology.org/cultural.htm

Study: Hofstede, Geert et al, The Hofstede Center: Strategy, Culture, Change

geert-hofstede.com/national-culture.html

Discussion Questions

1. How do you think the culture you live in is similar to or different from the culture your parents were raised in?
2. What are the risks of associating "culture" mainly with differences between large populations such as entire nations?
3. If you were a social psychologist, what steps would you take to guard against ethnocentricity in your research?
4. Name one value that is important to you. How did you learn that value?
5. In your opinion, has the internet increased or reduced global cultural diversity?
6. Imagine a social psychologist who researches the culture of extremely poor people, such as so-called "rag pickers," who sort through trash for food or for items to sell. What ethical challenges can you identify in this type of study?

Vocabulary

Collectivism

The cultural trend in which the primary unit of measurement is the group. Collectivists are likely to emphasize duty and obligation over personal aspirations.

Cross-cultural psychology (or cross-cultural studies)

An approach to researching culture that emphasizes the use of standard scales as a means of making meaningful comparisons across groups.

Cross-cultural studies (or cross-cultural psychology)

An approach to researching culture that emphasizes the use of standard scales as a means of making meaningful comparisons across groups.

Cultural differences

An approach to understanding culture primarily by paying attention to unique and distinctive features that set them apart from other cultures.

Cultural intelligence

The ability and willingness to apply cultural awareness to practical uses.

Cultural psychology

An approach to researching culture that emphasizes the use of interviews and observation as a means of understanding culture from its own point of view.

Cultural relativism

The principled objection to passing overly culture-bound (i.e., "ethnocentric") judgements on aspects of other cultures.

Cultural script

Learned guides for how to behave appropriately in a given social situation. These reflect cultural norms and widely accepted values.

Cultural similarities

An approach to understanding culture primarily by paying attention to common features that are the same as or similar to those of other cultures

Culture

A pattern of shared meaning and behavior among a group of people that is passed from one generation to the next.

Enculturation

The uniquely human form of learning that is taught by one generation to another.

Ethnocentric bias (or ethnocentrism)

Being unduly guided by the beliefs of the culture you've grown up in, especially when this results in a misunderstanding or disparagement of unfamiliar cultures.

Ethnographic studies

Research that emphasizes field data collection and that examines questions that attempt to understand culture from it's own context and point of view.

Independent self

The tendency to define the self in terms of stable traits that guide behavior.

Individualism

The cultural trend in which the primary unit of measurement is the individual. Individualists are likely to emphasize uniqueness and personal aspirations over social duty.

Interdependent self

The tendency to define the self in terms of social contexts that guide behavior.

Observational learning

Learning by observing the behavior of others.

Open ended questions

Research questions that ask participants to answer in their own words.

Ritual

Rites or actions performed in a systematic or prescribed way often for an intended purpose. Example: The exchange of wedding rings during a marriage ceremony in many cultures.

Self-construal

The extent to which the self is defined as independent or as relating to others.

Situational identity

Being guided by different cultural influences in different situations, such as home versus workplace, or formal versus informal roles.

Standard scale

Research method in which all participants use a common scale—typically a Likert scale—to respond to questions.

Value judgment

An assessment—based on one's own preferences and priorities—about the basic "goodness" or "badness" of a concept or practice.

Value-free research

Research that is not influenced by the researchers' own values, morality, or opinions.

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3.4: Social Comparison

By Stephen Garcia and Arnor Halldorsson

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When athletes compete in a race, they are able to observe and compare their performance against those of their competitors. In the same way, all people naturally engage in mental comparisons with the people around them during the course of daily life. These evaluations can impact our motivation and feelings. In this module, you will learn about the process of social comparison: its definition, consequences, and the factors that affect it.

learning objectives

- Understand the reasons people make social comparisons.
- Identify consequences of social comparison.
- Understand the Self-Evaluation Maintenance Model.
- Explain situational factors that can affect social comparison.

Introduction: Social Comparison

One pleasant Saturday afternoon, Mr. Jones arrives home from the car dealership in a brand-new Mercedes-Benz *C-Class*, the entry-level sedan in the Mercedes family of cars. Although Mercedes-Benzes are common in Europe, they are often viewed as status symbols in Mr. Jones' neighborhood in North America. This new car is a huge upgrade from his previous car. Excited, Mr. Jones immediately drives around the block and into town to show it off. He is thrilled with his purchase for a full week—that is, until he sees his neighbor across the street, Mr. Smith, driving a brand-new Mercedes *S-Class*, the highest tier of Mercedes sedans. Mr. Smith notices Mr. Jones from a distance and waves to him with a big smile. Climbing into his *C-Class*, Mr. Jones suddenly feels disappointed with his purchase and even feels envious of Mr. Smith. Now his *C-Class* feels just as uncoo as his old car.

Mr. Smith is experiencing the effects of **social comparison**. Occurring frequently in our lives, social comparison shapes our perceptions, memory, and behavior—even regarding the most trivial of issues. In this module, we will take a closer look at the reasons we make social comparisons and the consequences of the social comparison process.



Social comparison is a well-known concept to advertisers. They create idealized images that influence consumers' self-perceptions as well as the things they feel they must buy in order to be satisfied. [Image: SenseiAlan, http://goo.gl/XOwjq5, CC BY 2.0, goo.gl/T4qgSp]

Social Comparison: Basics

In 1954, psychologist Leon Festinger hypothesized that people compare themselves to others in order to fulfill a basic human desire: the need for self-evaluation. He called this process *social comparison theory*. At the core of his theory is the idea that people

come to know about themselves—their own abilities, successes, and personality—by comparing themselves with others. These comparisons can be divided into two basic categories.

In one category, we consider social norms and the opinions of others. Specifically, we compare our own opinions and values to those of others when our own self-evaluation is unclear. For example, you might not be certain about your position on a hotly contested issue, such as the legality of abortion. Or, you might not be certain about which fork to use first in a multi-course place setting. In these types of instances people are prone to look toward others—to make social comparisons—to help fill in the gaps.

Imagine an American exchange student arriving in India for the first time, a country where the culture is drastically different from his own. He notices quickly through observing others—i.e., social comparison—that when greeting a person, it is normal to place his own palms together rather than shaking the other person's hand. This comparison informs him of how he should behave in the surrounding social context.



When comparing, similarity is important. A professional athlete is far more likely to compare his or her own performance against that of other professional athletes than that of an amateur. [Image: Doma-w, https://goo.gl/2NM9Ii, CC BY 3.0, goo.gl/b58TcB]

The second category of social comparison pertains to our abilities and performance. In these cases, the need for self-evaluation is driven by another fundamental desire: to perform better and better—as Festinger (1954) put it, "a unidirectional drive upward." In essence, we compare our performance not only to evaluate ourselves but also to benchmark our performance related to another person. If we observe or even anticipate that a specific person is doing better than us at some ability then we may be motivated to boost our performance level. Take, for example, a realistic scenario where Olivia uses social comparison to gauge her abilities: Olivia is a high school student who often spends a few hours in her backyard shooting a soccer ball at her homemade goal. A friend of hers suggests she try out for the school's soccer team. Olivia accepts her friend's suggestion, although nervously, doubting she's good enough to make the team. On the day of tryouts, Olivia gets her gear ready and starts walking towards the soccer field. As she approaches, she feels butterflies in her stomach and her legs get wobbly. But, glancing towards the other candidates who have arrived early to take a few practice shots at the goal, she notices that their aim is inconsistent and they frequently miss the goal. Seeing this, Olivia feels more relaxed, and she confidently marches onto the field, ready to show everyone her skills.

Relevance and Similarity

There are important factors, however, that determine whether people will engage in social comparison. First, the performance dimension has to be relevant to the self (Festinger, 1954). For example, if excelling in academics is more important to you than excelling in sports, you are more likely to compare yourself with others in terms of academic rather than athletic performance. Relevance is also important when assessing opinions. If the issue at hand is relevant to you, you will compare your opinion to others; if not, you most likely won't even bother. Relevance is thus a *necessary precondition* for social comparison.

A secondary question is, " to whom do people compare themselves ?" Generally speaking, people compare themselves to those who are similar (Festinger, 1954; Goethals & Darley, 1977), whether similar in personal characteristics (e.g., gender, ethnic background, hair color, etc.) or in terms of performance (e.g., both being of comparable ability or both being neck-and-neck in a race). For example, a casual tennis player will not compare her performance to that of a professional, but rather to that of another casual tennis player. The same is true of opinions. People will cross-reference their own opinions on an issue with others who are similar to them rather than dissimilar (e.g., ethnic background or economic status).

Direction of Comparison

Social comparison is a bi-directional phenomenon where we can compare ourselves to people who are better than us—"**upward comparisons**"—or worse than us—"**downward comparisons**." Engaging in either of these two comparisons on a performance dimension can affect our self-evaluation. On one hand, upward comparisons on relevant dimensions can threaten our self-evaluation and jeopardize **self-esteem** (Tesser, 1988). On the other hand, they can also lead to joy and admiration for others' accomplishments on dimensions that are not relevant to the self, where one's self-evaluation is not under threat. For example, an academic overachiever who distinguishes himself by having two advanced degrees, both a PhD and a law degree, may not enjoy meeting another individual with a PhD, a law degree, and an MBA, but may well enjoy meeting a fellow overachiever in a domain that is not self-relevant, such as a famous NASCAR racer or professional hockey player.

Downward comparisons may boost our self-evaluation on relevant dimensions, leading to a **self-enhancement effect** (Wills, 1981), such as when an individual suffering from an illness makes downward comparisons with those suffering even more. A person enduring treatment for cancer, for instance, might feel better about his own side effects if he learns that an acquaintance suffered worse side effects from the same treatment. More recent findings have also shown that downward comparisons can also lead to feelings of scorn (Fiske, 2011), such as when those of a younger generation look down upon the elderly. In these cases, the boost to self-evaluation is so strong that it leads to an exaggerated sense of pride.

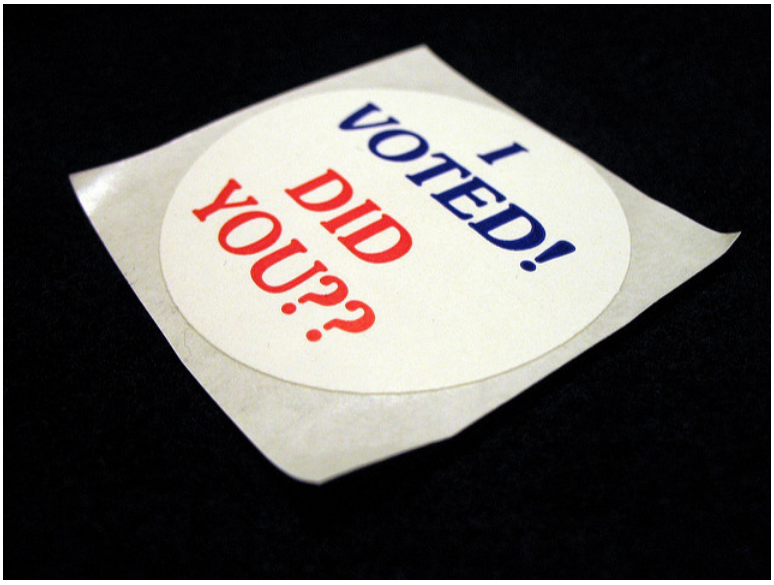
Interestingly, the direction of comparison and a person's emotional response can also depend on the **counterfactual**—"what might have been"—that comes most easily to mind. For example, one might think that an Olympic silver medalist would feel happier than a bronze medalist. After all, placing second is more prestigious than placing third. However, a classic study by Victoria Medvec, Scott Madey, and Thomas Gilovich (1995) found the opposite effect: bronze medalists were actually happier than silver medalists. The reason for this effect is that silver medalist's focus on having fallen short of achieving the gold (*so close!*), essentially turning a possible downward comparison into an upward comparison; whereas the bronze medalists recognize they came close to not winning any medal, essentially turning a possible upward comparison (to another medalist) into a downward comparison to those who did not even receive a medal.

	Upward Comparison	**Downward Comparison**
Positive Effects	Hope, Inspiration	Gratitude
Negative Effects	Dissatisfaction, Envy	Scorn

Table 1: The effects of social comparison.

Consequences of Social Comparison

The social comparison process has been associated with numerous consequences. For one, social comparison can impact self-esteem (Tesser, 1988), especially when doing well relative to others. For example, having the best final score in a class can increase your self-esteem quite a bit. Social comparison can also lead to feelings of regret (White, Langer, Yariv, & Welch, 2006), as when comparing the negative outcome of one's investment strategy to the positive outcome of a different strategy taken by a neighbor. Social comparison can also lead to feelings of envy (Fiske, 2011; Salovey & Rodin, 1984), as when someone with thinning hair envies the thick hair of a colleague.



Comparing your behavior to that of other people might make you jealous, regretful or more motivated. Lapel stickers and online badges that proclaim "I voted" or "I gave blood" are common examples of leveraging social comparison to achieve positive social outcomes. [Image: CAVE CANEM, http://goo.gl/ifKSiE, CC BY 2.0, goo.gl/v4Y0Zv]

Social comparison can also have interesting behavioral consequences. If you were to observe a discrepancy in performance between yourself and another person, then you might behave more competitively (Garcia, Tor, & Schiff, 2013), as you attempt to minimize the discrepancy. If, for example, you are among the top 10% on your class mid-term you might feel competitive with the other top students. Although competition can raise performance it can also take more problematic forms, from inflicting actual harm to making a comment to another person. These kinds of behaviors are likely to arise when the situation following the social comparison does not provide the opportunity to self-repair, such as another chance to compete in a race or retake a test (Johnson, 2012). However, when later opportunities to self-repair do exist, a more positive form of competitive motivation arises, whether that means running harder in a race or striving to earn a higher test score.

Self-Evaluation Maintenance Model

The **self-evaluation maintenance** (SEM; Tesser, 1988) model builds on social comparison theory. SEM points to a range of psychological forces that help and maintain our self-evaluation and self-esteem. In addition to relevance and similarity, SEM reveals the importance of relationship closeness. It turns out that relationship closeness—where two people stand on the continuum from being complete strangers to being intimate friends—affects self-evaluations.

For example, in one study, Tesser and Smith (1980) asked people to play a verbal game in which they were given the opportunity to receive clues from a partner. These clues could be used to help them guess the correct word in a word game. Half the participants were told the game was related to intelligence whereas the other half were not. Additionally, half the participants were paired with a close friend but the other half played with a stranger. Results show that participants who were led to believe the task was self-relevant or having to do with intelligence provided more difficult clues when their partner was a friend versus a stranger—suggesting a competitive uptick associated with relationship closeness. However, when performance was implied to be irrelevant to the self, partners gave easier clues to friends than strangers.

SEM can predict which of our friends and which of our comparison dimensions are self-relevant (Tesser & Campbell, 2006; Zuckerman & Jost, 2001). For example, suppose playing chess is highly self-relevant for you. In this case you will naturally compare yourselves to other chess players. Now, suppose that your chess-playing friend consistently beats you. In fact, each time you play she beats you by a wider and wider margin. SEM would predict that one of two things will likely happen: (1) winning at chess will no longer be self-relevant to you, or (2) you will no longer be friends with this individual. In fact, if the first option occurs—you lose interest in competing—you will begin to bask in the glory of your chess playing friend as his or her performance approaches perfection.

These psychological processes have real world implications! They may determine who is hired in an organization or who is promoted at work. For example, suppose you are a faculty member of a university law school. Your work performance is appraised based on your teaching and on your academic publications. Although you do not have the most publications in your law school, you do have the most publications in prestigious journals.



It is common advice in the business world for managers to "hire your replacement." In other words, to hire people with as much talent as possible, even those who could do the job better than the manager. The SEM model suggests that managers may prefer sub-optimal candidates who aren't likely to challenge their standing in the organization. [Image: Ethan, http://goo.gl/Inqxas, CC BY 2.0, goo.gl/v4Y0Zv]

Now, suppose that you are chairing a committee to hire a new faculty member. One candidate has even more top tier publications than you, while another candidate has the most publications in general of all the faculty members. How do you think social comparison might influence your choice of applicants? Research suggests that someone in your hypothetical shoes would likely favor the second candidate over the first candidate: people will actively champion the candidate who does not threaten their standing on a relevant dimension in an organization (Garcia, Song, & Tesser, 2010). In other words, the SEM forces are so powerful that people will essentially advocate for a candidate whom they feel is inferior!

Individual Differences

It is also worth mentioning that social comparison and its effects on self-evaluation will often depend on **personality** and **individual differences**. For example, people with **mastery goals**(Poortvliet, Janssen, Van Yperen, & Van de Vliert, 2007) may not interpret an upward comparison as a threat to the self but more as challenge, and a hopeful sign that one can achieve a certain level of performance. Another individual difference is whether one has a "**fixed mindset**" or "**growth mindset**" (Dweck, 2007). People with fixed mindsets think that their abilities and talents cannot change; thus, an upward comparison will likely threaten their self-evaluation and prompt them to experience negative consequences of social comparison, such as competitive behavior, envy, or

unhappiness. People with growth mindsets, however, are likely to interpret an upward comparison as a challenge, and an opportunity to improve themselves.

Situational factors

Social comparison researchers are actively exploring situational factors that can likewise influence degrees of social comparison:

Number

As the number of comparison targets (i.e., the number of people with whom you can compare) increases, social comparison tends to decrease. For example, imagine you are running a race with competitors of similar ability as your own, and the top 20% will receive a prize. Do you think you would try harder if there were only 10 people in the race, or if there were 100? The findings on **N-Effect** (Garcia & Tor, 2009; Tor & Garcia, 2010) suggest the answer is 10 . Even though the expected value of winning is the same in both cases, people will try harder when there are fewer people. In fact, findings suggest that as the number of SAT test-takers at a particular venue increases, the lower the average SAT score for that venue will be (Garcia & Tor, 2009). One of the mechanisms behind the *N-Effect* is social comparison. As the number of competitors increases, social comparison—one of the engines behind competitive motivation—becomes less important. Perhaps you have experienced this if you have had to give class presentations. As the number of presenters increases, you feel a decreasing amount of comparison pressure.

Local



It is natural to make comparisons between oneself and others on a variety of different standards and to compare oneself with a variety of different people. Comparisons to friends are among the most influential of all. [Image: Corrie M, http://goo.gl/FRbOfQ, CC BY-ND 2.0, goo.gl/FuDJ6c]

Research on the **local dominance effect** (Zell & Alicke, 2010) also provides insights about social comparison. People are more influenced by social comparison when the comparison is more localized rather than being broad and general. For example, if you wanted to evaluate your height by using social comparison, you could compare your height to a good friend, a group of friends, people in your workplace, or even the average height of people living in your city. Although any of these comparisons is hypothetically possible people generally rely on more local comparisons. They are more likely to compare with friends or co-workers than they are to industry or national averages. So, if you are among the tallest in your group of friends, it may very well give you a bigger boost to your self-esteem, even if you're still among the shortest individuals at the national level.

Proximity to a Standard

Research suggests that social comparison involves the **proximity** of a standard—such as the #1 ranking or other qualitative threshold. One consequence of this is an increase in competitive behavior. For example, in childhood games, if someone shouts,

"First one to the tree is the coolest-person-in the-world!" then the children who are nearest the tree will tug and pull at each other for the lead. However, if someone shouts, "Last one there is a rotten-egg!" then the children who are in last place will be the ones tugging and pulling each other to get ahead. In the proximity of a standard, social comparison concerns increase. We also see this in rankings. Rivals ranked #2 and #3, for instance, are less willing to maximize joint gains (in which they both benefit) if it means their opponent will benefit *more*, compared to rivals ranked #202 and #203 (Garcia, Tor, & Gonzalez, 2006; Garcia & Tor, 2007). These latter rivals are so far from the #1 rank (i.e., the standard) that it does not bother them if their opponent benefits more than them. Thus, social comparison concerns are only important in the proximity of a standard.

Social Category Lines

Social comparison can also happen between groups. This is especially the case when groups come from different social categories versus the same **social category**. For example, if students were deciding what kind of music to play at the high school prom, one option would be to simply flip a coin—say, heads for hip-hop, tails for pop. In this case, everyone represents the same social category—high school seniors—and social comparison isn't an issue. However, if all the boys wanted hip-hop and all the girls wanted pop flipping a coin is not such an easy solution as it privileges one social category over another (Garcia & Miller, 2007). For more on this, consider looking into the research literature about the difficulties of win-win scenarios between different social categories (Tajfel, Billig, Bundy, & Flament, 1971; Turner, Brown, & Tajfel, 1979).

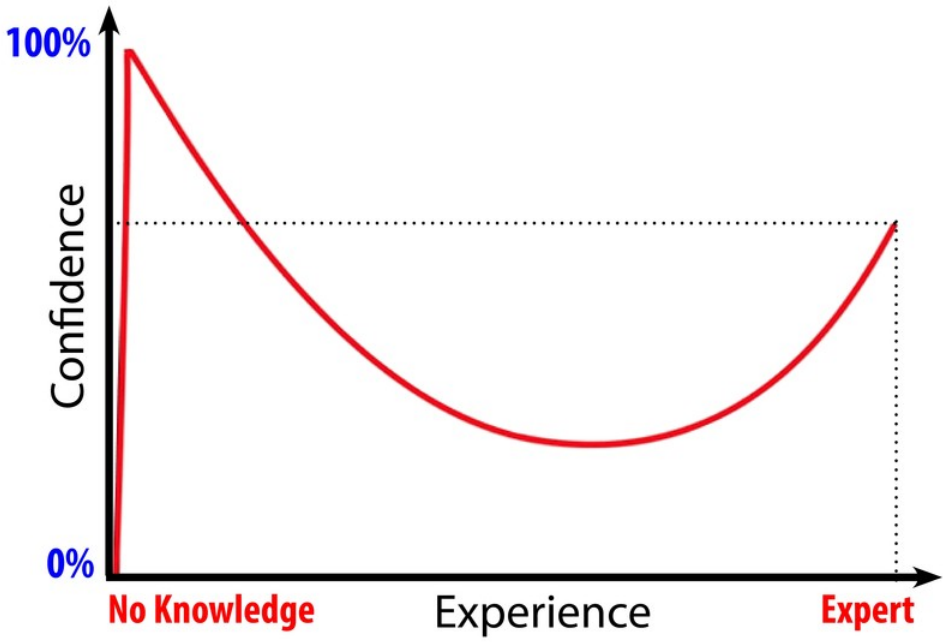
Related Phenomena

Frog Pond Effect

One interesting phenomenon of social comparison is the **Frog Pond Effect**. As the name suggests, its premise can be illustrated using the simple analogy of a frog in a pond: as a frog, would you rather be in a small pond where you're a big frog, or a large pond where you're a small frog? According to Marsh, Trautwein, Ludtke and Koller (2008), people in general had a better academic self-concept if they were a big frog in a small pond (e.g., the top student in their local high school) rather than a small frog in a large one (e.g., one of many good students at an Ivy League university). In a large study of students, they found that school-average ability can have a negative impact on the academic self-esteem of a student when the average ability is 1 standard deviation higher than normal (i.e., a big pond). In other words, average students have a higher academic self-concept when attending a below-average school (big fish in a small pond), and they have a lower academic self-concept when attending an above-average school (small fish in a big pond) (Marsh, 1987; Marsh & Parker, 1984).

The Dunning-Kruger Effect

Another related topic to social comparison is the **Dunning-Kruger Effect**. The Dunning-Kruger effect, as explained by Dunning, Johnson, Ehrlinger and Kruger (2003), addresses the fact that unskilled people often think they are on par or superior to their peers in tasks such as test-taking abilities. That is, they are overconfident. Basically, they fail to accurately compare themselves or their skills within their surroundings. For example, Dunning et al. (2003) asked students to disclose how well they thought they had done on an exam they'd just taken. The bottom 25% of students with the lowest test scores overestimated their performance by approximately 30%, thinking their performance was above the 50th percentile. This estimation problem doesn't only apply to poor performers, however. According to Dunning et al. (2003), top performers tend to *under*estimate their skills or percentile ranking in their surrounding context. Some explanations are provided by Dunning et al. (2003) for this effect on both the good and poor performers:The poor performers, compared to their more capable peers, lack specific logical abilities similar to the logic necessary to do some of the tasks/tests in these studies and, as such, cannot really distinguish which questions they are getting right or wrong. This is known as the double-curse explanation. However, the good performers do not have this particular logic problem and are actually quite good at estimating their raw scores. Ironically, the good performers usually overestimate how well the people around them are doing and therefore devaluate their own performance. As a result, most people tend to think they are above average in what they do, when in actuality not everyone can be above average.



The Dunning-Kruger Effect shows that the least experienced and least knowledgeable people are over-confident. These people don't know what they don't know and are more likely to overestimate their own abilities.

Conclusion

Social comparison is a natural psychological tendency and one that can exert a powerful influence on the way we feel and behave. Many people act as if social comparison is an ugly phenomenon and one to be avoided. This sentiment is at the heart of phrases like "keeping up with the Joneses" and "the rat race," in which it is assumed that people are primarily motivated by a desire to beat others. In truth, social comparison has many positive aspects. Just think about it: how could you ever gauge your skills in chess without having anyone to compare yourself to? It would be nearly impossible to ever know just how good your chess skills are, or even what criteria determine "good" vs. "bad" chess skills. In addition, the engine of social comparison can also provide the push you need to rise to the occasion and increase your motivation, and therefore make progress toward your goals.

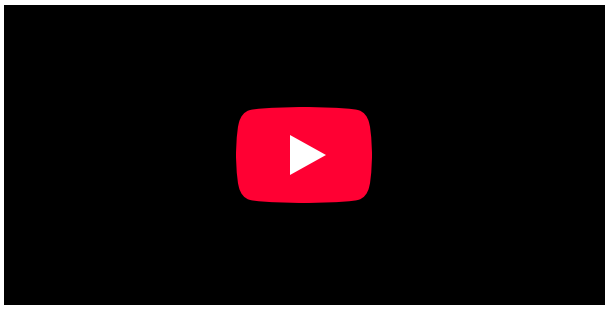
Outside Resources

Video: Downward Comparison



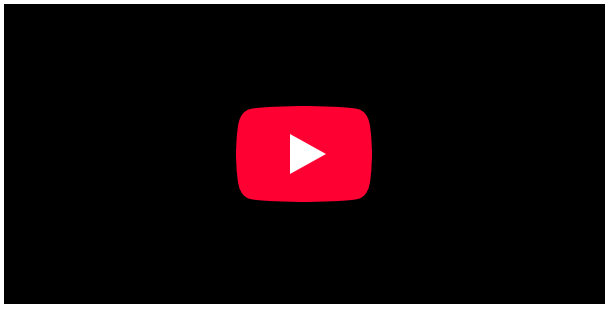


Video: Dunning-Kruger Effect



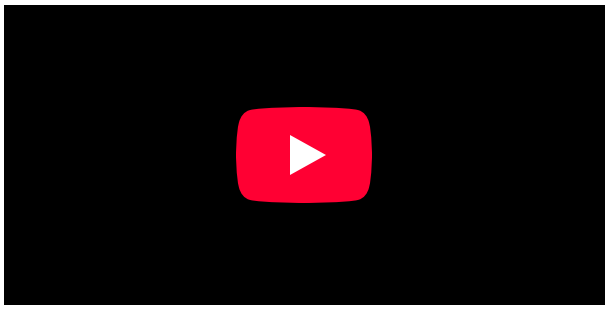


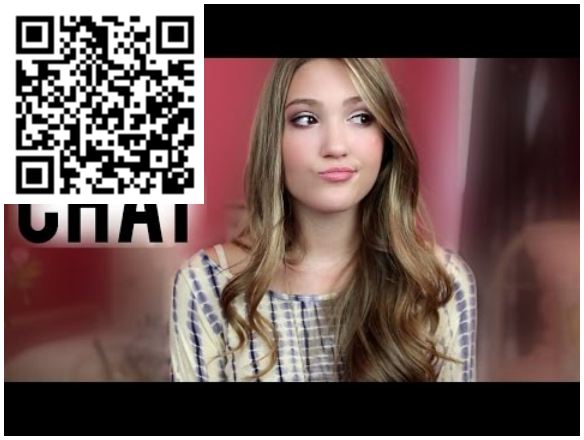
Video: Social Comparison overview





Video: Social Media and Comparison





Video: Upward Comparison





Web: Self-Compassion to counter the negative effects of social comparison

http://self-compassion.org/the-three-elements-of-self-compassion-2/

Discussion Questions

1. On what do you compare yourself with others? Qualities such as attractiveness and intelligence? Skills such as school performance or athleticism? Do others also make these same types of comparisons or does each person make a unique set? Why do you think this is?
2. How can making comparisons to others help you?
3. One way to make comparisons is to compare yourself with your own past performance. Discuss a time you did this. Could this example be described as an "upward" or "downward" comparison? How did this type of comparison affect you?

Vocabulary

Counterfactual thinking

Mentally comparing actual events with fantasies of what might have been possible in alternative scenarios.

Downward comparison

Making mental comparisons with people who are perceived to be inferior on the standard of comparison.

Dunning-Kruger Effect

The tendency for unskilled people to be overconfident in their ability and highly skilled people to underestimate their ability.

Fixed mindset

The belief that personal qualities such as intelligence are traits that cannot be developed. People with fixed mindsets often underperform compared to those with "growth mindsets"

Frog Pond Effect

The theory that a person's comparison group can affect their evaluations of themselves. Specifically, people have a tendency to have lower self-evaluations when comparing themselves to higher performing groups.

Growth mindset

The belief that personal qualities, such as intelligence, can be developed through effort and practice.

Individual differences

Psychological traits, abilities, aptitudes and tendencies that vary from person to person.

Local dominance effect

People are generally more influenced by social comparison when that comparison is personally relevant rather than broad and general.

Mastery goals

Goals that are focused primarily on learning, competence, and self-development. These are contrasted with "performance goals" that are focused on the quality of a person's performance.

N-Effect

The finding that increasing the number of competitors generally decreases one's motivation to compete.

Personality

A person's relatively stable patterns of thought, feeling, and behavior.

Proximity

The relative closeness or distance from a given comparison standard. The further from the standard a person is, the less important he or she considers the standard. When a person is closer to the standard he/she is more likely to be competitive.

Self-enhancement effect

The finding that people can boost their own self-evaluations by comparing themselves to others who rank lower on a particular comparison standard.

Self-esteem

The feeling of confidence in one's own abilities or worth.

Self-evaluation maintenance (SEM)

A model of social comparison that emphasizes one's closeness to the comparison target, the relative performance of that target person, and the relevance of the comparison behavior to one's self-concept.

Social category

Any group in which membership is defined by similarities between its members. Examples include religious, ethnic, and athletic groups.

Social comparison

The process by which people understand their own ability or condition by mentally comparing themselves to others.

Upward comparisons

Making mental comparisons to people who are perceived to be superior on the standard of comparison.

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CHAPTER OVERVIEW

4: EMOTIONS

4.1: Functions of Emotions

4.2: Culture and Emotion

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4.1: Functions of Emotions

By Hyisung Hwang and David Matsumoto

San Francisco State University

Emotions play a crucial role in our lives because they have important functions. This module describes those functions, dividing the discussion into three areas: the intrapersonal, the interpersonal, and the social and cultural functions of emotions. The section on the intrapersonal functions of emotion describes the roles that emotions play within each of us individually; the section on the interpersonal functions of emotion describes the meanings of emotions to our relationships with others; and the section on the social and cultural functions of emotion describes the roles and meanings that emotions have to the maintenance and effective functioning of our societies and cultures at large. All in all we will see that emotions are a crucially important aspect of our psychological composition, having meaning and function to each of us individually, to our relationships with others in groups, and to our societies as a whole.

learning objectives

- Gain an appreciation of the importance of emotion in human life.
- Understand the functions and meanings of emotion in three areas of life: the intrapersonal, interpersonal, and social–cultural.
- Give examples of the role and function of emotion in each of the three areas described

Introduction

It is impossible to imagine life without emotion. We treasure our feelings—the joy at a ball game, the pleasure of the touch of a loved one, or the fun with friends on a night out. Even negative emotions are important, such as the sadness when a loved one dies, the anger when violated, the fear that overcomes us in a scary or unknown situation, or the guilt or shame toward others when our sins are made public. Emotions color life experiences and give those experiences meaning and flavor.



Emotions help us navigate the complex social landscape of our lives. [Image: Gwenaël Piase, https://goo.gl/d4EDKS, CC BY-NC-SA 2.0, goo.gl/hSpkVI]

In fact, emotions play many important roles in people's lives and have been the topic of scientific inquiry in psychology for well over a century (Cannon, 1927; Darwin, 1872; James, 1890). This module explores why we have emotions and why they are important. Doing so requires us to understand the function of emotions, and this module does so below by dividing the discussion into three sections. The first concerns the **intrapersonal** functions of emotion, which refer to the role that emotions play within each of us individually. The second concerns the **interpersonal** functions of emotion, which refer to the role emotions play between individuals within a group. The third concerns the **social and cultural** functions of emotion, which refer to the role that

emotions play in the maintenance of social order within a society. All in all, we will see that emotions inform us of who we are, what our relationships with others are like, and how to behave in social interactions. Emotions give meaning to events; without emotions, those events would be mere facts. Emotions help coordinate interpersonal relationships. And emotions play an important role in the cultural functioning of keeping human societies together.

Intrapersonal Functions of Emotion

Emotions Help us Act Quickly with Minimal Conscious Awareness

Emotions are rapid information-processing systems that help us act with minimal thinking (Tooby & Cosmides, 2008). Problems associated with birth, battle, death, and seduction have occurred throughout evolutionary history and emotions evolved to aid humans in adapting to those problems rapidly and with minimal conscious cognitive intervention. If we did not have emotions, we could not make rapid decisions concerning whether to attack, defend, flee, care for others, reject food, or approach something useful, all of which were functionally adaptive in our evolutionary history and helped us to survive. For instance, drinking spoiled milk or eating rotten eggs has negative consequences for our welfare. The emotion of disgust, however, helps us immediately take action by not ingesting them in the first place or by vomiting them out. This response is adaptive because it aids, ultimately, in our survival and allows us to act immediately without much thinking. In some instances, taking the time to sit and rationally think about what to do, calculating cost–benefit ratios in one's mind, is a luxury that might cost one one's life. Emotions evolved so that we can act without that depth of thinking.

Emotions Prepare the Body for Immediate Action



The emotion of disgust serves to protect us from toxins and contamination, of the physical and moral variety. [Image: Runs with Scissors, https://goo.gl/FQRxGa, CC BY-NC 2.0, goo.gl/tgFydH]

Emotions prepare us for behavior. When triggered, emotions orchestrate systems such as perception, attention, inference, learning, memory, goal choice, motivational priorities, physiological reactions, motor behaviors, and behavioral decision making (Cosmides & Tooby, 2000; Tooby & Cosmides, 2008). Emotions simultaneously activate certain systems and deactivate others in order to prevent the chaos of competing systems operating at the same time, allowing for coordinated responses to environmental stimuli (Levenson, 1999). For instance, when we are afraid, our bodies shut down temporarily unneeded digestive processes, resulting in saliva reduction (a dry mouth); blood flows disproportionately to the lower half of the body; the visual field expands; and air is

breathed in, all preparing the body to flee. Emotions initiate a system of components that includes subjective experience, expressive behaviors, physiological reactions, action tendencies, and cognition, all for the purposes of specific actions; the term “emotion” is, in reality, a metaphor for these reactions.

One common misunderstanding many people have when thinking about emotions, however, is the belief that emotions must always directly produce action. This is not true. Emotion certainly *prepares* the body for action; but whether people actually engage in action is dependent on many factors, such as the context within which the emotion has occurred, the target of the emotion, the perceived consequences of one’s actions, previous experiences, and so forth (Baumeister, Vohs, DeWall, & Zhang, 2007; Matsumoto & Wilson, 2008). Thus, emotions are just one of many determinants of behavior, albeit an important one.

Emotions Influence Thoughts

Emotions are also connected to thoughts and memories. Memories are not just facts that are encoded in our brains; they are colored with the emotions felt at those times the facts occurred (Wang & Ross, 2007). Thus, emotions serve as the neural glue that connects those disparate facts in our minds. That is why it is easier to remember happy thoughts when happy, and angry times when angry. Emotions serve as the affective basis of many attitudes, values, and beliefs that we have about the world and the people around us; without emotions those attitudes, values, and beliefs would be just statements without meaning, and emotions give those statements meaning. Emotions influence our thinking processes, sometimes in constructive ways, sometimes not. It is difficult to think critically and clearly when we feel intense emotions, but easier when we are not overwhelmed with emotions (Matsumoto, Hirayama, & LeRoux, 2006).

Emotions Motivate Future Behaviors

Because emotions prepare our bodies for immediate action, influence thoughts, and can be felt, they are important motivators of future behavior. Many of us strive to experience the feelings of satisfaction, joy, pride, or triumph in our accomplishments and achievements. At the same time, we also work very hard to avoid strong negative feelings; for example, once we have felt the emotion of disgust when drinking the spoiled milk, we generally work very hard to avoid having those feelings again (e.g., checking the expiration date on the label before buying the milk, smelling the milk before drinking it, watching if the milk curdles in one’s coffee before drinking it). Emotions, therefore, not only influence immediate actions but also serve as an important motivational basis for future behaviors.



Emotions can act as signals to our friends and partners, conveying information about the quality of the relationship. [Image: mynameisharsha, https://goo.gl/HY2XgV, CC BY-SA 2.0, goo.gl/rxiUsF]

Emotions are expressed both verbally through words and nonverbally through facial expressions, voices, gestures, body postures, and movements. We are constantly expressing emotions when interacting with others, and others can reliably judge those emotional expressions (Elfenbein & Ambady, 2002; Matsumoto, 2001); thus, emotions have signal value to others and influence others and our social interactions. Emotions and their expressions communicate information to others about our feelings, intentions, relationship with the target of the emotions, and the environment. Because emotions have this communicative signal value, they help solve social problems by evoking responses from others, by signaling the nature of interpersonal relationships, and by providing incentives for desired social behavior (Keltner, 2003).

Emotional Expressions Facilitate Specific Behaviors in Perceivers

Because facial expressions of emotion are universal social signals, they contain meaning not only about the expressor's psychological state but also about that person's intent and subsequent behavior. This information affects what the perceiver is likely to do. People observing fearful faces, for instance, are more likely to produce approach-related behaviors, whereas people who observe angry faces are more likely to produce avoidance-related behaviors (Marsh, Ambady, & Kleck, 2005). Even subliminal presentation of smiles produces increases in how much beverage people pour and consume and how much they are willing to pay for it; presentation of angry faces decreases these behaviors (Winkielman, Berridge, & Wilbarger, 2005). Also, emotional displays evoke specific, complementary emotional responses from observers; for example, anger evokes fear in others (Dimberg & Ohman, 1996; Esteves, Dimberg, & Ohman, 1994), whereas distress evokes sympathy and aid (Eisenberg et al., 1989).

Emotional Expressions Signal the Nature of Interpersonal Relationships

Emotional expressions provide information about the nature of the relationships among interactants. Some of the most important and provocative set of findings in this area come from studies involving married couples (Gottman & Levenson, 1992; Gottman, Levenson, & Woodin, 2001). In this research, married couples visited a laboratory after having not seen each other for 24 hours, and then engaged in intimate conversations about daily events or issues of conflict. Discrete expressions of contempt, especially by the men, and disgust, especially by the women, predicted later marital dissatisfaction and even divorce.

Emotional Expressions Provide Incentives for Desired Social Behavior

Facial expressions of emotion are important regulators of social interaction. In the developmental literature, this concept has been investigated under the concept of **social referencing** (Klinnert, Campos, & Sorce, 1983); that is, the process whereby infants seek out information from others to clarify a situation and then use that information to act. To date, the strongest demonstration of social referencing comes from work on the visual cliff. In the first study to investigate this concept, Campos and colleagues (Sorce, Emde, Campos, & Klinnert, 1985) placed mothers on the far end of the "cliff" from the infant. Mothers first smiled to the infants and placed a toy on top the safety glass to attract them; infants invariably began crawling to their mothers. When the infants were in the center of the table, however, the mother then posed an expression of fear, sadness, anger, interest, or joy. The results were clearly different for the different faces; no infant crossed the table when the mother showed fear; only 6% did when the mother posed anger, 33% crossed when the mother posed sadness, and approximately 75% of the infants crossed when the mother posed joy or interest.

Other studies provide similar support for facial expressions as regulators of social interaction. In one study (Bradshaw, 1986), experimenters posed facial expressions of neutral, anger, or disgust toward babies as they moved toward an object and measured the amount of inhibition the babies showed in touching the object. The results for 10- and 15-month olds were the same: anger produced the greatest inhibition, followed by disgust, with neutral the least. This study was later replicated (Hertenstein & Campos, 2004) using joy and disgust expressions, altering the method so that the infants were not allowed to touch the toy (compared with a distractor object) until one hour after exposure to the expression. At 14 months of age, significantly more infants touched the toy when they saw joyful expressions, but fewer touched the toy when the infants saw disgust.

Social and Cultural Functions of Emotion



Although there are cultural differences in the display of emotion, almost all infants start showing emotion such as smiling or reacting to their caretaker as early as 6 weeks after their birth. [Image: vgm8383, https://goo.gl/jgfRDN, CC BY-NC 2.0, goo.gl/VnKlK8]

If you stop to think about many things we take for granted in our daily lives, we cannot help but come to the conclusion that modern human life is a colorful tapestry of many groups and individual lives woven together in a complex yet functional way. For

example, when you're hungry, you might go to the local grocery store and buy some food. Ever stop to think about how you're able to do that? You might buy a banana that was grown in a field in southeast Asia being raised by farmers there, where they planted the tree, cared for it, and picked the fruit. They probably handed that fruit off to a distribution chain that allowed multiple people somewhere to use tools such as cranes, trucks, cargo bins, ships or airplanes (that were also created by multiple people somewhere) to bring that banana to your store. The store had people to care for that banana until you came and got it and to barter with you for it (with your money). You may have gotten to the store riding a vehicle that was produced somewhere else in the world by others, and you were probably wearing clothes produced by some other people somewhere else.

Thus, human social life is complex. Individuals are members of multiple groups, with multiple social roles, norms, and expectations, and people move rapidly in and out of the multiple groups of which they are members. Moreover, much of human social life is unique because it revolves around cities, where many people of disparate backgrounds come together. This creates the enormous potential for social chaos, which can easily occur if individuals are not coordinated well and relationships not organized systematically.

One of the important functions of culture is to provide this necessary coordination and organization. Doing so allows individuals and groups to negotiate the social complexity of human social life, thereby maintaining social order and preventing social chaos. Culture does this by providing a meaning and information system to its members, which is shared by a group and transmitted across generations, that allows the group to meet basic needs of survival, pursue happiness and well-being, and derive meaning from life (Matsumoto & Juang, 2013). Culture is what allowed the banana from southeast Asia to appear on your table.

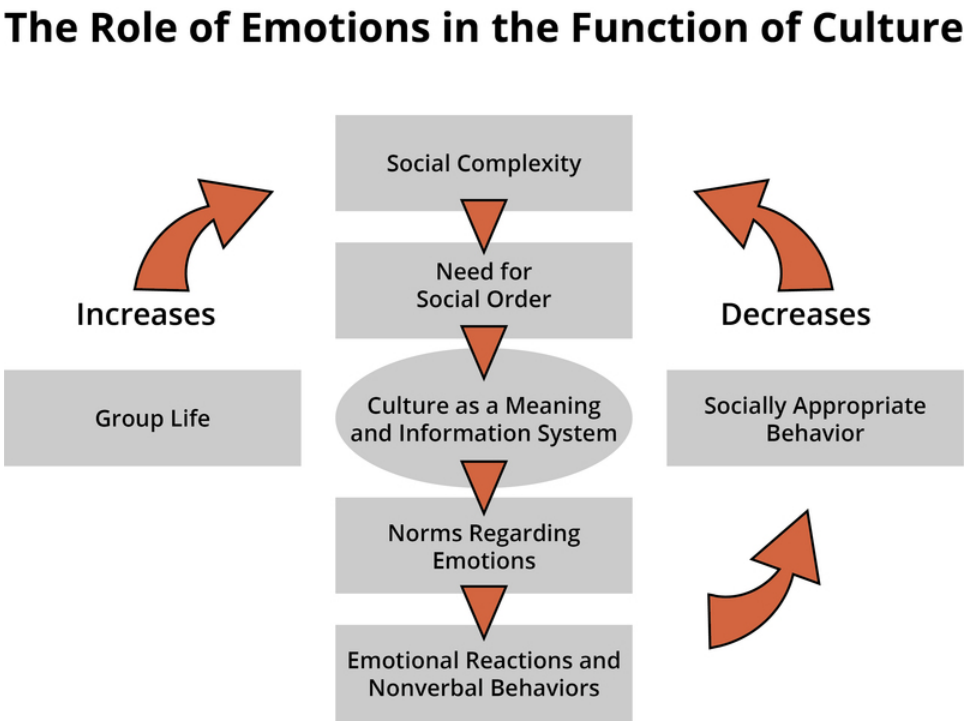


Figure 4.2.1: The Role of Emotions in the Function of Culture

Cultural transmission of the meaning and information system to its members is, therefore, a crucial aspect of culture. One of the ways this transmission occurs is through the development of worldviews (including attitudes, values, beliefs, and norms) related to emotions (Matsumoto & Hwang, 2013; Matsumoto et al., 2008). Worldviews related to emotions provide guidelines for desirable emotions that facilitate norms for regulating individual behaviors and interpersonal relationships. Our cultural backgrounds tell us which emotions are ideal to have, and which are not (Tsai, Knutson, & Fung, 2006). The cultural transmission of information related to emotions occurs in many ways, from childrearers to children, as well as from the cultural products available in our world, such as books, movies, ads, and the like (Schönpflug, 2009; Tsai, Louie, Chen, & Uchida, 2007).



Cultural display rules teach us how to manage our emotions. For example, in many Asian countries children are taught to mute their emotions, especially negative emotions like anger. [Image: john.gillespie, https://goo.gl/gTdPYb, CC BY-SA 3.0, goo.gl/eLCn2O]

Cultures also inform us about what to do with our emotions—that is, how to manage or modify them—when we experience them. One of the ways in which this is done is through the management of our emotional expressions through **cultural display rules** (Friesen, 1972). These are rules that are learned early in life that specify the management and modification of our emotional expressions according to social circumstances. Thus, we learn that "big boys don't cry" or to laugh at the boss's jokes even though they're not funny. By affecting how individuals express their emotions, culture also influences how people experience them as well.

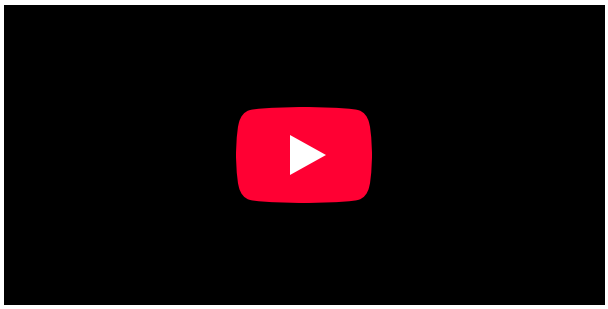
Because one of the major functions of culture is to maintain social order in order to ensure group efficiency and thus survival, cultures create worldviews, rules, guidelines, and norms concerning emotions because emotions have important intra- and interpersonal functions, as described above, and are important motivators of behavior. Norms concerning emotion and its regulation in all cultures serve the purpose of maintaining social order. Cultural worldviews and norms help us manage and modify our emotional reactions (and thus behaviors) by helping us to have certain kinds of emotional experiences in the first place and by managing our reactions and subsequent behaviors once we have them. By doing so, our culturally moderated emotions can help us engage in socially appropriate behaviors, as defined by our cultures, and thus reduce social complexity and increase social order, avoiding social chaos. All of this allows us to live relatively harmonious and constructive lives in groups. If cultural worldviews and norms about emotions did not exist, people would just run amok having all kinds of emotional experiences, expressing their emotions and then behaving in all sorts of unpredictable and potentially harmful ways. If that were the case, it would be very difficult for groups and societies to function effectively, and even for humans to survive as a species, if emotions were not regulated in culturally defined ways for the common, social good. Thus, emotions play a critical role in the successful functioning of any society and culture.

Outside Resources

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NPR News: Science Of Sadness And Joy: 'Inside Out' Gets Childhood Emotions Right

www.npr.org/sections/health-s...emotions-right

Online Psychology Laboratory: Motivation and Emotion resources

opl.apa.org/Resources.aspx#Motivation

Web: See how well you can read other people's facial expressions of emotion

http://www.humintell.com/free-demos/

Discussion Questions

1. When emotions occur, why do they simultaneously activate certain physiological and psychological systems in the body and deactivate others?
2. Why is it difficult for people to act rationally and think happy thoughts when they are angry? Conversely, why is it difficult to remember sad memories or have sad thoughts when people are happy?
3. You're walking down a deserted street when you come across a stranger who looks scared. What would you say? What would you do? Why?
4. You're walking down a deserted street when you come across a stranger who looks angry. What would you say? What would you do? Why?
5. Think about the messages children receive from their environment (such as from parents, mass media, the Internet, Hollywood movies, billboards, and storybooks). In what ways do these messages influence the kinds of emotions that children should and should not feel?

Vocabulary

Cultural display rules

These are rules that are learned early in life that specify the management and modification of emotional expressions according to social circumstances. Cultural display rules can work in a number of different ways. For example, they can require individuals to express emotions “as is” (i.e., as they feel them), to exaggerate their expressions to show more than what is actually felt, to tone down their expressions to show less than what is actually felt, to conceal their feelings by expressing something else, or to show nothing at all.

Interpersonal

This refers to the relationship or interaction between two or more individuals in a group. Thus, the interpersonal functions of emotion refer to the effects of one’s emotion on others, or to the relationship between oneself and others.

Intrapersonal

This refers to what occurs within oneself. Thus, the intrapersonal functions of emotion refer to the effects of emotion to individuals that occur physically inside their bodies and psychologically inside their minds.

Social and cultural

Society refers to a system of relationships between individuals and groups of individuals; culture refers to the meaning and information afforded to that system that is transmitted across generations. Thus, the social and cultural functions of emotion refer to the effects that emotions have on the functioning and maintenance of societies and cultures.

Social referencing

This refers to the process whereby individuals look for information from others to clarify a situation, and then use that information to act. Thus, individuals will often use the emotional expressions of others as a source of information to make decisions about their own behavior.

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4.2: Culture and Emotion

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How do people's cultural ideas and practices shape their emotions (and other types of feelings)? In this module, we will discuss findings from studies comparing North American (United States, Canada) and East Asian (Chinese, Japanese, Korean) contexts. These studies reveal both cultural similarities and differences in various aspects of emotional life. Throughout, we will highlight the scientific and practical importance of these findings and conclude with recommendations for future research.

Learning Objectives

- Review the history of cross-cultural studies of emotion
- Learn about recent empirical findings and theories of culture and emotion
- Understand why cultural differences in emotion matter
- Explore current and future directions in culture and emotion research

Take a moment and imagine you are traveling in a country you've never been to before. Everything—the sights, the smells, the sounds—seems strange. People are speaking a language you don't understand and wearing clothes unlike yours. But they greet you with a smile and you sense that, despite the differences you observe, deep down inside these people have the same feelings as you. But is this true? Do people from opposite ends of the world really feel the same emotions? While most scholars agree that members of different cultures may vary in the foods they eat, the languages they speak, and the holidays they celebrate, there is disagreement about the extent to which culture shapes people's emotions and feelings—including what people feel, what they express, and what they do during an emotional event. Understanding how culture shapes people's emotional lives and what impact emotion has on psychological health and well-being in different cultures will not only advance the study of human behavior but will also benefit multicultural societies. Across a variety of settings—academic, business, medical—people worldwide are coming into more contact with people from foreign cultures. In order to communicate and function effectively in such situations, we must understand the ways cultural ideas and practices shape our emotions.

Historical Background

In the 1950s and 1960s, social scientists tended to fall into either one of two camps. The **universalist** camp claimed that, despite cultural differences in customs and traditions, at a fundamental level all humans feel similarly. These universalists believed that emotions evolved as a response to the environments of our primordial ancestors, so they are the same across all cultures. Indeed, people often describe their emotions as "automatic," "natural," "physiological," and "instinctual," supporting the view that emotions are hard-wired and universal.



Universalists point to our prehistoric ancestors as the source of emotions that all humans share. [Image: Stefan Sheer, https://goo.gl/x56mw9, CC BY-SA 3.0, goo.gl/tCiqlm]

The **social constructivist** camp, however, claimed that despite a common evolutionary heritage, different groups of humans evolved to adapt to their distinctive environments. And because human environments vary so widely, people's emotions are also culturally variable. For instance, Lutz (1988) argued that many Western views of emotion assume that emotions are "singular events situated within individuals." However, people from Ifaluk (a small island near Micronesia) view emotions as "exchanges between individuals" (p. 212). Social constructivists contended that because cultural ideas and practices are all-encompassing, people are often unaware of how their feelings are shaped by their culture. Therefore emotions can feel automatic, natural, physiological, and instinctual, and yet still be primarily culturally shaped.

In the 1970s, Paul Ekman conducted one of the first scientific studies to address the universalist–social constructivist debate. He and Wallace Friesen devised a system to measure people's facial muscle activity, called the Facial Action Coding System (FACS; Ekman & Friesen, 1978). Using FACS, Ekman and Friesen analyzed people's facial expressions and identified specific facial muscle configurations associated with specific emotions, such as happiness, anger, sadness, fear, disgust. Ekman and Friesen then took photos of people posing with these different expressions (Figure 1). With the help of colleagues at different universities around the world, Ekman and Friesen showed these pictures to members of vastly different cultures, gave them a list of emotion words (translated into the relevant languages), and asked them to match the facial expressions in the photos with their corresponding emotion words on the list (Ekman & Friesen, 1971; Ekman et al., 1987).

Across cultures, participants "recognized" the emotional facial expressions, matching each picture with its "correct" emotion word at levels greater than chance. This led Ekman and his colleagues to conclude that there are universally recognized emotional facial expressions. At the same time, though, they found considerable variability across cultures in recognition rates. For instance, whereas 95% of U.S. participants associated a smile with "happiness," only 69% of Sumatran participants did. Similarly, 86% of U.S. participants associated wrinkling of the nose with "disgust," but only 60% of Japanese did (Ekman et al., 1987). Ekman and colleagues interpreted this variation as demonstrating cultural differences in "display rules," or rules about what emotions are appropriate to show in a given situation (Ekman, 1972). Indeed, since this initial work, Matsumoto and his colleagues have demonstrated widespread cultural differences in display rules (Safdar et al., 2009). One prominent example of such differences is biting one's tongue. In India, this signals embarrassment; however, in the U.S. this expression has no such meaning (Haidt & Keltner, 1999).

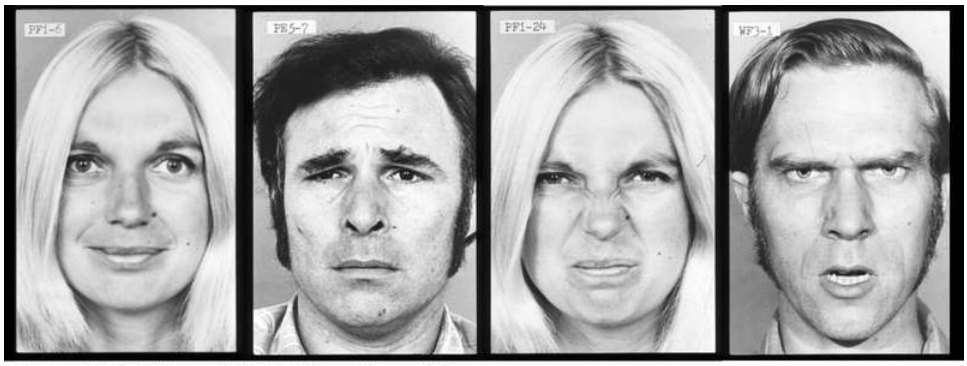


Photo credit - Paul Eckman Ph.D. / Paul Ekman Group, LLC.

Figure 4.8.1: Facial expressions associated with happiness, sadness, disgust, and anger based on the Facial Action Coding System. [Image: Paul Eckman, used with permission]

These findings suggest both cultural similarities and differences in the recognition of emotional facial expressions (although see Russell, 1994, for criticism of this work). Interestingly, since the mid-2000s, increasing research has demonstrated cultural differences not only in display rules, but also the degree to which people focus on the face (versus other aspects of the social context; Masuda, Ellsworth, Mesquita, Leu, Tanida, & Van de Veerdonk, 2008), and on different features of the face (Yuki, Maddux, & Matsuda, 2007) when perceiving others' emotions. For example, people from the United States tend to focus on the mouth when interpreting others' emotions, whereas people from Japan tend to focus on the eyes.

But how does culture shape other aspects of emotional life—such as how people emotionally respond to different situations, how they want to feel generally, and what makes them happy? Today, most scholars agree that emotions and other related states are multifaceted, and that cultural similarities and differences exist for each facet. Thus, rather than classifying emotions as *either* universal *or* socially-constructed, scholars are now attempting to identify the specific similarities and differences of emotional life across cultures. These endeavors are yielding new insights into the effects of cultural on emotion.

Current and Research Theory

Given the wide range of cultures and facets of emotion in the world, for the remainder of the module we will limit our scope to the two cultural contexts that have received the most empirical attention by social scientists: North America (United States, Canada) and East Asia (China, Japan, and Korea). Social scientists have focused on North American and East Asian contexts because they differ in obvious ways, including their geographical locations, histories, languages, and religions. Moreover, since the 1980s large-scale studies have revealed that North American and East Asian contexts differ in their overall values and attitudes, such as the prioritization of personal vs. group needs (individualism vs. collectivism; Hofstede, 2001). Whereas North American contexts encourage members to prioritize personal over group needs (to be "individualistic"), East Asian contexts encourage members to prioritize group over personal needs (to be "collectivistic").

Cultural Models of Self in North American and East Asian Contexts

In a landmark paper, cultural psychologists Markus and Kitayama (1991) proposed that previously observed differences in individualism and collectivism translated into different models of the self—or one's personal concept of who s/he is as a person. Specifically, the researchers argued that in North American contexts, the dominant model of the self is an independent one, in which being a person means being distinct from others and behaving accordingly across situations. In East Asian contexts, however, the dominant model of the self is an interdependent one, in which being a person means being fundamentally connected to others and being responsive to situational demands. For example, in a classic study (Cousins, 1989), American and Japanese students were administered the Twenty Statements Test, in which they were asked to complete the sentence stem, "I am _____," twenty times. U.S. participants were more likely than Japanese participants to complete the stem with psychological attributes (e.g., friendly, cheerful); Japanese participants, on the other hand, were more likely to complete the stem with references to social roles and responsibilities (e.g., a daughter, a student) (Cousins, 1989). These different models of the self result in different principles for interacting with others. An independent model of self teaches people to express themselves and try to influence others (i.e., change their environments to be consistent with their own beliefs and desires). In contrast, an interdependent model of self teaches people to suppress their own beliefs and desires and adjust to others' (i.e., fit in with their environment) (Heine, Lehman, Markus, &

Kitayama, 1999; Morling, Kitayama, & Miyamoto, 2002; Weisz, Rothbaum, & Blackburn, 1984). Markus and Kitayama (1991) argue that these different models of self have significant implications for how people in Western and East Asian contexts feel.

Cultural Similarities and Differences in Emotion: Comparisons of North American and East Asian Contexts

A considerable body of empirical research suggests that these different models of self shape various aspects of emotional dynamics. Next we will discuss several ways culture shapes emotion, starting with emotional response.

People's Physiological Responses to Emotional Events Are Similar Across Cultures, but Culture Influences People's Facial Expressive Behavior



Although study participants from different cultural backgrounds reported similar emotions and levels of intensity when recalling important episodes in their lives, there were significant differences in facial expressions in response to those emotions. [Image: Andrew Sweeney, https://goo.gl/Npc7Wm, CC BY-NC-SA 4.0, goo.gl/H2QaA8]

How does culture influence people's responses to emotional events? Studies of emotional response tend to focus on three components: physiology (e.g., how fast one's heart beats), subjective experience (e.g., feeling intensely happy or sad), and facial expressive behavior (e.g., smiling or frowning). Although only a few studies have simultaneously measured these different aspects of emotional response, those that do tend to observe more similarities than differences in physiological responses between cultures. That is, regardless of culture, people tend to respond similarly in terms of physiological (or bodily) expression. For instance, in one study, European American and Hmong (pronounced "muhng") American participants were asked to relive various emotional episodes in their lives (e.g., when they lost something or someone they loved; when something good happened) (Tsai, Chentsova-Dutton, Freire-Bebeau, & Przymus, 2002). At the level of physiological arousal (e.g., heart rate), there were no differences in how the participants responded. However, their facial expressive behavior told a different story. When reliving events that elicited happiness, pride, and love, European Americans smiled more frequently and more intensely than did their Hmong counterparts—though all participants reported feeling happy, proud, and in love at similar levels of intensity. And similar patterns have emerged in studies comparing European Americans with Chinese Americans during different emotion-eliciting tasks (Tsai et al., 2002; Tsai, Levenson, & McCoy, 2006; Tsai, Levenson, & Carstensen, 2000). Thus, while the physiological aspects of emotional responses appear to be similar across cultures, their accompanying facial expressions are more culturally distinctive.

Again, these differences in facial expressions during positive emotional events are consistent with findings from cross-cultural studies of *display rules*, and stem from the models of self-description discussed above: In North American contexts that promote an **independent self** , individuals tend to express their emotions to influence others. Conversely, in East Asian contexts that promote an interdependent self, individuals tend to control and suppress their emotions to adjust to others.

People Suppress Their Emotions Across Cultures, but Culture Influences the Consequences of Suppression for Psychological Well-Being

If the cultural ideal in North American contexts is to express oneself, then suppressing emotions (not showing how one feels) should have negative consequences. This is the assumption underlying hydraulic models of emotion: the idea that emotional suppression and repression impair psychological functioning (Freud, 1910). Indeed, significant empirical research shows that suppressing emotions can have negative consequences for psychological well-being in North American contexts (Gross, 1998). However, Soto and colleagues (2011) find that the relationship between suppression and psychological well-being varies by culture. True, with European Americans, emotional suppression is associated with higher levels of depression and lower levels of life satisfaction. (Remember, in these individualistic societies, the expression of emotion is a fundamental aspect of positive interactions with others.) On the other hand, since for Hong Kong Chinese, emotional suppression is needed to adjust to others (in this interdependent community, suppressing emotions is how to appropriately interact with others), it is simply a part of normal life and therefore not associated with depression or life satisfaction.

These findings are consistent with research suggesting that factors related to clinical depression vary between European Americans and Asian Americans. European Americans diagnosed with depression show dampened or muted emotional responses (Bylsma, Morris, & Rottenberg, 2008). For instance, when shown sad or amusing film clips, depressed European Americans respond less intensely than their nondepressed counterparts.However, other studies have shown that depressed East Asian Americans (i.e., people of East Asian descent who live in the United States) demonstrate *similar or increased* emotional responses compared with their nondepressed counterparts (Chentsova-Dutton et al., 2007; Chentsova-Dutton, Tsai, & Gotlib, 2010). In other words, depressed European Americans show reduced emotional expressions, but depressed East Asian Americans do *not*—and, in fact, may express *more* emotion. Thus, muted responses (which resemble suppression) are associated with depression in European American contexts, but not in East Asian contexts.



Someone from a collectivist culture is more likely to think about how their own accomplishments might impact others. An otherwise positive achievement for one person could cause another to feel something negative, with mixed emotions as the result. [Image: lian xiaoxiao, https://goo.gl/js5jDw, CC BY-SA 2.0, goo.gl/jSSrcO]

What about people's subjective emotional experiences? Do people across cultures *feel* the same emotions in similar situations, despite how they show them? Recent studies indicate that culture affects whether people are likely to feel bad during good events. In North American contexts, people rarely feel bad after good experiences. However, a number of research teams have observed that, compared with people in North American contexts, people in East Asian contexts are more likely to feel bad *and* good ("mixed" emotions) during positive events (e.g., feeling worried after winning an important competition; Miyamoto, Uchida, & Ellsworth, 2010). This may be because, compared with North Americans, East Asians engage in more dialectical thinking (i.e., they are more tolerant of contradiction and change). Therefore, they accept that positive and negative feelings can occur simultaneously. In addition, whereas North Americans value maximizing positive states and minimizing negative ones, East Asians value a greater balance between the two (Sims, Tsai, Wang, Fung, & Zhang, 2013). To better understand this, think about how you would feel after getting the top score on a test that's graded on a curve. In North American contexts, such success is considered an individual achievement and worth celebrating. But what about the other students who will now receive a lower grade because you "raised the curve" with your good grade? In East Asian contexts, not only would students be more thoughtful of the overall group's success, but they would also be more comfortable acknowledging both the positive (their own success on the test) and the negative (their classmates' lower grades).

Again, these differences can be linked to cultural differences in models of the self. An interdependent model encourages people to think about how their accomplishments might affect others (e.g., make others feel bad or jealous). Thus, awareness of negative emotions during positive events may discourage people from expressing their excitement and standing out (as in East Asian contexts). Such emotional suppression helps individuals feel in sync with those around them. An independent model, however, encourages people to express themselves and stand out, so when something good happens, they have no reason to feel bad.

So far, we have reviewed research that demonstrates cultural similarities in physiological responses and in the ability to suppress emotions. We have also discussed the cultural differences in facial expressive behavior and the likelihood of experiencing negative feelings during positive events. Next, we will explore how culture shapes people's ideal or desired states.

People Want to Feel Good Across Cultures, but Culture Influences the Specific Good States People Want to Feel (Their "Ideal Affect")

Everyone welcomes positive feelings, but cultures vary in the specific types of **positive affective states** (see Figure 4.8.2) their people favor. An affective state is essentially the type of emotional arousal one feels coupled with its intensity—which can vary from pleasant to unpleasant (e.g., happy to sad), with high to low arousal (e.g., energetic to passive). Although people of all cultures experience this range of affective states, they can vary in their preferences for each. For example, people in North American contexts lean toward feeling excited, enthusiastic, energetic, and other "high arousal positive" states. People in East Asian contexts, however, generally prefer feeling calm, peaceful, and other "low arousal positive" states (Tsai, Knutson, & Fung, 2006). These cultural differences have been observed in young children between the ages of 3 and 5, college students, and adults between the ages of 60 and 80 (Tsai, Louie, Chen, & Uchida, 2007; Tsai, Sims, Thomas, & Fung, 2013), and are reflected in widely-distributed cultural products. For example, wherever you look in American contexts—women's magazines, children's storybooks, company websites, and even Facebook profiles (Figure 3)—you will find more open, excited smiles and fewer closed, calm smiles compared to Chinese contexts (Chim, Moon, Ang, Tsai, 2013; Tsai, 2007;Tsai, Louie, et al., 2007).

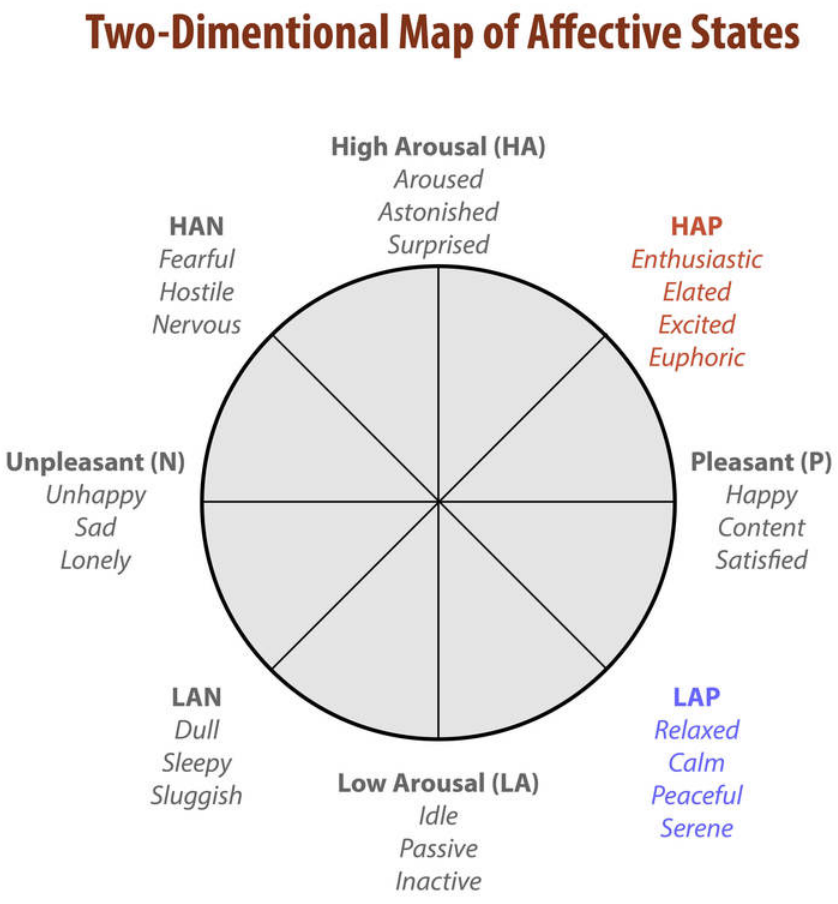


Figure 4.8.2: Adapted from Feldman, Barrett, and Russell (1999); Larsen and Diener ((1992); Russell (1991); Thayer (1989); Watson and Tellegen (1985)

Again, these differences in ideal affect (i.e., the emotional states that people believe are best) correspond to the independent and interdependent models described earlier: Independent selves want to influence others, which requires action (*doing something*), and action involves high arousal states. Conversely, interdependent selves want to adjust to others, which requires *suspending* action and attending to others—both of which involve low arousal states. Thus, the more that individuals and cultures want to influence

others (as in North American contexts), the more they value excitement, enthusiasm, and other high arousal positive states. And, the more that individuals and cultures want to adjust to others (as in East Asian contexts), the more they value calm, peacefulness, and other low arousal positive states (Tsai, Miao, Seppala, Fung, & Yeung, 2007).



Figure 4.8.3: Sample Hong Kong Chinese (left) and European American (right) Facebook pages.

Because one's ideal affect functions as a guide for behavior and a way of evaluating one's emotional states, cultural differences in ideal affect can result in different emotional lives. For example, several studies have shown that people engage in activities (e.g., recreational pastimes, musical styles) consistent with their cultural ideal affect. That is, people from North American contexts (who value high arousal affective states) tend to prefer thrilling activities like skydiving, whereas people from East Asian contexts (who value low arousal affective states) prefer tranquil activities like lounging on the beach (Tsai, 2007). In addition, people base their conceptions of well-being and happiness on their ideal affect. Therefore, European Americans are more likely to define well-being in terms of excitement, whereas Hong Kong Chinese are more likely to define well-being in terms of calmness. Indeed, among European Americans, the less people experience *high* arousal positive states, the more depressed they are. But, among Hong Kong Chinese—you guessed it!—the less people experience *low* arousal positive states, the more depressed they are (Tsai, Knutson, & Fung, 2006).



Research has shown that self-esteem is more highly correlated with life satisfaction in individualistic cultures than in collectivist cultures. [Image: Erik, https://goo.gl/N8zccv, CC BY-NC-SA 2.0, goo.gl/Toc0ZF]

What factors make people happy or satisfied with their lives? We have seen that discrepancies between how people actually feel (actual affect) and how they want to feel (ideal affect)—as well as people's suppression of their ideal affect—are associated with depression. But happiness is based on other factors as well. For instance, Kwan, Bond, & Singelis (1997) found that while European Americans and Hong Kong Chinese subjects both based life satisfaction on how they felt about themselves (self-esteem) and their relationships (relationship harmony), their weighting of each factor was different. That is, European Americans based their life satisfaction primarily on self-esteem, whereas Hong Kong Chinese based their life satisfaction equally on self-esteem *and* relationship harmony. Consistent with these findings, Oishi and colleagues (1999) found in a study of 39 nations that self-esteem was more strongly correlated with life satisfaction in more individualistic nations compared to more collectivistic ones. Researchers also found that in individualistic cultures people rated life satisfaction based on their emotions more so than on social definitions (or norms). In other words, rather than using social norms as a guideline for what constitutes an ideal life, people in individualistic cultures tend to evaluate their satisfaction according to how they feel emotionally. In collectivistic cultures, however, people's life satisfaction tends to be based on a balance between their emotions and norms (Suh, Diener, Oishi, & Triandis, 1998). Similarly, other researchers have recently found that people in North American contexts are more likely to feel negative when they have poor mental and physical health, while people in Japanese contexts don't have this association (Curhan et al., 2013).

Again, these findings are consistent with cultural differences in models of the self. In North American, independent contexts, feelings about the self matter more, whereas in East Asian, interdependent contexts, feelings about others matter as much as or even more than feelings about the self.

Why Do Cultural Similarities And Differences In Emotion Matter?

Understanding cultural similarities and differences in emotion is obviously critical to understanding emotions in general, and the flexibility of emotional processes more specifically. Given the central role that emotions play in our interaction, understanding cultural similarities and differences is especially critical to preventing potentially harmful miscommunications. Although misunderstandings are unintentional, they can result in negative consequences—as we've seen historically for ethnic minorities in many cultures. For instance, across a variety of North American settings, Asian Americans are often characterized as too "quiet" and "reserved," and these low arousal states are often misinterpreted as expressions of disengagement or boredom—rather than

expressions of the ideal of calmness. Consequently, Asian Americans may be perceived as “cold,” “stoic,” and “unfriendly,” fostering stereotypes of Asian Americans as “perpetual foreigners” (Cheryan & Monin, 2005). Indeed, this may be one reason Asian Americans are often overlooked for top leadership positions (Hyun, 2005).

In addition to averting cultural miscommunications, recognizing cultural similarities and differences in emotion may provide insights into other paths to psychological health and well-being. For instance, findings from a recent series of studies suggest that calm states are easier to elicit than excited states, suggesting that one way of increasing happiness in cultures that value excitement may be to increase the value placed on calm states (Chim, Tsai, Hogan, & Fung, 2013).

Current Directions In Culture And Emotion Research

What About Other Cultures?

In this brief review, we’ve focused primarily on comparisons between North American and East Asian contexts because most of the research in cultural psychology has focused on these comparisons. However, there are obviously a multitude of other cultural contexts in which emotional differences likely exist. For example, although Western contexts are similar in many ways, specific Western contexts (e.g., American vs. German) also differ from each other in substantive ways related to emotion (Koopmann-Holm & Matsumoto, 2011). Thus, future research examining other cultural contexts is needed. Such studies may also reveal additional, uninvestigated dimensions or models that have broad implications for emotion. In addition, because more and more people are being raised within multiple cultural contexts (e.g., for many Chinese Americans, a Chinese immigrant culture at home and mainstream American culture at school), more research is needed to examine how people negotiate and integrate these different cultures in their emotional lives (for examples, see De Leersnyder, Mesquita, & Kim, 2011; Perunovic, Heller, & Rafaeli, 2007).

How Are Cultural Differences in Beliefs About Emotion Transmitted?



Children's story books offer one interesting and effective way to study how early influences can impact a person's ideal affect. [Image: Vernon Barford School Library, https://goo.gl/fghcae, CC BY-NC-SA 2.0, goo.gl/Toc0ZF]

According to Kroeber and Kluckhohn (1952), cultural ideas are reflected in and reinforced by practices, institutions, and products. As an example of this phenomenon—and illustrating the point regarding cultural differences in ideal affect—bestselling children's storybooks in the United States often contain more exciting and less calm content (smiles and activities) than do bestselling children's storybooks in Taiwan (Tsai, Louie, et al., 2007). To investigate this further, the researchers randomly assigned European American, Asian American, and Taiwanese Chinese preschoolers to be read either stories with exciting content or stories with calm content. Across all of these cultures, the kids who were read stories with exciting content were afterward more likely to value excited states, whereas those who were read stories with calm content were more likely to value calm states. As a test, after hearing the stories, the kids were shown a list of toys and asked to select their favorites. Those who heard the exciting stories wanted to play with more arousing toys (like a drum that beats loud and fast), whereas those who heard the calm stories wanted to play with less arousing toys (like a drum that beats quiet and slow). These findings suggest that regardless of ethnic background, direct exposure to storybook content alters children's ideal affect. More studies are needed to assess whether a similar process occurs when children and adults are chronically exposed to various types of cultural products. As well, future studies should examine other ways cultural ideas regarding emotion are transmitted (e.g., via interactions with parents and teachers).

Could These Cultural Differences Be Due to Temperament?

An alternative explanation for cultural differences in emotion is that they are due to temperamental factors—that is, biological predispositions to respond in certain ways. (Might European Americans just be more emotional than East Asians because of genetics?) Indeed, most models of emotion acknowledge that both culture *and* temperament play roles in emotional life, yet few if any models indicate how. Nevertheless, most researchers believe that despite genetic differences in founder populations (i.e., the migrants from a population who leave to create their own societies), culture has a greater impact on emotions. For instance, one theoretical framework, Affect Valuation Theory, proposes that cultural factors shape how people want to feel ("ideal affect") more than how they actually feel ("actual affect"); conversely, temperamental factors influence how people actually feel more than how they want to feel (Tsai, 2007) (see Figure 4.8.4).

To test this hypothesis, European American, Asian American, and Hong Kong Chinese participants completed measures of temperament (i.e., stable dispositions, such as neuroticism or extraversion), actual affect (i.e., how people actually feel in given situations), ideal affect (i.e., how people would like to feel in given situations), and influential cultural values (i.e., personal beliefs transmitted through culture). When researchers analyzed the participants' responses, they found that differences in ideal affect between cultures were associated more with cultural factors than with temperamental factors (Tsai, Knutson, & Fung, 2006). However, when researchers examined actual affect, they found this to be reversed: actual affect was more strongly associated with temperamental factors than cultural factors. Not all of the studies described above have ruled out a temperamental explanation, though, and more studies are needed to rule out the possibility that the observed group differences are due to genetic factors instead of, or in addition to, cultural factors. Moreover, future studies should examine whether the links between temperament and emotions might vary across cultures, and how cultural and temperamental factors work together to shape emotion.

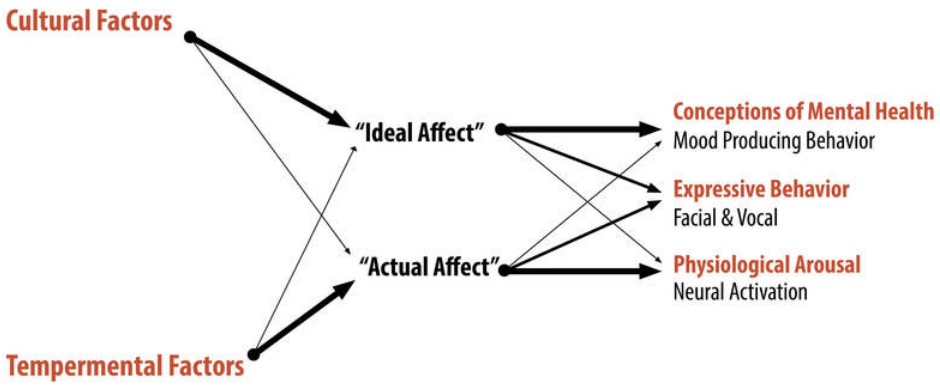


Figure 4.8.4: Affect valuation theory. Thicker lines indicate stronger predicted relationships.

Summary

Based on studies comparing North American and East Asian contexts, there is clear evidence for cultural similarities and differences in emotions, and most of the differences can be traced to different cultural models of the self.

Consider your own concept of self for a moment. What kinds of pastimes do you prefer—activities that make you excited, or ones that make you calm? What kinds of feelings do you strive for? What is your ideal affect? Because emotions seem and feel so instinctual to us, it's hard to imagine that the way we experience them and the ones we desire are anything other than biologically programmed into us. However, as current research has shown (and as future research will continue to explore), there are myriad ways in which culture, both consciously and unconsciously, shapes people's emotional lives.

Outside Resources

Audio Interview: The Really Big Questions "What Are Emotions?" Interview with Paul Ekman, Martha Nussbaum, Dominique Moisi, and William Reddy

http://www.trbq.org/index.php?option...d=16&Itemid=43

Book: Ed Diener and Robert Biswas-Diener: *Happiness: Unlocking the Mysteries of Psychological Wealth*

Book: Eric Weiner: *The Geography of Bliss*

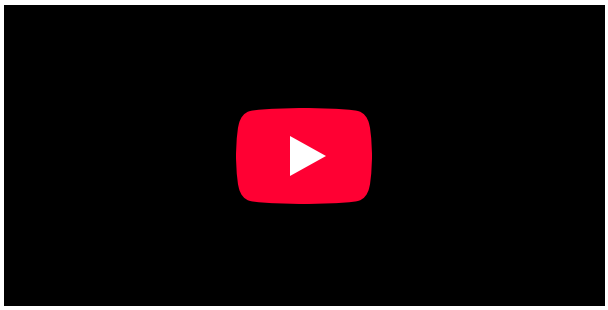
Book: Eva Hoffmann: *Lost in Translation: Life in a New Language*

Book: Hazel Markus: *Clash: 8 Cultural Conflicts That Make Us Who We Are*

Video: Social Psychology Alive

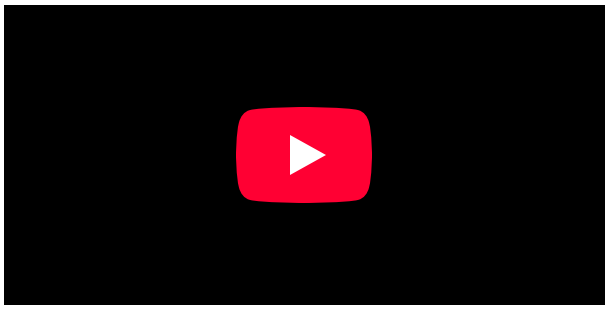
psychology.stanford.edu/~tsai...psychalive.wmv

Video: The Really Big Questions "Culture and Emotion," Dr. Jeanne Tsai





Video: Tsai's description of cultural differences in emotion





Web: Acculturation and Culture Collaborative at Leuven
http://ppw.kuleuven.be/home/english/...p/acc-research

Web: Culture and Cognition at the University of Michigan
culturecognition.isr.umich.edu/

Web: Experts In Emotion Series, Dr. June Gruber, Department of Psychology, Yale University
www.yalepeplab.com/teaching/p...pertseries.php

Web: Georgetown Culture and Emotion Lab
http://georgetownculturelab.wordpress.com/

Web: Paul Ekman's website
http://www.paulekman.com

Web: Penn State Culture, Health, and Emotion Lab
http://www.personal.psu.edu/users/m/...m280/sotosite/

Web: Stanford Culture and Emotion Lab
www-psych.stanford.edu/~tsailab/index.htm

Web: Wesleyan Culture and Emotion Lab
http://culture-and-emotion.research.wesleyan.edu/

Discussion Questions

1. What cultural ideas and practices related to emotion were you exposed to when you were a child? What cultural ideas and practices related to emotion are you currently exposed to as an adult? How do you think they shape your emotional experiences and expressions?
2. How can researchers avoid inserting their own beliefs about emotion in their research?
3. Most of the studies described above are based on self-report measures. What are some of the advantages and disadvantages of using self-report measures to understand the cultural shaping of emotion? How might the use of other behavioral methods (e.g., neuroimaging) address some of these limitations?
4. Do the empirical findings described above change your beliefs about emotion? How?

5. Imagine you are a manager of a large American company that is beginning to do work in China and Japan. How will you apply your current knowledge about culture and emotion to prevent misunderstandings between you and your Chinese and Japanese employees?

Vocabulary

Affect

Feelings that can be described in terms of two dimensions, the dimensions of arousal and valence (Figure 2). For example, high arousal positive states refer to excitement, elation, and enthusiasm. Low arousal positive states refer to calm, peacefulness, and relaxation. Whereas "actual affect" refers to the states that people actually feel, "ideal affect" refers to the states that people ideally want to feel.

Culture

Shared, socially transmitted ideas (e.g., values, beliefs, attitudes) that are reflected in and reinforced by institutions, products, and rituals.

Emotions

Changes in subjective experience, physiological responding, and behavior in response to a meaningful event. Emotions tend to occur on the order of seconds (in contract to moods which may last for days).

Feelings

A general term used to describe a wide range of states that include emotions, moods, traits and that typically involve changes in subjective experience, physiological responding, and behavior in response to a meaningful event. Emotions typically occur on the order of seconds, whereas moods may last for days, and traits are tendencies to respond a certain way across various situations.

Independent self

A model or view of the self as distinct from others and as stable across different situations. The goal of the independent self is to express and assert the self, and to influence others. This model of self is prevalent in many individualistic, Western contexts (e.g., the United States, Australia, Western Europe).

Interdependent self

A model or view of the self as connected to others and as changing in response to different situations. The goal of the interdependent self is to suppress personal preferences and desires, and to adjust to others. This model of self is prevalent in many collectivistic, East Asian contexts (e.g., China, Japan, Korea).

Social constructivism

Social constructivism proposes that knowledge is first created and learned within a social context and is then adopted by individuals.

Universalism

Universalism proposes that there are single objective standards, independent of culture, in basic domains such as learning, reasoning, and emotion that are a part of all human experience.

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CHAPTER OVERVIEW

5: SOCIAL INFLUENCE

5.1: Conformity and Obedience
5.2: Persuasion- So Easily Fooled

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5.1: Conformity and Obedience

By Jerry M. Burger

Santa Clara University

We often change our attitudes and behaviors to match the attitudes and behaviors of the people around us. One reason for this conformity is a concern about what other people think of us. This process was demonstrated in a classic study in which college students deliberately gave wrong answers to a simple visual judgment task rather than go against the group. Another reason we conform to the norm is because other people often have information we do not, and relying on norms can be a reasonable strategy when we are uncertain about how we are supposed to act. Unfortunately, we frequently misperceive how the typical person acts, which can contribute to problems such as the excessive binge drinking often seen in college students. Obeying orders from an authority figure can sometimes lead to disturbing behavior. This danger was illustrated in a famous study in which participants were instructed to administer painful electric shocks to another person in what they believed to be a learning experiment. Despite vehement protests from the person receiving the shocks, most participants continued the procedure when instructed to do so by the experimenter. The findings raise questions about the power of blind obedience in deplorable situations such as atrocities and genocide. They also raise concerns about the ethical treatment of participants in psychology experiments.

learning objectives

- Become aware of how widespread conformity is in our lives and some of the ways each of us changes our attitudes and behavior to match the norm.
- Understand the two primary reasons why people often conform to perceived norms.
- Appreciate how obedience to authority has been examined in laboratory studies and some of the implications of the findings from these investigations.
- Consider some of the remaining issues and sources of controversy surrounding Milgram's obedience studies.

Introduction

When he was a teenager, my son often enjoyed looking at photographs of me and my wife taken when we were in high school. He laughed at the hairstyles, the clothing, and the kind of glasses people wore "back then." And when he was through with his ridiculing, we would point out that no one is immune to fashions and fads and that someday his children will probably be equally amused by his high school photographs and the trends he found so normal at the time.

Everyday observation confirms that we often adopt the actions and attitudes of the people around us. Trends in clothing, music, foods, and entertainment are obvious. But our views on political issues, religious questions, and lifestyles also reflect to some degree the attitudes of the people we interact with. Similarly, decisions about behaviors such as smoking and drinking are influenced by whether the people we spend time with engage in these activities. Psychologists refer to this widespread tendency to act and think like the people around us as **conformity**.



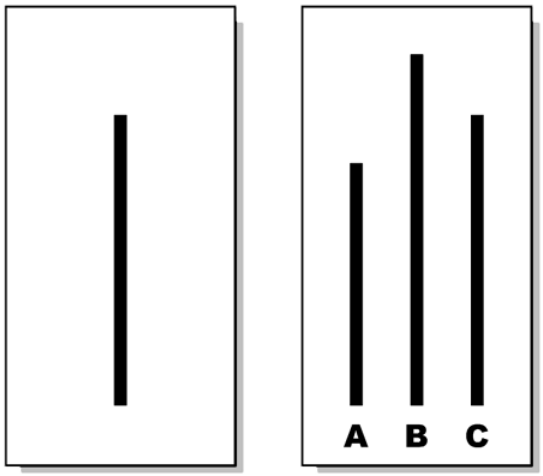
Fashion trends serve as good, and sometimes embarrassing, examples of our own susceptibility to conformity. [Image: bianca francesca, goo.gl/0roq35, CC BY-NC-SA 2.0, goo.gl/Toc0ZF]

Conformity

What causes all this conformity? To start, humans may possess an inherent tendency to imitate the actions of others. Although we usually are not aware of it, we often mimic the gestures, body posture, language, talking speed, and many other behaviors of the people we interact with. Researchers find that this mimicking increases the connection between people and allows our interactions to flow more smoothly (Chartrand & Bargh, 1999).

Beyond this automatic tendency to imitate others, psychologists have identified two primary reasons for conformity. The first of these is **normative influence**. When normative influence is operating, people go along with the crowd because they are concerned about what others think of them. We don't want to look out of step or become the target of criticism just because we like different kinds of music or dress differently than everyone else. Fitting in also brings rewards such as camaraderie and compliments.

How powerful is normative influence? Consider a classic study conducted many years ago by Solomon Asch (1956). The participants were male college students who were asked to engage in a seemingly simple task. An experimenter standing several feet away held up a card that depicted one line on the left side and three lines on the right side. The participant's job was to say aloud which of the three lines on the right was the same length as the line on the left. Sixteen cards were presented one at a time, and the correct answer on each was so obvious as to make the task a little boring. Except for one thing. The participant was not alone. In fact, there were six other people in the room who also gave their answers to the line-judgment task aloud. Moreover, although they pretended to be fellow participants, these other individuals were, in fact, confederates working with the experimenter. The real participant was seated so that he always gave his answer after hearing what five other "participants" said. Everything went smoothly until the third trial, when inexplicably the first "participant" gave an obviously incorrect answer. The mistake might have been amusing, except the second participant gave the same answer. As did the third, the fourth, and the fifth participant. Suddenly the real participant was in a difficult situation. His eyes told him one thing, but five out of five people apparently saw something else.



Examples of the cards used in the Asch experiment. How powerful is the normative influence? Would you be tempted to give a clearly incorrect answer, like many participants in the Asch experiment did, to better match the thoughts of a group of peers? [Image: Fred the Oyster, https://goo.gl/Gi5mtu, CC BY-SA 4.0, goo.gl/zVGXn8]

It's one thing to wear your hair a certain way or like certain foods because everyone around you does. But, would participants intentionally give a wrong answer just to conform with the other participants? The confederates uniformly gave incorrect answers on 12 of the 16 trials, and 76 percent of the participants went along with the norm at least once and also gave the wrong answer. In total, they conformed with the group on one-third of the 12 test trials. Although we might be impressed that the majority of the time participants answered honestly, most psychologists find it remarkable that so many college students caved in to the pressure of the group rather than do the job they had volunteered to do. In almost all cases, the participants knew they were giving an incorrect answer, but their concern for what these other people might be thinking about them overpowered their desire to do the right thing.

Variations of Asch's procedures have been conducted numerous times (Bond, 2005; Bond & Smith, 1996). We now know that the findings are easily replicated, that there is an increase in conformity with more confederates (up to about five), that teenagers are more prone to conforming than are adults, and that people conform significantly less often when they believe the confederates will not hear their responses (Berndt, 1979; Bond, 2005; Crutchfield, 1955; Deutsch & Gerard, 1955). This last finding is consistent with the notion that participants change their answers because they are concerned about what others think of them. Finally, although we see the effect in virtually every culture that has been studied, more conformity is found in collectivist countries such as Japan and China than in individualistic countries such as the United States (Bond & Smith, 1996). Compared with individualistic cultures, people who live in collectivist cultures place a higher value on the goals of the group than on individual preferences. They also are more motivated to maintain harmony in their interpersonal relations.

The other reason we sometimes go along with the crowd is that people are often a source of information. Psychologists refer to this process as **informational influence**. Most of us, most of the time, are motivated to do the right thing. If society deems that we put litter in a proper container, speak softly in libraries, and tip our waiter, then that's what most of us will do. But sometimes it's not clear what society expects of us. In these situations, we often rely on **descriptive norms** (Cialdini, Reno, & Kallgren, 1990). That is, we act the way most people—or most people like us—act. This is not an unreasonable strategy. Other people often have information that we do not, especially when we find ourselves in new situations. If you have ever been part of a conversation that went something like this,

> *"Do you think we should?"*
> *"Sure. Everyone else is doing it.",*

you have experienced the power of informational influence.



Efforts to influence people to engage in healthier or more sustainable behaviors have benefitted from the informational influence. For example, hotels have been able to significantly increase the numbers of people who re-use bath towels (reducing water and energy use) by informing them on signs in their rooms that re-using towels is a typical behavior of other hotel guests. [Image: Infrogmation of New Orleans, https://goo.gl/5P5F0v, CC BY 2.0, goo.gl/BRvSA7]

However, it's not always easy to obtain good descriptive norm information, which means we sometimes rely on a flawed notion of the norm when deciding how we should behave. A good example of how misperceived norms can lead to problems is found in research on binge drinking among college students. Excessive drinking is a serious problem on many campuses (Mita, 2009). There are many reasons why students binge drink, but one of the most important is their perception of the descriptive norm. How much students drink is highly correlated with how much they believe the average student drinks (Neighbors, Lee, Lewis, Fossos, & Larimer, 2007). Unfortunately, students aren't very good at making this assessment. They notice the boisterous heavy drinker at the party but fail to consider all the students not attending the party. As a result, students typically overestimate the descriptive norm for college student drinking (Borsari & Carey, 2003; Perkins, Haines, & Rice, 2005). Most students believe they consume significantly less alcohol than the norm, a miscalculation that creates a dangerous push toward more and more excessive alcohol consumption. On the positive side, providing students with accurate information about drinking norms has been found to reduce overindulgent drinking (Burger, LaSalvia, Hendricks, Mehdipour, & Neudeck, 2011; Neighbors, Lee, Lewis, Fossos, & Walter, 2009).

Researchers have demonstrated the power of descriptive norms in a number of areas. Homeowners reduced the amount of energy they used when they learned that they were consuming more energy than their neighbors (Schultz, Nolan, Cialdini, Goldstein, & Griskevicius, 2007). Undergraduates selected the healthy food option when led to believe that other students had made this choice (Burger et al., 2010). Hotel guests were more likely to reuse their towels when a hanger in the bathroom told them that this is what most guests did (Goldstein, Cialdini, & Griskevicius, 2008). And more people began using the stairs instead of the elevator when informed that the vast majority of people took the stairs to go up one or two floors (Burger & Shelton, 2011).

Obedience

Although we may be influenced by the people around us more than we recognize, whether we conform to the norm is up to us. But sometimes decisions about how to act are not so easy. Sometimes we are directed by a more powerful person to do things we may not want to do. Researchers who study **obedience** are interested in how people react when given an order or command from someone in a position of authority. In many situations, obedience is a good thing. We are taught at an early age to obey parents, teachers, and police officers. It's also important to follow instructions from judges, firefighters, and lifeguards. And a military would fail to function if soldiers stopped obeying orders from superiors. But, there is also a dark side to obedience. In the name of "following orders" or "just doing my job," people can violate ethical principles and break laws. More disturbingly, obedience often is at the heart of some of the worst of human behavior—massacres, atrocities, and even genocide.



Photographs of victims of Cambodian dictator Pol Pot. From 1975-79 the Khmer Rouge army obediently carried out orders to execute tens of thousands of civilians. [Image: ...your local connection, https://goo.gl/ut9fvk, CC BY-NC-SA 2.0, goo.gl/Toc0ZF]

It was this unsettling side of obedience that led to some of the most famous and most controversial research in the history of psychology. Milgram (1963, 1965, 1974) wanted to know why so many otherwise decent German citizens went along with the brutality of the Nazi leaders during the Holocaust. "These inhumane policies may have originated in the mind of a single person," Milgram (1963, p. 371) wrote, "but they could only be carried out on a massive scale if a very large number of persons obeyed orders."

To understand this obedience, Milgram conducted a series of laboratory investigations. In all but one variation of the basic procedure, participants were men recruited from the community surrounding Yale University, where the research was carried out. These citizens signed up for what they believed to be an experiment on learning and memory. In particular, they were told the research concerned the effects of punishment on learning. Three people were involved in each session. One was the participant. Another was the experimenter. The third was a confederate who pretended to be another participant.

The experimenter explained that the study consisted of a memory test and that one of the men would be the teacher and the other the learner. Through a rigged drawing, the real participant was always assigned the teacher's role and the confederate was always the learner. The teacher watched as the learner was strapped into a chair and had electrodes attached to his wrist. The teacher then moved to the room next door where he was seated in front of a large metal box the experimenter identified as a "shock generator." The front of the box displayed gauges and lights and, most noteworthy, a series of 30 levers across the bottom. Each lever was labeled with a voltage figure, starting with 15 volts and moving up in 15-volt increments to 450 volts. Labels also indicated the strength of the shocks, starting with "Slight Shock" and moving up to "Danger: Severe Shock" toward the end. The last two levers were simply labeled "XXX" in red.

Through a microphone, the teacher administered a memory test to the learner in the next room. The learner responded to the multiple-choice items by pressing one of four buttons that were barely within reach of his strapped-down hand. If the teacher saw the correct answer light up on his side of the wall, he simply moved on to the next item. But if the learner got the item wrong, the teacher pressed one of the shock levers and, thereby, delivered the learner's punishment. The teacher was instructed to start with the 15-volt lever and move up to the next highest shock for each successive wrong answer.

In reality, the learner received no shocks. But he did make a lot of mistakes on the test, which forced the teacher to administer what he believed to be increasingly strong shocks. The purpose of the study was to see how far the teacher would go before refusing to continue. The teacher's first hint that something was amiss came after pressing the 75-volt lever and hearing through the wall the learner say "Ugh!" The learner's reactions became stronger and louder with each lever press. At 150 volts, the learner yelled out, "Experimenter! That's all. Get me out of here. I told you I had heart trouble. My heart's starting to bother me now. Get me out of here, please. My heart's starting to bother me. I refuse to go on. Let me out."

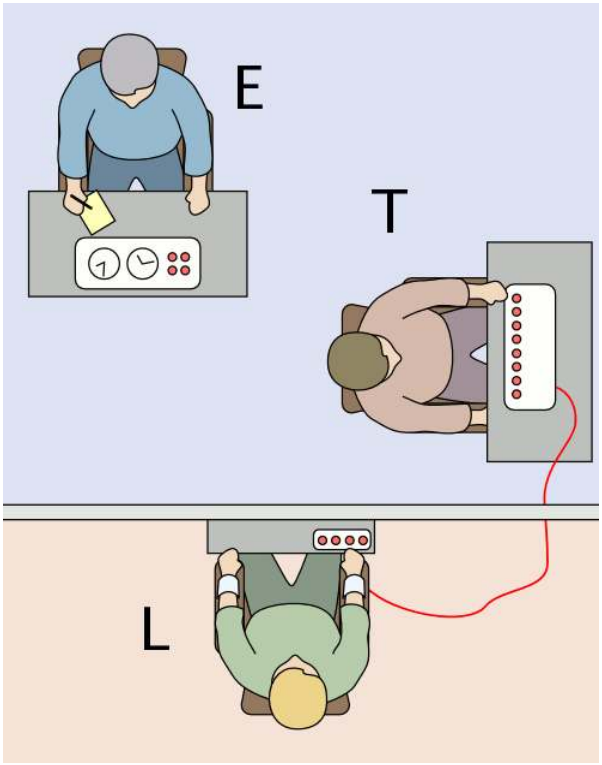


Diagram of the Milgram Experiment in which the "teacher" (T) was asked to deliver a (supposedly) painful electric shock to the "learner"(L). Would this experiment be approved by a review board today? [Image: Fred the Oyster, goo.gl/ZIbQz1, CC BY-SA 4.0, goo.gl/X3i0tq]

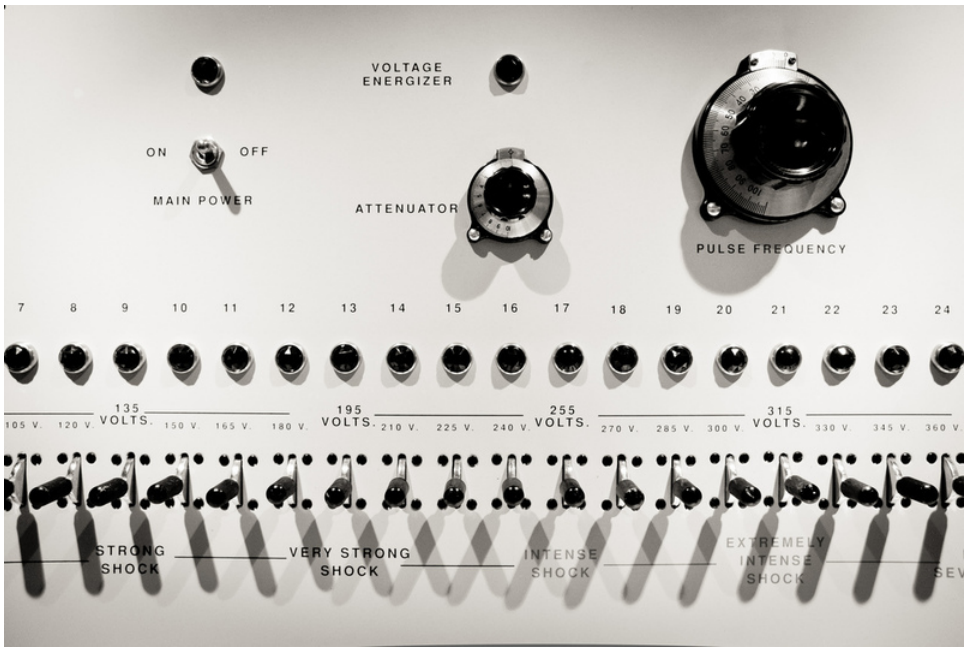
The experimenter's role was to encourage the participant to continue. If at any time the teacher asked to end the session, the experimenter responded with phrases such as, "The experiment requires that you continue," and "You have no other choice, you must go on." The experimenter ended the session only after the teacher stated four successive times that he did not want to continue. All the while, the learner's protests became more intense with each shock. After 300 volts, the learner refused to answer any more questions, which led the experimenter to say that no answer should be considered a wrong answer. After 330 volts, despite vehement protests from the learner following previous shocks, the teacher heard only silence, suggesting that the learner

was now physically unable to respond. If the teacher reached 450 volts—the end of the generator—the experimenter told him to continue pressing the 450 volt lever for each wrong answer. It was only after the teacher pressed the 450-volt lever three times that the experimenter announced that the study was over.

If you had been a participant in this research, what would you have done? Virtually everyone says he or she would have stopped early in the process. And most people predict that very few if any participants would keep pressing all the way to 450 volts. Yet in the basic procedure described here, 65 percent of the participants continued to administer shocks to the very end of the session. These were not brutal, sadistic men. They were ordinary citizens who nonetheless followed the experimenter's instructions to administer what they believed to be excruciating if not dangerous electric shocks to an innocent person. The disturbing implication from the findings is that, under the right circumstances, each of us may be capable of acting in some very uncharacteristic and perhaps some very unsettling ways.

Milgram conducted many variations of this basic procedure to explore some of the factors that affect obedience. He found that obedience rates decreased when the learner was in the same room as the experimenter and declined even further when the teacher had to physically touch the learner to administer the punishment. Participants also were less willing to continue the procedure after seeing other teachers refuse to press the shock levers, and they were significantly less obedient when the instructions to continue came from a person they believed to be another participant rather than from the experimenter. Finally, Milgram found that women participants followed the experimenter's instructions at exactly the same rate the men had.

Milgram's obedience research has been the subject of much controversy and discussion. Psychologists continue to debate the extent to which Milgram's studies tell us something about atrocities in general and about the behavior of German citizens during the Holocaust in particular (Miller, 2004). Certainly, there are important features of that time and place that cannot be recreated in a laboratory, such as a pervasive climate of prejudice and dehumanization. Another issue concerns the relevance of the findings. Some people have argued that today we are more aware of the dangers of blind obedience than we were when the research was conducted back in the 1960s. However, findings from partial and modified replications of Milgram's procedures conducted in recent years suggest that people respond to the situation today much like they did a half a century ago (Burger, 2009).



If you had been "a teacher" in the Milgram experiment, would you have behaved differently than the majority who delivered what they thought were massive 450-volt shocks? [Image: Sharon Drummond, https://goo.gl/uQZGtZ, CC BY-NC-SA 2.0, goo.gl/Toc0ZF]

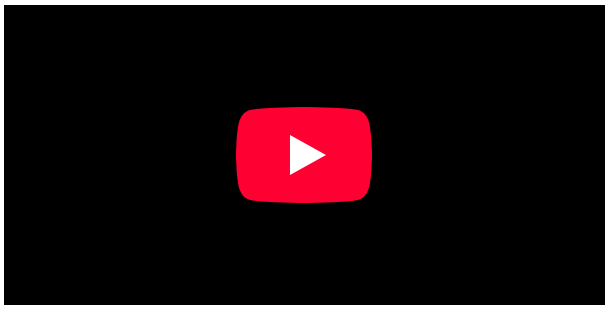
Another point of controversy concerns the ethical treatment of research participants. Researchers have an obligation to look out for the welfare of their participants. Yet, there is little doubt that many of Milgram's participants experienced intense levels of stress as they went through the procedure. In his defense, Milgram was not unconcerned about the effects of the experience on his participants. And in follow-up questionnaires, the vast majority of his participants said they were pleased they had been part of the

research and thought similar experiments should be conducted in the future. Nonetheless, in part because of Milgram's studies, guidelines and procedures were developed to protect research participants from these kinds of experiences. Although Milgram's intriguing findings left us with many unanswered questions, conducting a full replication of his experiment remains out of bounds by today's standards.

Social psychologists are fond of saying that we are all influenced by the people around us more than we recognize. Of course, each person is unique, and ultimately each of us makes choices about how we will and will not act. But decades of research on conformity and obedience make it clear that we live in a social world and that—for better or worse—much of what we do is a reflection of the people we encounter.

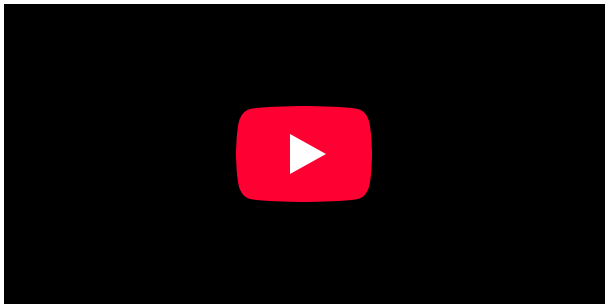
Outside Resources

Student Video: Christine N. Winston and Hemali Maher's 'The Milgram Experiment' gives an excellent 3-minute overview of one of the most famous experiments in the history of psychology. It was one of the winning entries in the 2015 Noba Student Video Award.



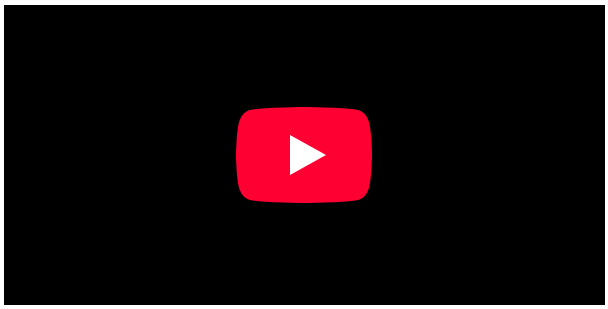


Video: An example of information influence in a field setting





Video: Scenes from a recent partial replication of Milgram's obedience studies





Video: Scenes from a recent replication of Asch's conformity experiment





Web: Website devoted to scholarship and research related to Milgram's obedience studies

http://www.stanleymilgram.com

Discussion Questions

1. In what ways do you see normative influence operating among you and your peers? How difficult would it be to go against the norm? What would it take for you to not do something just because all your friends were doing it?
2. What are some examples of how informational influence helps us do the right thing? How can we use descriptive norm information to change problem behaviors?
3. Is conformity more likely or less likely to occur when interacting with other people through social media as compared to face-to-face encounters?
4. When is obedience to authority a good thing and when is it bad? What can be done to prevent people from obeying commands to engage in truly deplorable behavior such as atrocities and massacres?
5. In what ways do Milgram's experimental procedures fall outside the guidelines for research with human participants? Are there ways to conduct relevant research on obedience to authority without violating these guidelines?

Vocabulary

Conformity

Changing one's attitude or behavior to match a perceived social norm.

Descriptive norm

The perception of what most people do in a given situation.

Informational influence

Conformity that results from a concern to act in a socially approved manner as determined by how others act.

Normative influence

Conformity that results from a concern for what other people think of us.

Obedience

Responding to an order or command from a person in a position of authority.

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5.2: Persuasion- So Easily Fooled

By Robert V. Levine

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This module introduces several major principles in the process of persuasion. It offers an overview of the different paths to persuasion. It then describes how mindless processing makes us vulnerable to undesirable persuasion and some of the "tricks" that may be used against us.

learning objectives

- Recognize the difference between the central and peripheral routes to persuasion.
- Understand the concepts of trigger features, fixed action patterns, heuristics, and mindless thinking, and how these processes are essential to our survival but, at the same time, leave us vulnerable to exploitation.
- Understand some common "tricks" persuasion artists may use to take advantage of us.
- Use this knowledge to make you less susceptible to unwanted persuasion.

Introduction

Have you ever tried to swap seats with a stranger on an airline? Ever negotiated the price of a car? Ever tried to convince someone to recycle, quit smoking, or make a similar change in health behaviors? If so, you are well versed with how persuasion can show up in everyday life.

Persuasion has been defined as "the process by which a message induces change in beliefs, attitudes, or behaviors" (Myers, 2011). Persuasion can take many forms. It may, for example, differ in whether it targets public compliance or private acceptance, is short-term or long-term, whether it involves slowly escalating commitments or sudden interventions and, most of all, in the benevolence of its intentions. When persuasion is well-meaning, we might call it education. When it is manipulative, it might be called mind control (Levine, 2003).

Whatever the content, however, there is a similarity to the form of the persuasion process itself. As the advertising commentator Sid Bernstein once observed, "Of course, you sell candidates for political office the same way you sell soap or sealing wax or whatever; because, when you get right down to it, that's the only way anything is sold" (Levine, 2003).

Persuasion is one of the most studied of all social psychology phenomena. This module provides an introduction to several of its most important components.



The instruments of persuasion work the same for selling products or politicians. [Image: if winter ends, https://goo.gl/BxiDC0, CC BY-NC 2.0, goo.gl/VnKlK8]

Two Paths to Persuasion

Persuasion theorists distinguish between the **central** and **peripheral** routes to persuasion (Petty & Cacioppo, 1986). The central route employs direct, relevant, logical messages. This method rests on the assumption that the audience is motivated, will think carefully about what is presented, and will react on the basis of your arguments. The central route is intended to produce enduring agreement. For example, you might decide to vote for a particular political candidate after hearing her speak and finding her logic and proposed policies to be convincing.

The peripheral route, on the other hand, relies on superficial cues that have little to do with logic. The peripheral approach is the salesman's way of thinking. It requires a target who *isn't* thinking carefully about what you are saying. It requires low effort from the target and often exploits rule-of-thumb **heuristics** that trigger mindless reactions (see below). It may be intended to persuade you to do something you do not want to do and might later be sorry you did. Advertisements, for example, may show celebrities, cute animals, beautiful scenery, or provocative sexual images that have nothing to do with the product. The peripheral approach is also common in the darkest of persuasion programs, such as those of dictators and cult leaders. Returning to the example of voting, you can experience the peripheral route in action when you see a provocative, emotionally charged political advertisement that tugs at you to vote a particular way.

Triggers and Fixed Action Patterns

The central route emphasizes objective communication of information. The peripheral route relies on psychological techniques. These techniques may take advantage of a target's not thinking carefully about the message. The process mirrors a phenomenon in animal behavior known as **fixed action patterns (FAPs)**. These are sequences of behavior that occur in exactly the same fashion, in exactly the same order, every time they're elicited. Cialdini (2008) compares it to a prerecorded tape that is turned on and, once it is, always plays to its finish. He describes it is as if the animal were turning on a tape recorder (Cialdini, 2008). There is the feeding tape, the territorial tape, the migration tape, the nesting tape, the aggressive tape—each sequence ready to be played when a situation calls for it.

In humans fixed action patterns include many of the activities we engage in while mentally on "auto-pilot." These behaviors are so automatic that it is very difficult to control them. If you ever feed a baby, for instance, nearly everyone mimics each bite the baby takes by opening and closing their own mouth! If two people near you look up and point you will automatically look up yourself. We also operate in a reflexive, non-thinking way when we make many decisions. We are more likely, for example, to be less critical about medical advice dispensed from a doctor than from a friend who read an interesting article on the topic in a popular magazine.

A notable characteristic of fixed action patterns is how they are activated. At first glance, it appears the animal is responding to the overall situation. For example, the maternal tape appears to be set off when a mother sees her hungry baby, or the aggressive tape seems to be activated when an enemy invades the animal's territory. It turns out, however, that the on/off switch may actually be controlled by a specific, minute detail of the situation—maybe a sound or shape or patch of color. These are the hot buttons of the biological world—what Cialdini refers to as "**trigger features**" and biologists call "releasers."



Certain triggers can cause people to switch into an automatic pattern of behavior. In an experiment, potential customers were more easily persuaded to buy when they heard the words "for a good cause." [Image: joelorama, https://goo.gl/FLXszT, CC BY-NC-SA 2.0, goo.gl/Toc0ZF]

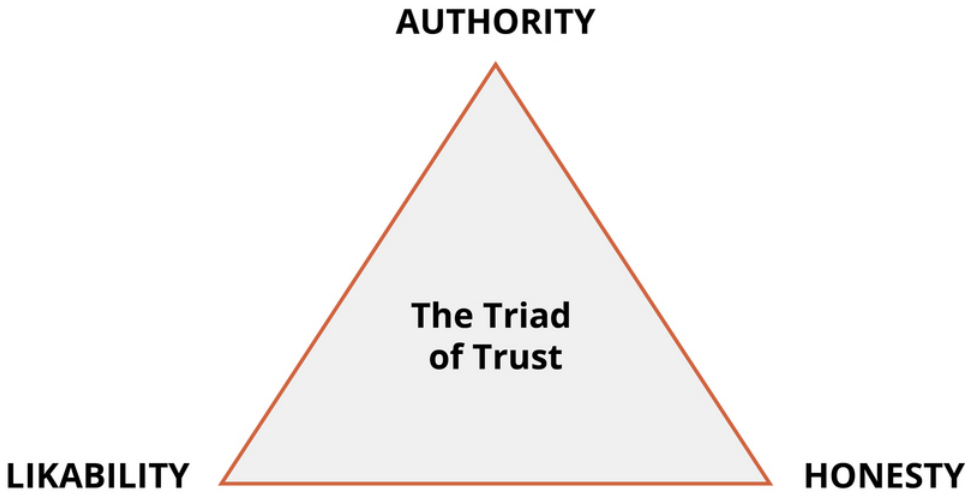
Humans are not so different. Take the example of a study conducted on various ways to promote a campus bake sale for charity (Levine, 2003). Simply displaying the cookies and other treats to passersby did not generate many sales (only 2 out of 30 potential customers made a purchase). In an alternate condition, however, when potential customers were asked to "buy a cookie for a good cause" the number rose to 12 out of 30. It seems that the phrase "a good cause" triggered a willingness to act. In fact, when the phrase "a good cause" was paired with a locally-recognized charity (known for its food-for-the-homeless program) the numbers held steady at 14 out of 30. When a fictional good cause was used instead (the make believe "Levine House") still 11 out of 30 potential customers made purchases and not one asked about the purpose or nature of the cause. The phrase "for a good cause" was an influential enough hot button that the exact cause didn't seem to matter.

The effectiveness of peripheral persuasion relies on our frequent reliance on these sorts of fixed action patterns and trigger features. These mindless, rules-of-thumb are generally effective shortcuts for coping with the overload of information we all must confront. They serve as heuristics—mental shortcuts-- that enable us to make decisions and solve problems quickly and efficiently. They also, however, make us vulnerable to uninvited exploitation through the peripheral route of persuasion.

The Source of Persuasion: The Triad of Trustworthiness

Effective persuasion requires trusting the source of the communication. Studies have identified three characteristics that lead to trust: perceived authority, honesty, and likability.

When the source appears to have any or all of these characteristics, people not only are more willing to agree to their request but are willing to do so without carefully considering the facts. We assume we are on safe ground and are happy to shortcut the tedious process of informed decision making. As a result, we are more susceptible to messages and requests, no matter their particular content or how peripheral they may be.



Authority

From earliest childhood, we learn to rely on authority figures for sound decision making because their authority signifies status and power, as well as expertise. These two facets often work together. Authorities such as parents and teachers are not only our primary sources of wisdom while we grow up, but they control us and our access to the things we want. In addition, we have been taught to believe that respect for authority is a moral virtue. As adults, it is natural to transfer this respect to society's designated authorities, such as judges, doctors, bosses, and religious leaders. We assume their positions give them special access to information and power. Usually we are correct, so that our willingness to defer to authorities becomes a convenient shortcut to sound decision making. Uncritical trust in authority may, however, lead to bad decisions. Perhaps the most famous study ever conducted in social psychology demonstrated that, when conditions were set up just so, two-thirds of a sample of psychologically normal men were willing to administer potentially lethal shocks to a stranger when an apparent authority in a laboratory coat ordered them to do so (Milgram, 1974; Burger, 2009).

Uncritical trust in authority can be problematic for several reasons. First, even if the source of the message is a legitimate, well-intentioned authority, they may not always be correct. Second, when respect for authority becomes mindless, expertise in one domain may be confused with expertise in general. To assume there is credibility when a successful actor promotes a cold remedy, or when a psychology professor offers his views about politics, can lead to problems. Third, the authority may not be legitimate. It is not difficult to fake a college degree or professional credential or to buy an official-looking badge or uniform.

Honesty

Honesty is the moral dimension of trustworthiness. Persuasion professionals have long understood how critical it is to their efforts. Marketers, for example, dedicate exorbitant resources to developing and maintaining an image of honesty. A trusted brand or company name becomes a mental shortcut for consumers. It is estimated that some 50,000 new products come out each year. Forrester Research, a marketing research company, calculates that children have seen almost six million ads by the age of 16. An established brand name helps us cut through this volume of information. It signals we are in safe territory. "The real suggestion to convey," advertising leader Theodore MacManus observed in 1910, "is that the man manufacturing the product is an honest man, and the product is an honest product, to be preferred above all others" (Fox, 1997).



People tend to favor products that are associated with people they like. This is the key ingredient to celebrity endorsements. While there are a lot of factors that can contribute to likability, being physically attractive is one of the most influential. [Image: DFID, https://goo.gl/KfFvvi, CC BY-NC-SA 2.0, goo.gl/Toc0ZF]

If we know that celebrities aren't really experts, and that they are being paid to say what they're saying, why do their endorsements sell so many products? Ultimately, it is because we like them. More than any single quality, we trust people we like. Roger Ailes, a public relations adviser to Presidents Reagan and George H.W. Bush, observed: "If you could master one element of personal communication that is more powerful than anything . . . it is the quality of being likable. I call it the magic bullet, because if your audience likes you, they'll forgive just about everything else you do wrong. If they don't like you, you can hit every rule right on target and it doesn't matter."

The mix of qualities that make a person likable are complex and often do not generalize from one situation to another. One clear finding, however, is that physically attractive people tend to be liked more. In fact, we prefer them to a disturbing extent: Various studies have shown we perceive attractive people as smarter, kinder, stronger, more successful, more socially skilled, better poised, better adjusted, more exciting, more nurturing, and, most important, of higher moral character. All of this is based on no other information than their physical appearance (e.g., Dion, Berscheid, & Walster, 1972).

Manipulating the Perception of Trustworthiness

The perception of trustworthiness is highly susceptible to manipulation. Levine (2003) lists some of the most common psychological strategies that are used to achieve this effect:

Manipulating Trustworthiness	
Testimonials & Endorsements	Presenting the Message as Education
"Word of Mouth"	The Maven

Testimonials and Endorsement

This technique employs someone who people already trust to testify about the product or message being sold. The technique goes back to the earliest days of advertising when satisfied customers might be shown describing how a patent medicine cured their life-long battle with "nerves" or how Dr. Scott's Electric Hair Brush healed their baldness ("My hair (was) falling out, and I was rapidly becoming bald, but since using the brush a thick growth of hair has made its appearance, quite equal to that I had before previous to its falling out," reported a satisfied customer in an 1884 ad for the product). Similarly, Kodak had Prince Henri D'Orleans and others endorse the superior quality of their camera ("The results are marvellous[sic]. The enlargements which you sent me are superb," stated Prince Henri D'Orleans in a 1888 ad).

Celebrity endorsements are a frequent feature in commercials aimed at children. The practice has aroused considerable ethical concern, and research shows the concern is warranted. In a study funded by the Federal Trade Commission, more than 400 children ages 8 to 14 were shown one of various commercials for a model racing set. Some of the commercials featured an endorsement from a famous race car driver, some included real racing footage, and others included neither. Children who watched the celebrity endorser not only preferred the toy cars more but were convinced the endorser was an expert about the toys. This held true for children of all ages. In addition, they believed the toy race cars were bigger, faster, and more complex than real race cars they saw on film. They were also less likely to believe the commercial was staged (Ross et al., 1984).

Presenting the Message as Education

The message may be framed as objective information. Salespeople, for example, may try to convey the impression they are less interested in selling a product than helping you make the best decision. The implicit message is that being informed is in everyone's best interest, because they are confident that when you understand what their product has to offer that you will conclude it is the best choice. Levine (2003) describes how, during training for a job as a used car salesman, he was instructed: "If the customer tells you they do not want to be bothered by a salesperson, your response is 'I'm not a salesperson, I'm a product consultant. I don't give prices or negotiate with you. I'm simply here to show you our inventory and help you find a vehicle that will fit your needs.'"

Word of Mouth

Imagine you read an ad that claims a new restaurant has the best food in your city. Now, imagine a friend tells you this new restaurant has the best food in the city. Who are you more likely to believe? Surveys show we turn to people around us for many decisions. A 1995 poll found that 70% of Americans rely on personal advice when selecting a new doctor. The same poll found that 53% of moviegoers are influenced by the recommendation of a person they know. In another survey, 91% said they're likely to use another person's recommendation when making a major purchase.

Persuasion professionals may exploit these tendencies. Often, in fact, they pay for the surveys. Using this data, they may try to disguise their message as word of mouth from your peers. For example, Cornerstone Promotion, a leading marketing firm that advertises itself as under-the-radar marketing specialists, sometimes hires children to log into chat rooms and pretend to be fans of one of their clients or pays students to throw parties where they subtly circulate marketing material among their classmates.

The Maven

More persuasive yet, however, is to involve peers face-to-face. Rather than over-investing in formal advertising, businesses and organizations may plant seeds at the grassroots level hoping that consumers themselves will then spread the word to each other. The

seeding process begins by identifying so-called information hubs—individuals the marketers believe can and will reach the most other people.

The seeds may be planted with established opinion leaders. Software companies, for example, give advance copies of new computer programs to professors they hope will recommend it to students and colleagues. Pharmaceutical companies regularly provide travel expenses and speaking fees to researchers willing to lecture to health professionals about the virtues of their drugs. Hotels give travel agents free weekends at their resorts in the hope they'll later recommend them to clients seeking advice.

There is a Yiddish word, maven, which refers to a person who's an expert or a connoisseur, as in a friend who knows where to get the best price on a sofa or the co-worker you can turn to for advice about where to buy a computer. They (a) know a lot of people, (b) communicate a great deal with people, (c) are more likely than others to be asked for their opinions, and (d) enjoy spreading the word about what they know and think. Most important of all, they are trusted. As a result, mavens are often targeted by persuasion professionals to help spread their message.

Other Tricks of Persuasion

There are many other mindless, mental shortcuts—heuristics and fixed action patterns—that leave us susceptible to persuasion. A few examples:

- "Free Gifts" & Reciprocity
- Social Proof
- Getting a Foot-in-the-Door
- A Door-in-the-Face
- "And That's Not All"
- The Sunk Cost Trap
- Scarcity & Psychological Reactance

Reciprocity

"There is no duty more indispensable than that of returning a kindness," wrote Cicero. Humans are motivated by a sense of equity and fairness. When someone does something for us or gives us something, we feel obligated to return the favor in kind. It triggers one of the most powerful of social norms, the **reciprocity** rule, whereby we feel compelled to repay, in equitable value, what another person has given to us.

Gouldner (1960), in his seminal study of the reciprocity rule, found it appears in every culture. It lays the basis for virtually every type of social relationship, from the legalities of business arrangements to the subtle exchanges within a romance. A salesperson may offer free gifts, concessions, or their valuable time in order to get us to do something for them in return. For example, if a colleague helps you when you're busy with a project, you might feel obliged to support her ideas for improving team processes. You might decide to buy more from a supplier if they have offered you an aggressive discount. Or, you might give money to a charity fundraiser who has given you a flower in the street (Cialdini, 2008; Levine, 2003).

Social Proof

If everyone is doing it, it must be right. People are more likely to work late if others on their team are doing the same, to put a tip in a jar that already contains money, or eat in a restaurant that is busy. This principle derives from two extremely powerful social forces—social comparison and conformity. We compare our behavior to what others are doing and, if there is a discrepancy between the other person and ourselves, we feel pressure to change (Cialdini, 2008).



While few people really like to wait in long lines, we might do it anyway in certain situations. If enough people are willing to wait it (usually) is a sign that there is something worth having at the end. A line in front of a restaurant, movie, etc. is social proof that will likely influence other people to try. [Image: Bill Badzo, https://goo.gl/fPdNVn, CC BY-NC-SA 2.0, goo.gl/Toc0ZF]

The principle of **social proof** is so common that it easily passes unnoticed. Advertisements, for example, often consist of little more than attractive social models appealing to our desire to be one of the group. For example, the German candy company Haribo suggests that when you purchase their products you are joining a larger society of satisfied customers: “Kids and grown-ups love it so-- the happy world of Haribo”. Sometimes social cues are presented with such specificity that it is as if the target is being manipulated by a puppeteer—for example, the laugh tracks on situation comedies that instruct one not only when to laugh but how to laugh. Studies find these techniques work. Fuller and Skeehy-Skeffington (1974), for example, found that audiences laughed longer and more when a laugh track accompanied the show than when it did not, even though respondents knew the laughs they heard were connived by a technician from old tapes that had nothing to do with the show they were watching. People are particularly susceptible to social proof (a) when they are feeling uncertain, and (b) if the people in the comparison group seem to be similar to ourselves. As P.T. Barnum once said, “Nothing draws a crowd like a crowd.”

Commitment and Consistency

Westerners have a desire to both feel and be perceived to act consistently. Once we have made an initial commitment, it is more likely that we will agree to subsequent commitments that follow from the first. Knowing this, a clever persuasion artist might induce someone to agree to a difficult-to-refuse small request and follow this with progressively larger requests that were his target from the beginning. The process is known as getting a **foot in the door** and then **slowly escalating the commitments**.

Paradoxically, we are less likely to say “No” to a large request than we are to a small request when it follows this pattern. This can have costly consequences. Levine (2003), for example, found ex-cult members tend to agree with the statement: “Nobody ever joins a cult. They just postpone the decision to leave.”

A Door in the Face

Some techniques bring a paradoxical approach to the escalation sequence by pushing a request to or beyond its acceptable limit and then backing off. In the door-in-the-face (sometimes called the reject-then-compromise) procedure, the persuader begins with a large request they expect will be rejected. They want the door to be slammed in their face. Looking forlorn, they now follow this with a smaller request, which, unknown to the customer, was their target all along.

In one study, for example, Mowen and Cialdini (1980), posing as representatives of the fictitious "California Mutual Insurance Co.," asked university students walking on campus if they'd be willing to fill out a survey about safety in the home or dorm. The survey, students were told, would take about 15 minutes. Not surprisingly, most of the students declined—only one out of four complied with the request. In another condition, however, the researchers door-in-the-faced them by beginning with a much larger request. "The survey takes about two hours," students were told. Then, after the subject declined to participate, the experimenters retreated to the target request: ". . . look, one part of the survey is particularly important and is fairly short. It will take only 15 minutes to administer." Almost twice as many now complied.

And That's Not All!

The that's-not-all technique also begins with the salesperson asking a high price. This is followed by several seconds' pause during which the customer is kept from responding. The salesperson then offers a better deal by either lowering the price or adding a bonus product. That's-not-all is a variation on door-in-the-face. Whereas the latter begins with a request that will be rejected, however, that's-not-all gains its influence by putting the customer on the fence, allowing them to waver and then offering them a comfortable way off.

Burger (1986) demonstrated the technique in a series of field experiments. In one study, for example, an experimenter-salesman told customers at a student bake sale that cupcakes cost 75 cents. As this price was announced, another salesman held up his hand and said, "Wait a second," briefly consulted with the first salesman, and then announced ("that's-not-all") that the price today included two cookies. In a control condition, customers were offered the cupcake and two cookies as a package for 75 cents right at the onset. The bonus worked magic: Almost twice as many people bought cupcakes in the that's-not-all condition (73%) than in the control group (40%).

The Sunk Cost Trap

Sunk cost is a term used in economics referring to nonrecoverable investments of time or money. The trap occurs when a person's aversion to loss impels them to throw good money after bad, because they don't want to waste their earlier investment. This is vulnerable to manipulation. The more time and energy a cult recruit can be persuaded to spend with the group, the more "invested" they will feel, and, consequently, the more of a loss it will feel to leave that group. Consider the advice of billionaire investor Warren Buffet: "When you find yourself in a hole, the best thing you can do is stop digging" (Levine, 2003).



People may be more attracted to an opportunity when supplies or time is limited. [Image: Peter Rukavina, goo.gl/KQ2LmT, CC BY-NC-SA 2.0, goo.gl/Toc0ZF]

People tend to perceive things as more attractive when their availability is limited, or when they stand to lose the opportunity to acquire them on favorable terms (Cialdini, 2008). Anyone who has encountered a willful child is familiar with this principle. In a classic study, Brehm & Weinraub (1977), for example, placed 2-year-old boys in a room with a pair of equally attractive toys. One of the toys was placed next to a plexiglass wall; the other was set behind the plexiglass. For some boys, the wall was 1 foot high, which allowed the boys to easily reach over and touch the distant toy. Given this easy access, they showed no particular preference for one toy or the other. For other boys, however, the wall was a formidable 2 feet high, which required them to walk around the barrier to touch the toy. When confronted with this wall of inaccessibility, the boys headed directly for the forbidden fruit, touching it three times as quickly as the accessible toy.

Research shows that much of that 2-year-old remains in adults, too. People resent being controlled. When a person seems too pushy, we get suspicious, annoyed, often angry, and yearn to retain our freedom of choice more than before. Brehm (1966) labeled this the principle of **psychological reactance**.

The most effective way to circumvent psychological reactance is to first get a foot in the door and then escalate the demands so gradually that there is seemingly nothing to react against. Hassan (1988), who spent many years as a higher-up in the “Moonies” cult, describes how they would shape behaviors subtly at first, then more forcefully. The material that would make up the new identity of a recruit was doled out gradually, piece by piece, only as fast as the person was deemed ready to assimilate it. The rule of thumb was to “tell him only what he can accept.” He continues: “Don’t sell them [the converts] more than they can handle . . . . If a recruit started getting angry because he was learning too much about us, the person working on him would back off and let another member move in .....”

Defending Against Unwelcome Persuasion

The most commonly used approach to help people defend against unwanted persuasion is known as the “inoculation” method. Research has shown that people who are subjected to weak versions of a persuasive message are less vulnerable to stronger versions later on, in much the same way that being exposed to small doses of a virus immunizes you against full-blown attacks. In a classic study by McGuire (1964), subjects were asked to state their opinion on an issue. They were then mildly attacked for their position and then given an opportunity to refute the attack. When later confronted by a powerful argument against their initial opinion, these subjects were more resistant than were a control group. In effect, they developed defenses that rendered them immune.

Sagarin and his colleagues have developed a more aggressive version of this technique that they refer to as “stinging” (Sagarin, Cialdini, Rice, & Serna, 2002). Their studies focused on the popular advertising tactic whereby well-known authority figures are employed to sell products they know nothing about, for example, ads showing a famous astronaut pontificating on Rolex watches. In a first experiment, they found that simply forewarning people about the deviousness of these ads had little effect on peoples’ inclination to buy the product later. Next, they stung the subjects. This time, they were immediately confronted with their gullibility. “Take a look at your answer to the first question. Did you find the ad to be even somewhat convincing? If so, then you got fooled. ... Take a look at your answer to the second question. Did you notice that this ‘stockbroker’ was a fake?” They were then asked to evaluate a new set of ads. The sting worked. These subjects were not only more likely to recognize the manipulativeness of deceptive ads; they were also less likely to be persuaded by them.

Anti-vulnerability trainings such as these can be helpful. Ultimately, however, the most effective defense against unwanted persuasion is to accept just how vulnerable we are. One must, first, accept that it is normal to be vulnerable and, second, to learn to recognize the danger signs when we are falling prey. To be forewarned is to be forearmed.

Conclusion

This module has provided a brief introduction to the psychological processes and subsequent “tricks” involved in persuasion. It has emphasized the peripheral route of persuasion because this is when we are most vulnerable to psychological manipulation. These vulnerabilities are side effects of “normal” and usually adaptive psychological processes. Mindless heuristics offer shortcuts for coping with a hopelessly complicated world. They are necessities for human survival. All, however, underscore the dangers that accompany any mindless thinking.

Outside Resources

Book: Ariely, D. (2008). Predictably irrational. New York, NY: Harper.

Book: Cialdini, R. B. (2008). Influence: Science and practice (5th ed.). Boston, MA: Allyn and Bacon.

Book: Gass, R., & Seiter, J. (2010). Persuasion, social influence, and compliance gaining (4th ed.). Boston, MA: Pearson.

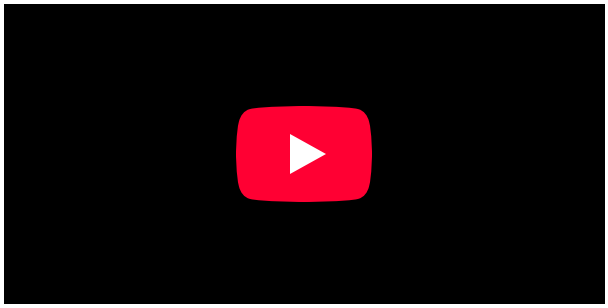
Book: Kahneman, D. (2012). Thinking fast and slow. New York, NY: Farrar, Straus & Giroux.

Book: Levine, R. (2006). The power of persuasion: how we\'re bought and sold. Hoboken, NJ: Wiley

www.amazon.com/The-Power-Pers.../dp/0471763179

Book: Tavris, C., & Aronson, E. (2011). Mistakes were made (but not by me). New York, NY: Farrar, Straus & Giroux.

Student Video 1: Kyle Ball and Brandon Do's 'Principles of Persuasion'. This is a student-made video highlighting 6 key principles of persuasion that we encounter in our everyday lives. It was one of the winning entries in the 2015 Noba Student Video Award.

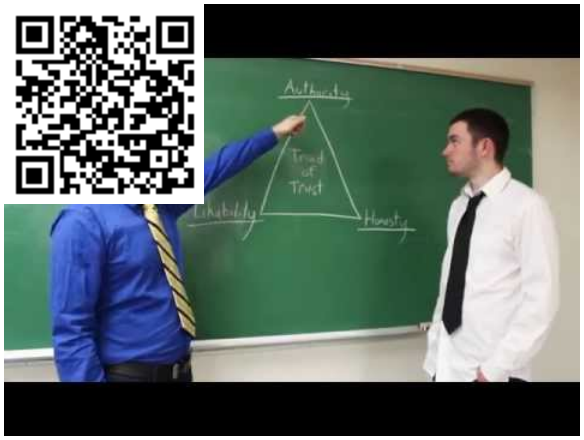


Stu suasion', created by Jake Teeny and Ben Oliveto, compares the central and peripheral routes to per ooks at how techniques of persuasion such as Scarcity and Social Proof influence our consumer choices. It was one of the winning entries in the 2015 Noba Student Video Award.



Student Video 3: 'Persuasion in Advertising' is a humorous look at the techniques used by companies to try to convince us to buy their products. The video was created by the team of Edward Puckering, Chris Cameron, and Kevin Smith. It was one of the winning entries in the 2015 Noba Student Video Award.





Video: A brief, entertaining interview with the celebrity pickpocket shows how easily we can be fooled. See A Pickpocket's Tale at

http://www.newyorker.com/online/blogs/culture/2013/01/video-the-art-of-pickpocketing.html

Video: Cults employ extreme versions of many of the principles in this module. An excellent documentary tracing the history of the Jonestown cult is the PBS "American Experience" production, Jonestown: The Life and Death of Peoples Temple at

www.pbs.org/wgbh/americanexpe...-introduction/

Video: Philip Zimbardo's now-classic video, Quiet Rage, offers a powerful, insightful description of his famous Stanford prison study

www.prisonexp.org/documentary.htm

Video: The documentary Outfoxed provides an excellent example of how persuasion can be masked as news and education.

http://www.outfoxed.org/

Video: The video, The Science of Countering Terrorism: Psychological Perspectives, a talk by psychologist Fathali Moghaddam, is an excellent introduction to the process of terrorist recruitment and thinking

sciencestage.com/v/32330/fath...spectives.html

Discussion Questions

1. Imagine you are commissioned to create an ad to sell a new beer. Can you give an example of an ad that would rely on the central route? Can you give an example of an ad that would rely on the peripheral route?
2. The reciprocity principle can be exploited in obvious ways, such as giving a customer a free sample of a product. Can you give an example of a less obvious way it might be exploited? What is a less obvious way that a cult leader might use it to get someone under his or her grip?
3. Which "trick" in this module are you, personally, most prone to? Give a personal example of this. How might you have avoided it?

Vocabulary

Central route to persuasion

Persuasion that employs direct, relevant, logical messages.

Fixed action patterns (FAPs)

Sequences of behavior that occur in exactly the same fashion, in exactly the same order, every time they are elicited.

Foot in the door

Obtaining a small, initial commitment.

Gradually escalating commitments

A pattern of small, progressively escalating demands is less likely to be rejected than a single large demand made all at once.

Heuristics

Mental shortcuts that enable people to make decisions and solve problems quickly and efficiently.

Peripheral route to persuasion

Persuasion that relies on superficial cues that have little to do with logic.

Psychological reactance

A reaction to people, rules, requirements, or offerings that are perceived to limit freedoms.

Social proof

The mental shortcut based on the assumption that, if everyone is doing it, it must be right.

The norm of reciprocity

The normative pressure to repay, in equitable value, what another person has given to us.

The rule of scarcity

People tend to perceive things as more attractive when their availability is limited, or when they stand to lose the opportunity to acquire them on favorable terms.

The triad of trust

We are most vulnerable to persuasion when the source is perceived as an authority, as honest and likable.

Trigger features

Specific, sometimes minute, aspects of a situation that activate fixed action patterns.

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CHAPTER OVERVIEW

6: CONFLICT

6.1: Prejudice, Discrimination, and Stereotyping
6.2: Aggression and Violence

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6.1: Prejudice, Discrimination, and Stereotyping

By Susan T. Fiske

Princeton University

People are often biased against others outside of their own social group, showing prejudice (emotional bias), stereotypes (cognitive bias), and discrimination (behavioral bias). In the past, people used to be more explicit with their biases, but during the 20th century, when it became less socially acceptable to exhibit bias, such things like prejudice, stereotypes, and discrimination became more subtle (automatic, ambiguous, and ambivalent). In the 21st century, however, with social group categories even more complex, biases may be transforming once again.

learning objectives

- Distinguish prejudice, stereotypes, and discrimination.
- Distinguish old-fashioned, blatant biases from contemporary, subtle biases.
- Understand old-fashioned biases such as social dominance orientation and right-wing. authoritarianism.
- Understand subtle, unexamined biases that are automatic, ambiguous, and ambivalent.
- Understand 21st century biases that may break down as identities get more complicated.

Introduction



You are an individual, full of beliefs, identities, and more that help make you unique. You don't want to be labeled just by your gender or race or religion. But as complex as we perceive ourselves to be, we often define others merely by their most distinct social group. [Image: caseorganic, https://goo.gl/PuLI4E, CC BY-NC 2.0, goo.gl/VnKlK8]

Even in one's own family, everyone wants to be seen for who they are, not as "just another typical X." But still, people put other people into groups, using that label to inform their evaluation of the person as a whole—a process that can result in serious consequences. This module focuses on biases against social groups, which social psychologists sort into emotional **prejudices**, mental **stereotypes**, and behavioral **discrimination**. These three aspects of bias are related, but they each can occur separately from the others (Dovidio & Gaertner, 2010; Fiske, 1998). For example, sometimes people have a negative, emotional reaction to a social group (prejudice) without knowing even the most superficial reasons to dislike them (stereotypes).

This module shows that today's biases are not yesterday's biases in many ways, but at the same time, they are troublingly similar. First, we'll discuss old-fashioned biases that might have belonged to our grandparents and great-grandparents—or even the people nowadays who have yet to leave those wrongful times. Next, we will discuss late 20th century biases that affected our parents and still linger today. Finally, we will talk about today's 21st century biases that challenge fairness and respect for all.

Old-fashioned Biases: Almost Gone

You would be hard pressed to find someone today who openly admits they don't believe in equality. Regardless of one's demographics, most people believe everyone is entitled to the same, natural rights. However, as much as we now collectively believe this, not too far back in our history, this ideal of equality was an unpracticed sentiment. Of all the countries in the world, only a few have equality in their constitution, and those who do, originally defined it for a select group of people.

At the time, old-fashioned biases were simple: people openly put down those not from their own group. For example, just 80 years ago, American college students unabashedly thought Turkish people were "cruel, very religious, and treacherous" (Katz & Braly, 1933). So where did they get those ideas, assuming that most of them had never met anyone from Turkey? Old-fashioned stereotypes were overt, unapologetic, and expected to be shared by others—what we now call "blatant biases."

Blatant biases are conscious beliefs, feelings, and behavior that people are perfectly willing to admit, which mostly express hostility toward other groups (outgroups) while unduly favoring one's own group (in-group). For example, organizations that preach contempt for other races (and praise for their own) is an example of a blatant bias. And scarily, these blatant biases tend to run in packs: People who openly hate one outgroup also hate many others. To illustrate this pattern, we turn to two personality scales next.

Social Dominance Orientation



People with a social dominance orientation are more likely to be attracted to certain types of careers, such as law enforcement, that maintain group hierarchies. [Image: Thomas Hawk, https://goo.gl/qWQ7jE, CC BY-NC 2.0, goo.gl/VnKlK8]

Social dominance orientation (SDO) describes a belief that group hierarchies are inevitable in all societies and are even a good idea to maintain order and stability (Sidanius & Pratto, 1999). Those who score high on SDO believe that some groups are inherently better than others, and because of this, there is no such thing as group "equality." At the same time, though, SDO is not just about being personally dominant and controlling of others; SDO describes a preferred arrangement of groups with some on top

(preferably one's own group) and some on the bottom. For example, someone high in SDO would likely be upset if someone from an outgroup moved into his or her neighborhood. It's not that the person high in SDO wants to "control" what this outgroup member does; it's that moving into this "nice neighborhood" disrupts the social hierarchy the person high in SDO believes in (i.e. living in a nice neighborhood denotes one's place in the social hierarchy—a place reserved for one's in-group members).

Although research has shown that people higher in SDO are more likely to be politically conservative, there are other traits that more strongly predict one's SDO. For example, researchers have found that those who score higher on SDO are usually lower than average on tolerance, empathy, altruism, and community orientation. In general, those high in SDO have a strong belief in work ethic—that hard work always pays off and leisure is a waste of time. People higher on SDO tend to choose and thrive in occupations that maintain existing group hierarchies (police, prosecutors, business), compared to those lower in SDO, who tend to pick more equalizing occupations (social work, public defense, psychology).

The point is that SDO—a preference for inequality as normal and natural—also predicts endorsing the superiority of certain groups: men, native-born residents, heterosexuals, and believers in the dominant religion. This means seeing women, minorities, homosexuals, and non-believers as inferior. Understandably, the first list of groups tend to score higher on SDO, while the second group tends to score lower. For example, the SDO gender difference (men higher, women lower) appears all over the world.

At its heart, SDO rests on a fundamental belief that the world is tough and competitive with only a limited number of resources. Thus, those high in SDO see groups as battling each other for these resources, with winners at the top of the social hierarchy and losers at the bottom (see Table 1).

	Social Dominance Orientation	Right-Wing Authoritarianism
Core Belief	Groups compete for economic resources	Groups compete over values
Intergroup Belief	Group hierarchies are inevitable, good	Groups must follow authority
Ingroup Belief	Ingroup must be tough, competitive	Ingroup must unite, protect
Outgroup Belief	"They" are trying to beat "us"	"They" have bad values

Table 1. Old-Fashioned Biases

Right-wing Authoritarianism

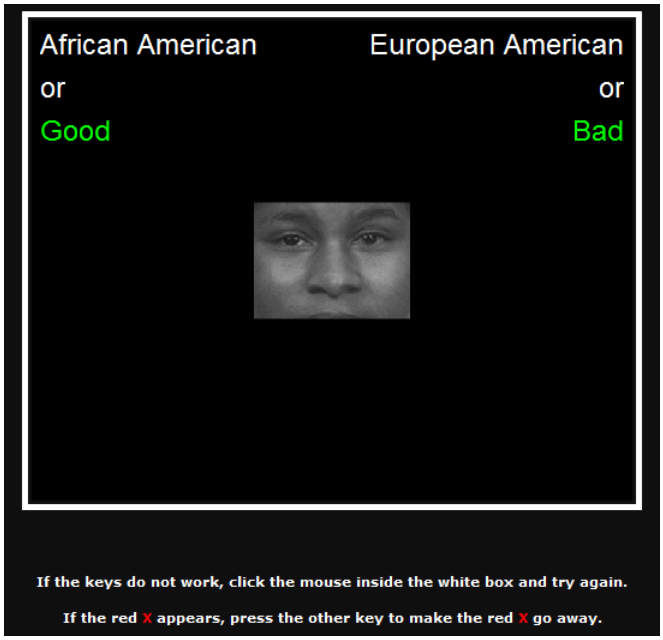
Right-wing authoritarianism (RWA) focuses on value conflicts, whereas SDO focuses on the economic ones. That is, RWA endorses respect for obedience and authority in the service of group conformity (Altemeyer, 1988). Returning to an example from earlier, the homeowner who's high in SDO may dislike the outgroup member moving into his or her neighborhood because it "threatens" one's economic resources (e.g. lowering the value of one's house; fewer openings in the school; etc.). Those high in RWA may equally dislike the outgroup member moving into the neighborhood but for different reasons. Here, it's because this outgroup member brings in values or beliefs that the person high in RWA disagrees with, thus "threatening" the collective values of his or her group. RWA respects group unity over individual preferences, wanting to maintain group values in the face of differing opinions. Despite its name, though, RWA is not necessarily limited to people on the right (conservatives). Like SDO, there does appear to be an association between this personality scale (i.e. the preference for order, clarity, and conventional values) and conservative beliefs. However, regardless of political ideology, RWA focuses on groups' competing frameworks of values. Extreme scores on RWA predict biases against outgroups while demanding in-group loyalty and conformity Notably, the combination of high RWA and high SDO predicts joining hate groups that openly endorse aggression against minority groups, immigrants, homosexuals, and believers in non-dominant religions (Altemeyer, 2004).

20th Century Biases: Subtle but Significant

Fortunately, old-fashioned biases have diminished over the 20th century and into the 21st century. Openly expressing prejudice is like blowing second-hand cigarette smoke in someone's face: It's just not done any more in most circles, and if it is, people are readily criticized for their behavior. Still, these biases exist in people; they're just less in view than before. These **subtle biases** are

unexamined and sometimes unconscious but real in their consequences. They are automatic, ambiguous, and ambivalent, but nonetheless biased, unfair, and disrespectful to the belief in equality.

Automatic Biases



An actual screenshot from an IAT (Implicit Association Test) that is designed to test a person's reaction time (measured in milliseconds) to an array of stimuli that are presented on the screen. This particular item is testing an individual's unconscious reaction towards members of various ethnic groups. [Image: Courtesy of Anthony Greenwald from Project Implicit]

Most people like themselves well enough, and most people identify themselves as members of certain groups but not others. Logic suggests, then, that because we like ourselves, we therefore like the groups we associate with more, whether those groups are our hometown, school, religion, gender, or ethnicity. Liking yourself and your groups is human nature. The larger issue, however, is that own-group preference often results in liking other groups less. And whether you recognize this "favoritism" as wrong, this trade-off is relatively **automatic**, that is, unintended, immediate, and irresistible.

Social psychologists have developed several ways to measure this relatively automatic own-group preference, the most famous being the **Implicit Association Test**(IAT;Greenwald, Banaji, Rudman, Farnham, Nosek, & Mellott, 2002; Greenwald, McGhee, & Schwartz, 1998). The test itself is rather simple and you can experience it yourself if you Google "implicit" or go to *understandingprejudice.org*. Essentially, the IAT is done on the computer and measures how quickly you can sort words or pictures into different categories. For example, if you were asked to categorize "ice cream" as good or bad, you would quickly categorize it as good. However, imagine if every time you ate ice cream, you got a brain freeze. When it comes time to categorize ice cream as good or bad, you may still categorize it as "good," but you will likely be a little slower in doing so compared to someone who has nothing but positive thoughts about ice cream. Related to group biases, people may explicitly claim they don't discriminate against outgroups—and this is very likely true. However, when they're given this computer task to categorize people from these outgroups, that automatic or unconscious hesitation (a result of having mixed evaluations about the outgroup) will show up in the test. And as countless studies have revealed, people are mostly faster at pairing their own group with good categories, compared to pairing others' groups. In fact, this finding generally holds regardless if one's group is measured according race, age, religion, nationality, and even temporary, insignificant memberships.

This all-too-human tendency would remain a mere interesting discovery except that people's reaction time on the IAT predicts actual feelings about individuals from other groups, decisions about them, and behavior toward them, especially nonverbal behavior (Greenwald, Poehlman, Uhlmann, & Banaji, 2009). For example, although a job interviewer may not be "blatantly biased," his or her "automatic or implicit biases" may result in unconsciously acting distant and indifferent, which can have devastating effects on the hopeful interviewee's ability to perform well (Word, Zanna, & Cooper, 1973). Although this is unfair, sometimes the automatic associations—often driven by society's stereotypes—trump our own, explicit values (Devine, 1989). And

sadly, this can result in consequential discrimination, such as allocating fewer resources to disliked outgroups (Rudman & Ashmore, 2009). See Table 2 for a summary of this section and the next two sections on subtle biases.

Type of Bias	Example	What It Shows
Automatic	Implicit Association Test	People link "good" & ingroup, "bad" & outgroup
Ambiguous	Social identity theory Self-categorized theory Aversive racism	People favor ingroup, distance from outgroup Same but emphasizes self as a member of ingroup People avoid outgroup, avoid their own prejudices
Ambivalent	Stereotype Content Model	People divide groups by warmth and competence

Table 2: Subtle Biases

Ambiguous Biases



Whether we are aware of it or not (and usually we're not), we sort the world into "us" and "them" categories. We are more likely to treat with bias or discrimination anyone we feel is outside our own group. [Image: Keira McPhee, https://goo.gl/gkaKBe, CC BY 2.0, goo.gl/BRvSA7]

As the IAT indicates, people's biases often stem from the spontaneous tendency to favor their own, at the expense of the other. **Social identity theory** (Tajfel, Billig, Bundy, & Flament, 1971) describes this tendency to favor one's own in-group over another's outgroup. And as a result, outgroup disliking stems from this in-group liking (Brewer & Brown, 1998). For example, if two classes of children want to play on the same soccer field, the classes will come to dislike each other not because of any real, objectionable traits about the other group. The dislike originates from each class's favoritism toward itself and the fact that only one group can play on the soccer field at a time. With this preferential perspective for one's own group, people are not punishing the other one so much as neglecting it in favor of their own. However, to justify this preferential treatment, people will often exaggerate the differences between their in-group and the outgroup. In turn, people see the outgroup as more similar in personality than they are. This results in the perception that "they" really differ from us, and "they" are all alike. Spontaneously, people categorize people into groups just as we categorize furniture or food into one type or another. The difference is that we people inhabit categories ourselves, as **self-categorization theory** points out (Turner, 1975). Because the attributes of group categories can be either good or bad, we tend to favor the groups with people like us and incidentally disfavor the others. In-group favoritism is an ambiguous form of bias because it disfavors the outgroup by exclusion. For example, if a politician has to decide between funding one program or another, s/he may be more likely to give resources to the group that more closely represents his in-group. And this life-changing decision stems from the simple, natural human tendency to be more comfortable with people like yourself.

A specific case of comfort with the ingroup is called aversive racism, so-called because people do not like to admit their own racial biases to themselves or others (Dovidio & Gaertner, 2010). Tensions between, say, a White person's own good intentions and

discomfort with the perhaps novel situation of interacting closely with a Black person may cause the White person to feel uneasy, behave stiffly, or be distracted. As a result, the White person may give a good excuse to avoid the situation altogether and prevent any awkwardness that could have come from it. However, such a reaction will be ambiguous to both parties and hard to interpret. That is, was the White person right to avoid the situation so that neither person would feel uncomfortable? Indicators of **aversive racism** correlate with discriminatory behavior, despite being the ambiguous result of good intentions gone bad.

Bias Can Be Complicated - Ambivalent Biases

Not all stereotypes of outgroups are all bad. For example, ethnic Asians living in the United States are commonly referred to as the "model minority" because of their perceived success in areas such as education, income, and social stability. Another example includes people who feel benevolent toward traditional women but hostile toward nontraditional women. Or even ageist people who feel respect toward older adults but, at the same time, worry about the burden they place on public welfare programs. A simple way to understand these mixed feelings, across a variety of groups, results from the **Stereotype Content Model** (Fiske, Cuddy, & Glick, 2007).

When people learn about a new group, they first want to know if its intentions of the people in this group are for good or ill. Like the guard at night: "Who goes there, friend or foe?" If the other group has good, cooperative intentions, we view them as warm and trustworthy and often consider them part of "our side." However, if the other group is cold and competitive or full of exploiters, we often view them as a threat and treat them accordingly. After learning the group's intentions, though, we also want to know whether they are competent enough to act on them (if they are incompetent, or unable, their intentions matter less). These two simple dimensions—warmth and competence—together map how groups relate to each other in society.

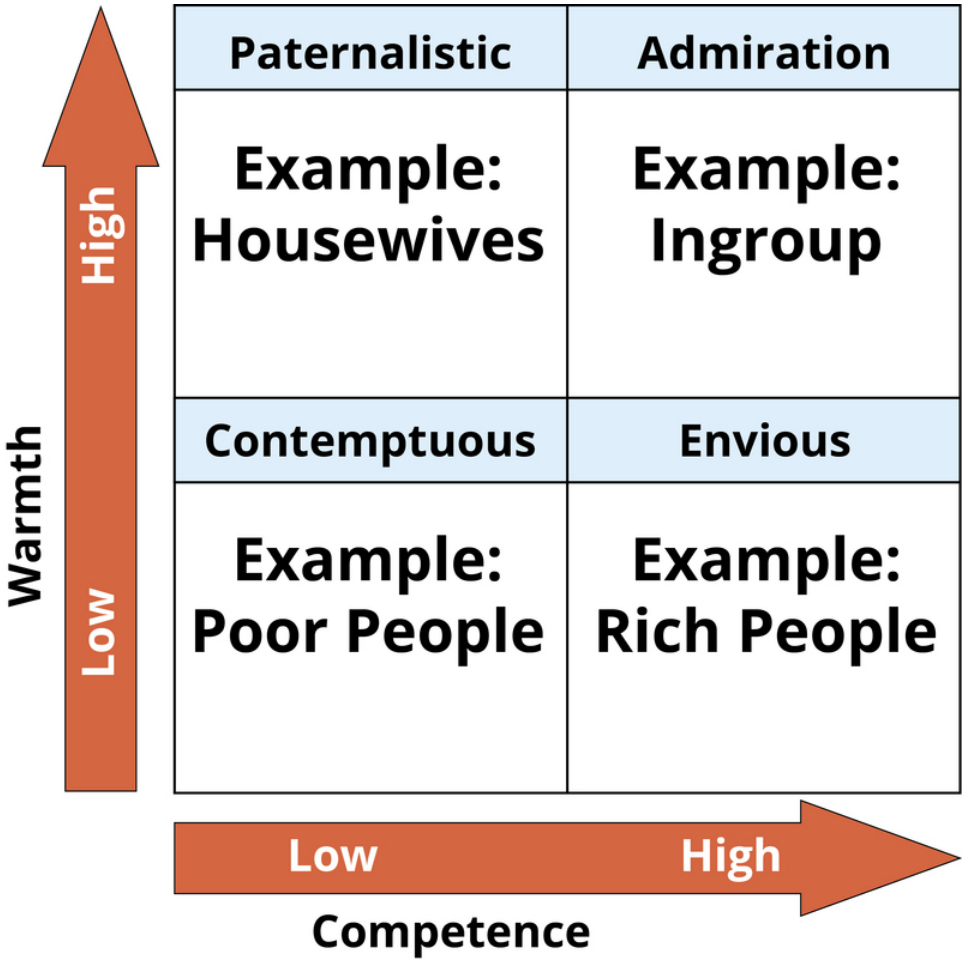


Figure 12.6.1: Stereotype Content Model - 4 kinds of stereotypes that form from perceptions of competence and warmth

There are common stereotypes of people from all sorts of categories and occupations that lead them to be classified along these two dimensions. For example, a stereotypical "housewife" would be seen as high in warmth but lower in competence. This is not to

suggest that actual housewives are not competent, of course, but that they are not widely admired for their competence in the same way as scientific pioneers, trendsetters, or captains of industry. At another end of the spectrum are homeless people and drug addicts, stereotyped as not having good intentions (perhaps exploitative for not trying to play by the rules), and likewise being incompetent (unable) to do anything useful. These groups reportedly make society more disgusted than any other groups do.

Some group stereotypes are mixed, high on one dimension and low on the other. Groups stereotyped as competent but not warm, for example, include rich people and outsiders good at business. These groups that are seen as "competent but cold" make people feel some envy, admitting that these others may have some talent but resenting them for not being "people like us." The "model minority" stereotype mentioned earlier includes people with this excessive competence but deficient sociability.

The other mixed combination is high warmth but low competence. Groups who fit this combination include older people and disabled people. Others report pitying them, but only so long as they stay in their place. In an effort to combat this negative stereotype, disability- and elderly-rights activists try to eliminate that pity, hopefully gaining respect in the process.

Altogether, these four kinds of stereotypes and their associated emotional prejudices (pride, disgust, envy, pity) occur all over the world for each of society's own groups. These maps of the group terrain predict specific types of discrimination for specific kinds of groups, underlining how bias is not exactly equal opportunity.

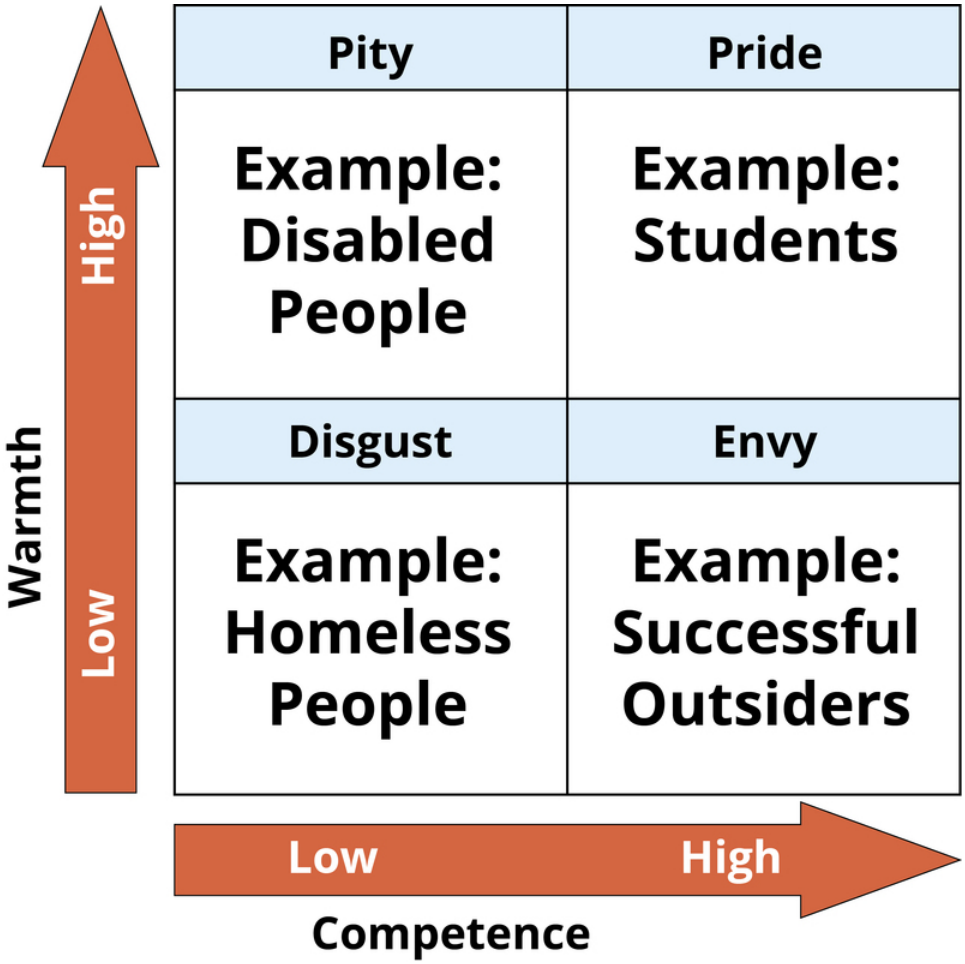


Figure 12.6.2: Combinations of perceived warmth and confidence and the associated behaviors/emotional prejudices.

Conclusion: 21st Century Prejudices

As the world becomes more interconnected—more collaborations between countries, more intermarrying between different groups—more and more people are encountering greater diversity of others in everyday life. Just ask yourself if you've ever been asked, "What *are* you?" Such a question would be preposterous if you were only surrounded by members of your own group. Categories, then, are becoming more and more uncertain, unclear, volatile, and complex (Bodenhausen & Peery, 2009). People's identities are

multifaceted, intersecting across gender, race, class, age, region, and more. Identities are not so simple, but maybe as the 21st century unfurls, we will recognize each other by the content of our character instead of the cover on our outside.

Outside Resources

Web: Website exploring the causes and consequences of prejudice.

http://www.understandingprejudice.org/

Discussion Questions

1. Do you know more people from different kinds of social groups than your parents did?
2. How often do you hear people criticizing groups without knowing anything about them?
3. Take the IAT. Could you feel that some associations are easier than others?
4. What groups illustrate ambivalent biases, seemingly competent but cold, or warm but incompetent?
5. Do you or someone you know believe that group hierarchies are inevitable? Desirable?
6. How can people learn to get along with people who seem different from them?

Vocabulary

Automatic bias

Automatic biases are unintended, immediate, and irresistible.

Aversive racism

Aversive racism is unexamined racial bias that the person does not intend and would reject, but that avoids inter-racial contact.

Blatant biases

Blatant biases are conscious beliefs, feelings, and behavior that people are perfectly willing to admit, are mostly hostile, and openly favor their own group.

Discrimination

Discrimination is behavior that advantages or disadvantages people merely based on their group membership.

Implicit Association Test

Implicit Association Test (IAT) measures relatively automatic biases that favor own group relative to other groups.

Prejudice

Prejudice is an evaluation or emotion toward people merely based on their group membership.

Right-wing authoritarianism

Right-wing authoritarianism (RWA) focuses on value conflicts but endorses respect for obedience and authority in the service of group conformity.

Self-categorization theory

Self-categorization theory develops social identity theory's point that people categorize themselves, along with each other into groups, favoring their own group.

Social dominance orientation

Social dominance orientation (SDO) describes a belief that group hierarchies are inevitable in all societies and even good, to maintain order and stability.

Social identity theory

Social identity theory notes that people categorize each other into groups, favoring their own group.

Stereotype Content Model

Stereotype Content Model shows that social groups are viewed according to their perceived warmth and competence.

Stereotypes

Stereotype is a belief that characterizes people based merely on their group membership.

Subtle biases

Subtle biases are automatic, ambiguous, and ambivalent, but real in their consequences.

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6.2: Aggression and Violence

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This module discusses the causes and consequences of human aggression and violence. Both internal and external causes are considered. Effective and ineffective techniques for reducing aggression are also discussed.

learning objectives

- Explain the important components of the definition of aggression, and explain how aggression differs from violence.
- Explain whether people think the world is less violent now than in the past, and whether it actually is less violent. If there is a discrepancy between perception and reality, how can it be resolved?
- Identify the internal causes and external causes of aggression. Compare and contrast how the inner and external causes differ.
- Identify effective and ineffective approaches to reducing aggression.

Introduction

"*Beware of the dark side. Anger, fear, aggression; the dark side of the Force are they.*"

-Yoda, renowned Jedi master in the *Star Wars* universe

Aggression is indeed the dark side of human nature. Although aggression may have been adaptive in our ancient past, it hardly seems adaptive today. For example, on 14 December 2012 Adam Lanza, age 20, first killed his mother in their home, and then went to an elementary school in Newtown, Connecticut and began shooting, killing 20 children and 6 school employees, before killing himself. When incidents such as these happen, we want to know what caused them. Although it is impossible to know what motivated a particular individual such as Lanza to commit the Newtown school shooting, for decades researchers have studied the internal and external factors that influence aggression and violence. We consider some of these factors in this module.



How much do internal causes such as personality versus external causes such as situations play in aggression? [Image: Dan4th Nicolas, https://goo.gl/RtC4Hi, CC BY 2.0, goo.gl/9uSnqN]

Before we get too far, let's begin by defining the term "aggression." Laypeople and researchers often use the term "aggression" differently. Laypeople might describe a salesperson that tries really hard to sell them something as "aggressive." The salesperson does not, however, want to harm potential customers. Most researchers define **aggression** as any behavior intended to harm another person who does not want to be harmed (Baron & Richardson, 1994). This definition includes three important features. First, aggression is a behavior—you can see it. Aggression is not an internal response, such as having angry feelings or aggressive thoughts (although such internal responses can increase the likelihood of actual aggression). Second, aggression is intentional rather than accidental. For example, a dentist might intentionally give a patient a shot of Novocain (which hurts!), but the goal is to help rather than harm the patient. Third, the victim wants to avoid the harm. Thus, suicide and sadomasochistic sex play would not be called aggression because the victim actively seeks to be harmed.

Researchers and laypeople also differ in their use of the term violence. A meteorologist might call a storm "violent" if it has intense winds, rain, thunder, lightning, or hail. Researchers define **violence** as aggression intended to cause extreme physical harm (e.g., injury, death). Thus, all violent acts are aggressive, but not all aggressive acts are violent. For example, screaming and swearing at another person is aggressive, but not violent.

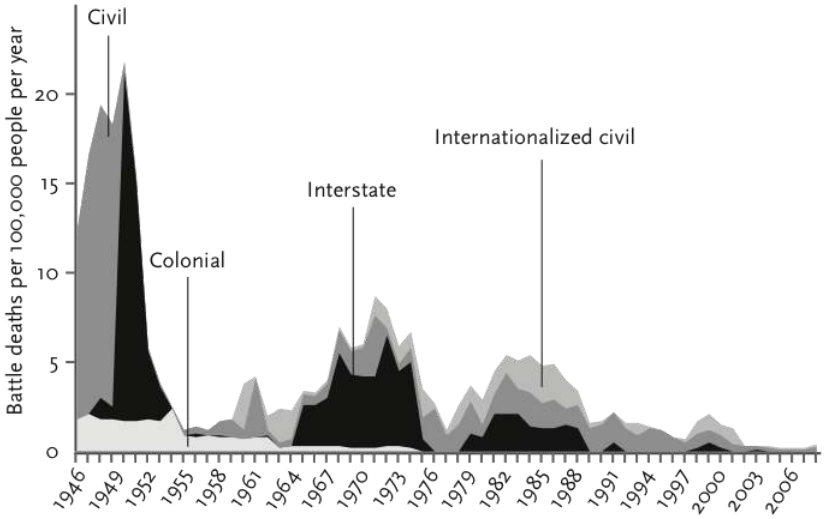


Figure 12.8.1: Rate of battle deaths in state-based armed conflicts, 1946-2008. Civilian and military battle deaths in state-based armed conflicts, divided by world population. Sources: UCDP/PRIO Armed Conflict Dataset; see Human Security Report Project (2007), based on data from Lacina and Gleditsch (2005), updated in 2010 by Tara Cooper. "Best" estimate used when available; otherwise the geometric mean of the "High" and "Low" estimates is used. World population figures from U.S. Census Bureau (2010). Population data for 1946-1949 were taken from McEvedy and Jones (1978), and multiplied by 1.01 to make them commensurate with the rest. From Pinker (2011, p. 301). Copyright permission granted by Steven Pinker.

The good news is that the level of violence in the world is decreasing over time—by millennia, century, and even decade (Pinker, 2011). Studies of body counts, such as the proportion of prehistoric skeletons with axe and arrowhead wounds, suggest that prehistoric societies were far more violent than those today. Estimates show that if the wars of the 20th century had killed the same proportion of the population as ancient tribal wars did, then the death toll would have been 20 times higher—2 billion rather than 100 million. More recent data show that murder rates in Europe have decreased dramatically since the Middle Ages. For example, estimated murders in England dropped from 24 per 100,000 in the 14th century to 0.6 per 100,000 by the early 1960s. The major decline in violence occurred in the 17th century during the "Age of Reason," which began in the Netherlands and England and then spread to other European countries. Global violence has also steadily decreased since the middle of the 20th century. For example, the number of battle deaths in interstate wars has declined from more than 65,000 per year in the 1950s to fewer than 2,000 per year in the 2000s. There have also been global declines in the number of armed conflicts and combat deaths, the number of military coups, and the number of deadly violence campaigns waged against civilians. For example, Figure 12.8.1 shows the number of battle deaths per 100,000 people per year over 60 years (see Pinker, 2011, p. 301). As can be seen, battle deaths of all types (civil, colonial, interstate, internationalized civil) have decreased over time. The claim that violence has decreased dramatically over time may seem hard to believe in today's digital age when we are constantly bombarded by scenes of violence in the media. In the news media, the top stories are the most violent ones—"If it bleeds it leads," so the saying goes. Citizen journalists around the world also use social media to "show and tell" the world about unjustified acts of violence. Because violent images are more available to us now than ever before, we incorrectly assume that violence levels are also higher. Our tendency to overestimate the amount of violence in the world is due to the **availability heuristic**, which is the tendency to judge the frequency or likelihood of an event by the ease with which relevant instances come to mind. Because we are frequently exposed to scenes of violence in the mass media, acts of violence are readily accessible in memory and come to mind easily, so we assume violence is more common than it actually is.

Human aggression is very complex and is caused by multiple factors. We will consider a few of the most important internal and external causes of aggression. Internal causes include anything the individual brings to the situation that increases the probability of aggression. External causes include anything in the environment that increases the probability of aggression. Finally, we will consider a few strategies for reducing aggression.

Internal Factors

Age

At what age are people most aggressive? You might be surprised to learn that toddlers 1 to 3 years old are most aggressive. Toddlers often rely on physical aggression to resolve conflict and get what they want. In free play situations, researchers have found that 25 percent of their interactions are aggressive (Tremblay, 2000). No other group of individuals (e.g., Mafia, street gangs) resorts to aggression 25 percent of the time. Fortunately for the rest of us, most toddler aggression isn't severe enough to qualify as violence because they don't use weapons, such as guns and knives. As children grow older, they learn to inhibit their aggressive impulses and resolve conflict using nonaggressive means, such as compromise and negotiation. Although most people become less aggressive over time, a small subset of people becomes *more*aggressive over time. The most dangerous years for this small subset of people (and for society as a whole) are late adolescence and early adulthood. For example, 18- to 24-year-olds commit most murders in the U.S. (U.S. Federal Bureau of Investigation, 2012).

Gender

At all ages, males tend to be more physically aggressive than females. However, it would be wrong to think that females are never physically aggressive. Females do use physical aggression, especially when they are provoked by other females (Collins, Quigley, & Leonard, 2007). Among heterosexual partners, women are actually slightly *more* likely than men to use physical aggression (Archer, 2000). However, when men do use physical aggression, they are more likely than women to cause serious injuries and even death to their partners. When people are strongly provoked, gender differences in aggression shrink (Bettencourt & Miller, 1996).

Females are much more likely than males to engage in **relational aggression**, defined as intentionally harming another person's social relationships, feelings of acceptance, or inclusion within a group (Crick & Grotpeter, 1995). Examples of relational aggression include gossiping, spreading rumors, withdrawing affection to get what you want, excluding someone from your circle of friends, and giving someone the "silent treatment."



Both physical and relational aggression are serious problems in schools and among adolescents. [Image: Elizabet21, goo.gl/klf5Pg, CC BY-SA 4.0, goo.gl/vUS6LW]

Personality Traits Related to Aggression

Some people seem to be cranky and aggressive almost all the time. Aggressiveness is almost as stable as intelligence over time (Olweus, 1979). Individual differences in aggressiveness are often assessed using self-report questionnaires such as the "Aggression Questionnaire" (Buss & Perry, 1992), which includes items such as "I get into fights a little more than the average person" and "When frustrated, I let my irritation show." Scores on these questionnaires are positively related to actual aggressive and violent behaviors (Anderson & Bushman, 1997).

The components of the “Dark Triad of Personality”—narcissism, psychopathy, and Machiavellianism—are also related to aggression (Paulhus & Williams, 2002). The term “narcissism” comes from the mythical Greek character Narcissus who fell in love with his own image reflected in the water. Narcissists have inflated egos, and they lash out aggressively against others when their inflated egos are threatened (e.g., Bushman & Baumeister, 1998). It is a common myth that aggressive people have low self-esteem (Bushman et al., 2009). Psychopaths are callous individuals who lack empathy for others. One of the strongest deterrents of aggression is empathy, which psychopaths lack. The term “Machiavellianism” comes from the Italian philosopher and writer Niccolò Machiavelli, who advocated using any means necessary to gain raw political power, including aggression and violence.

Hostile Cognitive Biases

One key to keeping aggression in check is to give people the benefit of the doubt. Some people, however, do just the opposite. There are three hostile cognitive biases. The **hostile attribution bias** is the tendency to perceive ambiguous actions by others as hostile actions (Dodge, 1980). For example, if a person bumps into you, a hostile attribution would be that the person did it on purpose and wants to hurt you. The **hostile perception bias** is the tendency to perceive social interactions in general as being aggressive (Dill et al., 1997). For example, if you see two people talking in an animated fashion, a hostile perception would be that they are fighting with each other. The **hostile expectation bias** is the tendency to expect others to react to potential conflicts with aggression (Dill et al., 1997). For example, if you bump into another person, a hostile expectation would be that the person will assume that you did it on purpose and will attack you in return. People with hostile cognitive biases view the world as a hostile place.

External Factors



Are there some situations that are particularly frustrating to you – friends not texting you back, no wi-fi connection available, someone walking at a slow pace in front of you? These situations make make you more likely than usual to behave aggressively. [Image: Syd Daoust, https://goo.gl/Qn9HMu, CC BY-NC-SA 2.0, goo.gl/iF4hmM]

One of the earliest theories of aggression proposed that aggression is caused by frustration, which was defined as blocking goal-directed behavior (Dollard et al., 1939). For example, if you are standing in a long line to purchase a ticket, it is frustrating when someone crowds in front of you. This theory was later expanded to say that all unpleasant events, not just frustrations, cause aggression (Berkowitz, 1989). Unpleasant events such as frustrations, provocations, social rejections, hot temperatures, loud noises, bad air (e.g., pollution, foul odors, secondhand smoke), and crowding can all cause aggression. Unpleasant events automatically trigger a fight–flight response.

Weapons

Obviously, *using* a weapon can increase aggression and violence, but can just *seeing* a weapon increase aggression? To find out, researchers sat angry participants at a table that had a shotgun and a revolver on it—or, in the control condition, badminton racquets and shuttlecocks (Berkowitz & LePage, 1967). The items on the table were supposedly part of a different study, but the researcher had forgotten to put them away. The participant was supposed to decide what level of electric shock to deliver to a person pretending to be another participant, and the electric shocks were used to measure aggression. The experimenter told participants to ignore the items on the table, but apparently they could not. Participants who saw the guns gave more shocks than did participants who saw the sports items. Several other studies have replicated this so-called **weapons effect**, including some conducted outside the lab (Carlson, Marcus-Newhall, & Miller, 1990). For example, one study found that motorists were more likely to honk their horns at another driver stalled in a pickup truck with a rifle visible in his rear window than in response to the same delay from the same truck, but with no gun (Turner, Layton, & Simons, 1975). When you think about it, you would have to be pretty stupid to honk your horn at a driver with a rifle in his truck. However, drivers were probably responding in an automatic rather than a

deliberate manner. Other research has shown drivers who have guns in their vehicles are more aggressive drivers than those without guns in their vehicles (Hemenway, Vriniotis, & Miller, 2006).

Violent Media



There have been hundreds of studies in recent decades looking at the effects of violent video games on behavior. A comprehensive review of these studies found that violent games increase aggressive thoughts, angry feelings, and aggressive behaviors and decrease empathic feelings and prosocial behaviors. [Image: Sergey Galyonkin, https://goo.gl/8fqUx3, CC BY-SA 2.0, goo.gl/jSSrcO]

There are plenty of aggressive cues in the mass media, such as in TV programs, films, and video games. In the U.S., the Surgeon General warns the public about threats to their physical and mental health. Most Americans know that the U.S. Surgeon General issued a warning about cigarettes in 1964: “Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.” However, most Americans do not know that the U.S. Surgeon General issued a warning regarding violent TV programs in 1972: “It is clear to me that the causal relationship between televised violence and antisocial behavior is sufficient to warrant appropriate and immediate remedial action. . . . There comes a time when the data are sufficient to justify action. That time has come” (Steinfeld, 1972). Since then, hundreds of additional studies have shown that all forms of violent media can increase aggression (e.g., Anderson & Bushman, 2002). Violent video games might even be more harmful than violent TV programs, for at least three reasons. First, playing a video game is active, whereas watching a TV program is passive. Active involvement enhances learning. One study found that boys who played a violent video game were more aggressive afterward than were boys who merely watched the same game (Polman, Orobio de Castro, & van Aken, 2008). Second, video game players are more likely to identify with a violent character than TV watchers. If the game involves a first-person shooter, players have the same visual perspective as the killer. If the game is third person, the player controls the character’s actions from a more distant visual perspective. In either case, the player is linked to a violent character. Research has shown that people are more aggressive when they identify with a violent character (e.g., Konijn, Nije Bijvank, & Bushman, 2007). Third, violent games directly reward players for violent behavior by awarding points or by allowing them to advance in the game. In some games, players are also rewarded through verbal praise, such as hearing “Impressive!” after killing an enemy. In TV programs, reward is not directly tied to the viewer’s behavior. It is well known that rewarding behavior increases its frequency. One study found that players were more aggressive after playing a violent game that rewarded violent actions than after playing the same game that punished violent actions (Carnagey & Anderson, 2005). The evidence linking violent video games to aggression is compelling. A comprehensive review found that violent games increase aggressive thoughts, angry feelings, and aggressive behaviors and decrease empathic feelings and prosocial behaviors (Anderson et

al., 2010). Similar effects were obtained for males and females, regardless of their age, and regardless of what country they were from.

Alcohol

Alcohol has long been associated with aggression and violence. In fact, sometimes alcohol is deliberately used to promote aggression. It has been standard practice for many centuries to issue soldiers some alcohol before they went into battle, both to increase aggression and reduce fear (Keegan, 1993). There is ample evidence of a link between alcohol and aggression, including evidence from experimental studies showing that consuming alcohol can *cause* an increase in aggression (e.g., Lipsey, Wilson, Cohen, & Derzon, 1997). Most theories of intoxicated aggression fall into one of two categories: (a) pharmacological theories that focus on how alcohol disrupts cognitive processes, and (b) expectancy theories that focus on how social attitudes about alcohol facilitate aggression. Normally, people have strong inhibitions against behaving aggressively, and pharmacological models focus on how alcohol reduces these inhibitions. To use a car analogy, alcohol increases aggression by cutting the brake line rather than by stepping on the gas. How does alcohol cut the brake line? Alcohol disrupts cognitive executive functions that help us organize, plan, achieve goals, and inhibit inappropriate behaviors (Giancola, 2000). Alcohol also reduces glucose, which provides energy to the brain for self-control (Gailliot & Baumeister, 2007). Alcohol has a "myopic" effect on attention—it causes people to focus attention only on the most salient features of a situation and not pay attention to more subtle features (Steele & Josephs, 1990). In some places where alcohol is consumed (e.g., crowded bar), provocations can be salient. Alcohol also reduces self-awareness, which decreases attention to internal standards against behaving aggressively (Hull, 1981).

According to expectancy theories, alcohol increases aggression because people expect it to. In our brains, alcohol and aggression are strongly linked together. Indeed, research shows that subliminally exposing people to alcohol-related words (e.g., vodka) can make them more aggressive, even though they do not drink one drop of alcohol (Subra et al., 2010). In many cultures, drinking occasions are culturally agreed-on "time out" periods where people are not held responsible for their actions (MacAndrew & Edgerton, 1969). Those who behave aggressively when intoxicated sometimes "blame the bottle" for their aggressive actions.

Does this research evidence mean that aggression is somehow contained in alcohol? No. Alcohol increases rather than causes aggressive tendencies. Factors that normally increase aggression (e.g., frustrations and other unpleasant events, aggressive cues) have a stronger effect on intoxicated people than on sober people (Bushman, 1997). In other words, alcohol mainly seems to increase aggression in combination with other factors. If someone insults or attacks you, your response will probably be more aggressive if you are drunk than sober. When there is no provocation, however, the effect of alcohol on aggression may be negligible. Plenty of people enjoy an occasional drink without becoming aggressive.

Reducing Aggression

Most people are greatly concerned about the amount of aggression in society. Aggression directly interferes with our basic needs of safety and security. Thus, it is urgent to find ways to reduce aggression. Because there is no single cause for aggression, it is difficult to design effective treatments. A treatment that works for one individual may not work for another individual. And some extremely aggressive people, such as psychopaths, are considered to be untreatable. Indeed, many people have started to accept the fact that aggression and violence have become an inevitable, intrinsic part of our society. This being said, there certainly are things that can be done to reduce aggression and violence. Before discussing some effective methods for reducing aggression, two ineffective methods need to be debunked: catharsis and punishment.

Catharsis

The term **catharsis** dates back to Aristotle and means to cleanse or purge. Aristotle taught that viewing tragic plays gave people emotional release from negative emotions. In Greek tragedy, the heroes didn't just grow old and retire—they are often murdered. Sigmund Freud revived the ancient notion of catharsis by proposing that people should express their bottled-up anger. Freud believed if they repressed it, negative emotions would build up inside the individual and surface as psychological disorders. According to catharsis theory, acting aggressively or even viewing aggression purges angry feelings and aggressive impulses into harmless channels. Unfortunately for catharsis theory, research shows the opposite often occurs (e.g., Geen & Quanty, 1977).

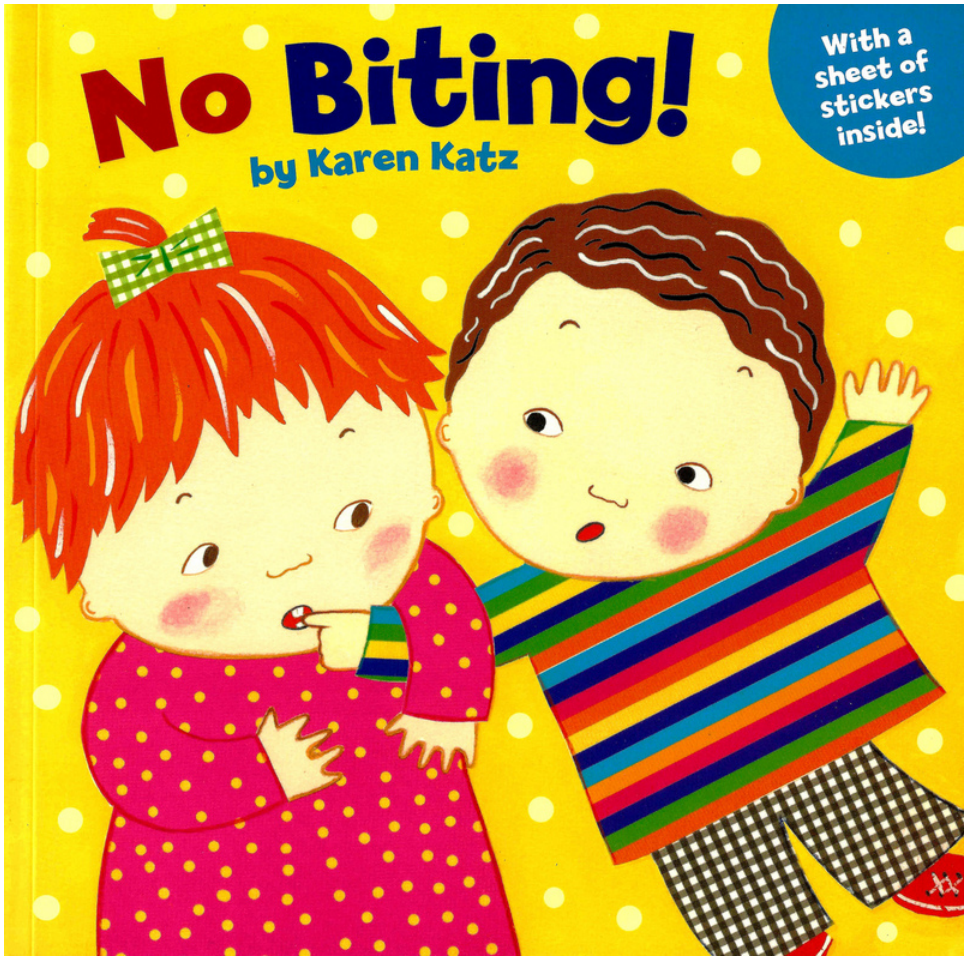
If venting anger doesn't get rid of it, what does? All emotions, including anger, consist of bodily states (e.g., arousal) and mental meanings. To get rid of anger, you can focus on either of those. Anger can be reduced by getting rid of the arousal state, such as by relaxing, listening to calming music, or counting to 10 before responding. Mental tactics can also reduce anger, such as by

reframing the situation or by distracting oneself and turning one's attention to more pleasant topics. Incompatible behaviors can also help get rid of anger. For example, petting a puppy, watching a comedy, kissing your lover, or helping someone in need, because those acts are incompatible with anger and, therefore, they make the angry state impossible to sustain (e.g., Baron, 1976). Viewing the provocative situation from a more distant perspective, such as that of a fly on the wall, also helps (Mischkowski, Kross, & Bushman, 2012).

Punishment

Most cultures assume that punishment is an effective way to deter aggression and violence. **Punishment** is defined as inflicting pain or removing pleasure for a misdeed. Punishment can range in intensity from spanking a child to executing a convicted killer. Parents use it, organizations use it, and governments use it, but does it work? Today, aggression researchers have their doubts. Punishment is most effective when it is: (a) intense, (b) prompt, (c) applied consistently and with certainty, (d) perceived as justified, and (e) possible to replace the undesirable punished behavior with a desirable alternative behavior (Berkowitz, 1993). Even if punishment occurs under these ideal conditions, it may only suppress aggressive behavior temporarily, and it has several undesirable long-term consequences. Most important, punishment models the aggressive behavior it seeks to prevent. Longitudinal studies have shown that children who are physically punished by their parents at home are more aggressive outside the home, such as in school (e.g., Lefkowitz, Huesmann, & Eron, 1978). Because punishment is unpleasant, it can also trigger aggression just like other unpleasant events.

Successful Interventions



One of the ways to circumvent the violent reactions of children who may eventually grow up to be aggressive adults is to model constructive responses to stress and frustration. [Image: Vernon Barford School Library, https://goo.gl/ByOiBc, CC BY-NC-SA 2.0, goo.gl/Toc0ZF]

Although specific aggression intervention strategies cannot be discussed in any detail here, there are two important general points to be made. First, successful interventions target as many causes of aggression as possible and attempt to tackle them collectively.

Interventions that are narrowly focused at removing a single cause of aggression, however well conducted, are bound to fail. In general, external causes are easier to change than internal causes. For example, one can reduce exposure to violent media or alcohol consumption, and make unpleasant situations more tolerable (e.g., use air conditioners when it is hot, reduce crowding in stressful environments such as prisons and psychiatric wards).

Second, aggression problems are best treated in early development, when people are still malleable. As was mentioned previously, aggression is very stable over time, almost as stable as intelligence. If young children display excessive levels of aggression (often in the form of hitting, biting, or kicking), it places them at high risk for becoming violent adolescents and even violent adults. It is much more difficult to alter aggressive behaviors when they are part of an adult personality, than when they are still in development.

Yoda warned that anger, fear, and aggression are the dark side of the Force. They are also the dark side of human nature. Fortunately, aggression and violence are decreasing over time, and this trend should continue. We also know a lot more now than ever before about what factors increase aggression and how to treat aggressive behavior problems. When Luke Skywalker was going to enter the dark cave on Degobah (the fictional *Star Wars* planet), Yoda said, "Your weapons, you will not need them." Hopefully, there will come a time in the not-too-distant future when people all over the world will no longer need weapons.

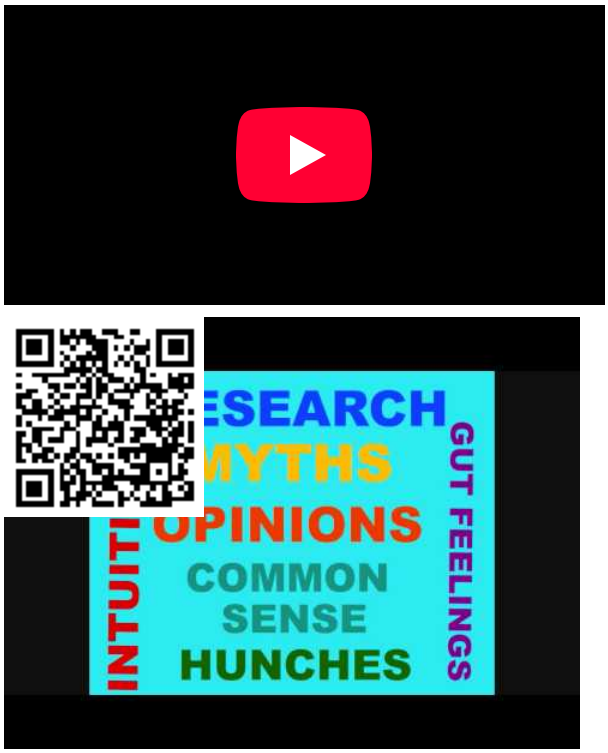
Outside Resources

Book: Bushman, B. J., & Huesmann, L. R. (2010). Aggression. In S. T. Fiske, D. T. Gilbert, & G. Lindzey (Eds.), *Handbook of social psychology* (5th ed.) (pp. 833-863). New York: John Wiley & Sons.

TED Talk: Zak Ebrahim

https://www.ted.com/talks/zak_ebrahim_i_am_the_son_of_a_terrorist_here_s_how_i_chose_peace?language=en#t-528075

Video: From the Inquisitive Mind website, Brad Bushman conducts a short review of terminology and important research concerning aggression and violence.



Discussion Questions

1. Discuss whether different examples (hypothetical and real) meet the definition of aggression and the definition of violence.
2. Why do people deny the harmful effects of violent media when the research evidence linking violent media to aggression is so conclusive?

3. Consider the various causes of aggression described in this module and elsewhere, and discuss whether they can be changed to reduce aggression, and if so how.

Vocabulary

Aggression

Any behavior intended to harm another person who does not want to be harmed.

Availability heuristic

The tendency to judge the frequency or likelihood of an event by the ease with which relevant instances come to mind.

Catharsis

Greek term that means to cleanse or purge. Applied to aggression, catharsis is the belief that acting aggressively or even viewing aggression purges angry feelings and aggressive impulses into harmless channels.

Hostile attribution bias

The tendency to perceive ambiguous actions by others as aggressive.

Hostile expectation bias

The tendency to assume that people will react to potential conflicts with aggression.

Hostile perception bias

The tendency to perceive social interactions in general as being aggressive.

Punishment

Inflicting pain or removing pleasure for a misdeed. Punishment decreases the likelihood that a behavior will be repeated.

Relational aggression

Intentionally harming another person's social relationships, feelings of acceptance, or inclusion within a group.

Violence

Aggression intended to cause extreme physical harm, such as injury or death.

Weapons effect

The increase in aggression that occurs as a result of the mere presence of a weapon.

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CHAPTER OVERVIEW

7: POSITIVE RELATIONSHIPS

7.1: Helping and Prosocial Behavior

7.2: Cooperation

7.3: Attraction and Beauty

7.4: Positive Relationships

7.5: Love, Friendship, and Social Support

7.6: Attachment Through the Life Course

7.7: Relationships and Well-being

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7.1: Helping and Prosocial Behavior

By Dennis L. Poepsel and David A. Schroeder

Truman State University, University of Arkansas

People often act to benefit other people, and these acts are examples of prosocial behavior. Such behaviors may come in many guises: helping an individual in need; sharing personal resources; volunteering time, effort, and expertise; cooperating with others to achieve some common goals. The focus of this module is on helping—prosocial acts in dyadic situations in which one person is in need and another provides the necessary assistance to eliminate the other's need. Although people are often in need, help is not always given. Why not? The decision of whether or not to help is not as simple and straightforward as it might seem, and many factors need to be considered by those who might help. In this module, we will try to understand how the decision to help is made by answering the question: Who helps when and why?

learning objectives

- Learn which situational and social factors affect when a bystander will help another in need.
- Understand which personality and individual difference factors make some people more likely to help than others.
- Discover whether we help others out of a sense of altruistic concern for the victim, for more self-centered and egoistic motives, or both.

Introduction



People often overestimate their willingness to help others in need especially when they are asked about a hypothetical situation rather than encountering one in real life. [Image: Ed Yourdon, https://goo.gl/BYFmcu, CC BY-NC-SA 2.0, goo.gl/Toc0ZF]

Go to YouTube and search for episodes of "Primetime: What Would You Do?" You will find video segments in which apparently innocent individuals are victimized, while onlookers typically fail to intervene. The events are all staged, but they are very real to the bystanders on the scene. The entertainment offered is the nature of the bystanders' responses, and viewers are outraged when bystanders fail to intervene. They are convinced that they would have helped. But would they? Viewers are overly optimistic in their beliefs that they would play the hero. Helping may occur frequently, but help is not always given to those in need. So *when* do

people help, and when do they not? All people are not equally helpful—*who* helps? *Why* would a person help another in the first place? Many factors go into a person's decision to help—a fact that the viewers do not fully appreciate. This module will answer the question: Who helps when and why?

When Do People Help?

Social psychologists began trying to answer this question following the unfortunate murder of Kitty Genovese in 1964 (Dovidio, Piliavin, Schroeder, & Penner, 2006; Penner, Dovidio, Piliavin, & Schroeder, 2005). A knife-wielding assailant attacked Kitty repeatedly as she was returning to her apartment early one morning. At least 38 people may have been aware of the attack, but no one came to save her. More recently, in 2010, Hugo Alfredo Tale-Yax was stabbed when he apparently tried to intervene in an argument between a man and woman. As he lay dying in the street, only one man checked his status, but many others simply glanced at the scene and continued on their way. (One passerby did stop to take a cellphone photo, however.) Unfortunately, failures to come to the aid of someone in need are not unique, as the segments on "What Would You Do?" show. Help is not always forthcoming for those who may need it the most. Trying to understand why people do not always help became the focus of **bystander intervention** research (e.g., Latané & Darley, 1970).

To answer the question regarding when people help, researchers have focused on

1. how bystanders come to define emergencies,
2. when they decide to take responsibility for **helping**, and
3. how the costs and benefits of intervening affect their decisions of whether to help.

Defining the situation: The role of pluralistic ignorance

The decision to help is not a simple yes/no proposition. In fact, a series of questions must be addressed before help is given—even in emergencies in which time may be of the essence. Sometimes help comes quickly; an onlooker recently jumped from a Philadelphia subway platform to help a stranger who had fallen on the track. Help was clearly needed and was quickly given. But some situations are ambiguous, and potential helpers may have to decide whether a situation is one in which help, in fact, *needs* to be given.

To define ambiguous situations (including many emergencies), potential helpers may look to the action of others to decide what should be done. But those others are looking around too, also trying to figure out what to do. Everyone is looking, but no one is acting! Relying on others to define the situation and to then erroneously conclude that no intervention is necessary when help is actually needed is called **pluralistic ignorance** (Latané & Darley, 1970). When people use the *inactions* of others to define their own course of action, the resulting pluralistic ignorance leads to less help being given.

Do I have to be the one to help?: Diffusion of responsibility



How does being in a crowd decrease someone's chance of being helped? How does being in a crowd increase someone's chance of being helped? [Image: flowcomm, https://goo.gl/tiRPch, CC BY 2.0, goo.gl/BRvSA7]

Simply being with others may facilitate or inhibit whether we get involved in other ways as well. In situations in which help is needed, the presence or absence of others may affect whether a bystander will assume personal responsibility to give the assistance. If the bystander is alone, personal responsibility to help falls solely on the shoulders of that person. But what if others are present? Although it might seem that having more potential helpers around would increase the chances of the victim getting help, the opposite is often the case. Knowing that someone else *could* help seems to relieve bystanders of personal responsibility, so bystanders do not intervene. This phenomenon is known as **diffusion of responsibility** (Darley & Latané, 1968).

On the other hand, watch the video of the race officials following the 2013 Boston Marathon after two bombs exploded as runners crossed the finish line. Despite the presence of many spectators, the yellow-jacketed race officials immediately rushed to give aid and comfort to the victims of the blast. Each one no doubt felt a personal responsibility to help by virtue of their official capacity in the event; fulfilling the obligations of their roles overrode the influence of the diffusion of responsibility effect.

There is an extensive body of research showing the negative impact of pluralistic ignorance and diffusion of responsibility on helping (Fisher et al., 2011), in both emergencies and everyday need situations. These studies show the tremendous importance potential helpers place on the social situation in which unfortunate events occur, especially when it is not clear what should be done and who should do it. Other people provide important social information about how we should act and what our personal obligations might be. But does knowing a person needs help and accepting responsibility to provide that help mean the person will get assistance? Not necessarily.

The costs and rewards of helping

The nature of the help needed plays a crucial role in determining what happens next. Specifically, potential helpers engage in a **cost–benefit analysis** before getting involved (Dovidio et al., 2006). If the needed help is of relatively low cost in terms of time, money, resources, or risk, then help is more likely to be given. Lending a classmate a pencil is easy; confronting the knife-wielding assailant who attacked Kitty Genovese is an entirely different matter. As the unfortunate case of Hugo Alfredo Tale-Yax demonstrates, intervening may cost the life of the helper.

The potential rewards of helping someone will also enter into the equation, perhaps offsetting the cost of helping. Thanks from the recipient of help may be a sufficient reward. If helpful acts are recognized by others, helpers may receive social rewards of praise or monetary rewards. Even avoiding feelings of guilt if one does not help may be considered a benefit. Potential helpers consider how much helping will cost and compare those costs to the rewards that might be realized; it is the economics of helping. If costs outweigh the rewards, helping is less likely. If rewards are greater than cost, helping is more likely.

Who Helps?

Do you know someone who always seems to be ready, willing, and able to help? Do you know someone who never helps out? It seems there are personality and individual differences in the helpfulness of others. To answer the question of who chooses to help, researchers have examined 1) the role that sex and gender play in helping, 2) what personality traits are associated with helping, and 3) the characteristics of the "prosocial personality."

Who are more helpful—men or women?



Sometimes there are situations that override the gender divide between the helpfulness of men and women and they offer help in equal numbers - for example, volunteering. [Image: Daniel Thornton, goo.gl/Rn7yL0, CC BY 2.0, goo.gl/BRvSA7]

In terms of individual differences that might matter, one obvious question is whether men or women are more likely to help. In one of the "What Would You Do?" segments, a man takes a woman's purse from the back of her chair and then leaves the restaurant. Initially, no one responds, but as soon as the woman asks about her missing purse, a group of men immediately rush out the door to catch the thief. So, are men more helpful than women? The quick answer is "not necessarily." It all depends on the type of help needed. To be very clear, the general level of helpfulness may be pretty much equivalent between the sexes, but men and women help in different ways (Becker & Eagly, 2004; Eagly & Crowley, 1986). What accounts for these differences?

Two factors help to explain sex and gender differences in helping. The first is related to the cost–benefit analysis process discussed previously. Physical differences between men and women may come into play (e.g., Wood & Eagly, 2002); the fact that men tend

to have greater upper body strength than women makes the cost of intervening in some situations less for a man. Confronting a thief is a risky proposition, and some strength may be needed in case the perpetrator decides to fight. A bigger, stronger bystander is less likely to be injured and more likely to be successful.

The second explanation is simple socialization. Men and women have traditionally been raised to play different social roles that prepare them to respond differently to the needs of others, and people tend to help in ways that are most consistent with their gender roles. Female gender roles encourage women to be compassionate, caring, and nurturing; male gender roles encourage men to take physical risks, to be heroic and chivalrous, and to be protective of those less powerful. As a consequence of social training and the gender roles that people have assumed, men may be more likely to jump onto subway tracks to save a fallen passenger, but women are more likely to give comfort to a friend with personal problems (Diekman & Eagly, 2000; Eagly & Crowley, 1986). There may be some specialization in the types of help given by the two sexes, but it is nice to know that there is someone out there —man or woman—who is able to give you the help that you need, regardless of what kind of help it might be.

A trait for being helpful: Agreeableness

Graziano and his colleagues (e.g., Graziano & Tobin, 2009; Graziano, Habishi, Sheese, & Tobin, 2007) have explored how **agreeableness**—one of the Big Five personality dimensions (e.g., Costa & McCrae, 1988)—plays an important role in **prosocial behavior**. Agreeableness is a core trait that includes such dispositional characteristics as being sympathetic, generous, forgiving, and helpful, and behavioral tendencies toward harmonious social relations and likeability. At the conceptual level, a positive relationship between agreeableness and helping may be expected, and research by Graziano et al. (2007) has found that those higher on the agreeableness dimension are, in fact, more likely than those low on agreeableness to help siblings, friends, strangers, or members of some other group. Agreeable people seem to expect that others will be similarly cooperative and generous in interpersonal relations, and they, therefore, act in helpful ways that are likely to elicit positive social interactions.

Searching for the prosocial personality

Rather than focusing on a single trait, Penner and his colleagues (Penner, Fritzsche, Craiger, & Freifeld, 1995; Penner & Orom, 2010) have taken a somewhat broader perspective and identified what they call the **prosocial personality orientation**. Their research indicates that two major characteristics are related to the prosocial personality and prosocial behavior. The first characteristic is called **other-oriented empathy**: People high on this dimension have a strong sense of social responsibility, empathize with and feel emotionally tied to those in need, understand the problems the victim is experiencing, and have a heightened sense of moral obligation to be helpful. This factor has been shown to be highly correlated with the trait of agreeableness discussed previously. The second characteristic, **helpfulness**, is more behaviorally oriented. Those high on the helpfulness factor have been helpful in the past, and because they believe they can be effective with the help they give, they are more likely to be helpful in the future.

Why Help?

Finally, the question of *why* a person would help needs to be asked. What motivation is there for that behavior? Psychologists have suggested that 1) evolutionary forces may serve to predispose humans to help others, 2) egoistic concerns may determine if and when help will be given, and 3) selfless, altruistic motives may also promote helping in some cases.



Evolutionary theory suggests that being a good helper was a benefit for survival and reproductive success. And we don't just help our family members, reciprocal altruism has also been a benefit to our survival. [Image: TimJN1, https://goo.gl/iTQfWk, CC BY-SA 2.0, goo.gl/eH69he]

Our evolutionary past may provide keys about why we help (Buss, 2004). Our very survival was no doubt promoted by the prosocial relations with clan and family members, and, as a hereditary consequence, we may now be especially likely to help those closest to us—blood-related relatives with whom we share a genetic heritage. According to evolutionary psychology, we are helpful in ways that increase the chances that our DNA will be passed along to future generations (Burnstein, Crandall, & Kitayama, 1994)—the goal of the "selfish gene" (Dawkins, 1976). Our personal DNA may not always move on, but we can still be successful in getting some portion of our DNA transmitted if our daughters, sons, nephews, nieces, and cousins survive to produce offspring. The favoritism shown for helping our blood relatives is called **kin selection** (Hamilton, 1964).

But, we do not restrict our relationships just to our own family members. We live in groups that include individuals who are unrelated to us, and we often help them too. Why? **Reciprocal altruism** (Trivers, 1971) provides the answer. Because of reciprocal altruism, we are all better off in the long run if we help one another. If helping someone now increases the chances that you will be helped later, then your overall chances of survival are increased. There is the chance that someone will take advantage of your help and not return your favors. But people seem predisposed to identify those who fail to reciprocate, and punishments including social exclusion may result (Buss, 2004). Cheaters will not enjoy the benefit of help from others, reducing the likelihood of the survival of themselves and their kin.

Evolutionary forces may provide a general inclination for being helpful, but they may not be as good an explanation for why we help in the here and now. What factors serve as proximal influences for decisions to help?

Egoistic motivation for helping

Most people would like to think that they help others because they are concerned about the other person's plight. In truth, the reasons why we help may be more about ourselves than others: Egoistic or selfish motivations may make us help. Implicitly, we may ask, "What's in it *for me*?" There are two major theories that explain what types of reinforcement helpers may be seeking. The **negative state relief model** (e.g., Cialdini, Darby, & Vincent, 1973; Cialdini, Kenrick, & Baumann, 1982) suggests that people sometimes help in order to make themselves feel better. Whenever we are feeling sad, we can use helping someone else as a

positive mood boost to feel happier. Through socialization, we have learned that helping can serve as a secondary reinforcement that will relieve negative moods (Cialdini & Kenrick, 1976).

The **arousal: cost–reward model** provides an additional way to understand why people help (e.g., Piliavin, Dovidio, Gaertner, & Clark, 1981). This model focuses on the aversive feelings aroused by seeing another in need. If you have ever heard an injured puppy yelping in pain, you know that feeling, and you know that the best way to relieve that feeling is to help and to comfort the puppy. Similarly, when we see someone who is suffering in some way (e.g., injured, homeless, hungry), we vicariously experience a sympathetic arousal that is unpleasant, and we are motivated to eliminate that aversive state. One way to do that is to help the person in need. By eliminating the victim's pain, we eliminate our own aversive arousal. Helping is an effective way to alleviate our own discomfort.

As an egoistic model, the arousal: cost–reward model explicitly includes the cost/reward considerations that come into play. Potential helpers will find ways to cope with the aversive arousal that will minimize their costs—maybe by means other than direct involvement. For example, the costs of directly confronting a knife-wielding assailant might stop a bystander from getting involved, but the cost of some *indirect* help (e.g., calling the police) may be acceptable. In either case, the victim's need is addressed. Unfortunately, if the costs of helping are too high, bystanders may reinterpret the situation to justify not helping at all. We now know that the attack of Kitty Genovese was a murderous assault, but it may have been misperceived as a lover's spat by someone who just wanted to go back to sleep. For some, fleeing the situation causing their distress may do the trick (Piliavin et al., 1981).

The egoistically based negative state relief model and the arousal: cost–reward model see the primary motivation for helping as being the helper's own outcome. Recognize that the victim's outcome is of relatively little concern to the helper—benefits to the victim are incidental byproducts of the exchange (Dovidio et al., 2006). The victim may be helped, but the helper's real motivation according to these two explanations is egoistic: Helpers help to the extent that it makes them feel better.

Altruistic help



Altruism is helping with the aim of improving the wellbeing of others. Having a feeling of empathy for others is an important aspect of altruism. [Image: Ed Yourdon, https://goo.gl/MWCLk1, CC BY-NC-SA 2.0, goo.gl/Toc0ZF]

Although many researchers believe that **egoism** is the only motivation for helping, others suggest that **altruism**—helping that has as its ultimate goal the improvement of another's welfare—may also be a motivation for helping under the right circumstances. Batson (2011) has offered the **empathy–altruism model** to explain altruistically motivated helping for which the helper expects no benefits. According to this model, the key for altruism is empathizing with the victim, that is, putting oneself in the shoes of the victim and imagining how the victim must feel. When taking this perspective and having **empathic concern**, potential helpers become primarily interested in increasing the well-being of the victim, even if the helper must incur some costs that might otherwise be easily avoided. The empathy–altruism model does not dismiss egoistic motivations; helpers not empathizing with a victim may experience **personal distress** and have an egoistic motivation, not unlike the feelings and motivations explained by the arousal: cost–reward model. Because egoistically motivated individuals are primarily concerned with their own cost–benefit outcomes, they are less likely to help if they think they can escape the situation with no costs to themselves. In contrast, altruistically motivated helpers are willing to accept the cost of helping to benefit a person with whom they have empathized—this "self-sacrificial" approach to helping is the hallmark of altruism (Batson, 2011).

Although there is still some controversy about whether people can ever act for purely altruistic motives, it is important to recognize that, while helpers may derive some personal rewards by helping another, the help that has been given is also benefitting someone who was in need. The residents who offered food, blankets, and shelter to stranded runners who were unable to get back to their hotel rooms because of the Boston Marathon bombing undoubtedly received positive rewards because of the help they gave, but those stranded runners who were helped got what they needed badly as well. "In fact, it is quite remarkable how the fates of people who have never met can be so intertwined and complementary. Your benefit is mine; and mine is yours" (Dovidio et al., 2006, p. 143).

Conclusion



Helping feels good to the one who helps and the one who is being helped. [Image: International of Red Cross and Red Crescent Societies, https://goo.gl/0DXo8S, CC BY-NC-SA 2.0, goo.gl/Toc0ZF]

We started this module by asking the question, "Who helps when and why?" As we have shown, the question of when help will be given is not quite as simple as the viewers of "What Would You Do?" believe. The power of the situation that operates on potential helpers in real time is not fully considered. What might appear to be a split-second decision to help is actually the result of consideration of multiple situational factors (e.g., the helper's interpretation of the situation, the presence and ability of others to provide the help, the results of a cost–benefit analysis) (Dovidio et al., 2006). We have found that men and women tend to help in different ways—men are more impulsive and physically active, while women are more nurturing and supportive. Personality

characteristics such as agreeableness and the prosocial personality orientation also affect people's likelihood of giving assistance to others. And, why would people help in the first place? In addition to evolutionary forces (e.g., kin selection, reciprocal altruism), there is extensive evidence to show that helping and prosocial acts may be motivated by selfish, egoistic desires; by selfless, altruistic goals; or by some combination of egoistic and altruistic motives. (For a fuller consideration of the field of prosocial behavior, we refer you to Dovidio et al. [2006].)

Outside Resources

Article: Alden, L. E., & Trew, J. L. (2013). If it makes you happy: Engaging in kind acts increases positive affect in socially anxious individuals. Emotion, 13, 64-75. doi:10.1037/a0027761 Review available at:

http://nymag.com/scienceofus/2015/07...y-be-nice.html

Book: Batson, C.D. (2009). *Altruism in humans*. New York, NY: Oxford University Press.

Book: Dovidio, J. F., Piliavin, J. A., Schroeder, D. A., & Penner, L. A. (2006). *The social psychology of prosocial behavior*. Mahwah, NJ: Erlbaum.

Book: Mikuliner, M., & Shaver, P. R. (2010). *Prosocial motives, emotions, and behavior: The better angels of our nature*. Washington, DC: American Psychological Association.

Book: Schroeder, D. A. & Graziano, W. G. (forthcoming). *The Oxford handbook of prosocial behavior*. New York, NY: Oxford University Press.

Institution: Center for Generosity, University of Notre Dame, 936 Flanner Hall, Notre Dame, IN 46556.

http://www.generosityresearch.nd.edu

Institution: The Greater Good Science Center, University of California, Berkeley.

www.greatergood.berkeley.edu

News Article: Bystanders Stop Suicide Attempt

http://jfmueller.faculty.noctrl.edu/crow/bystander.pdf

Social Psychology Network (SPN)

http://www.socialpsychology.org/social.htm#prosocial

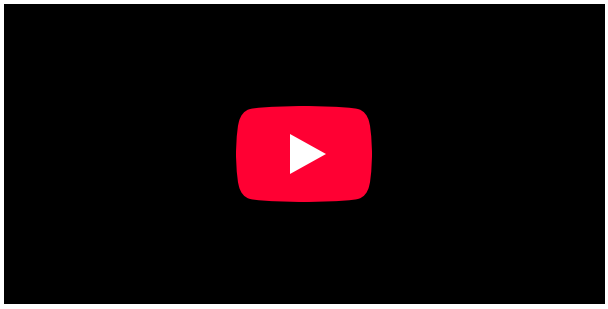
Video: Episodes (individual) of "Primetime: What Would You Do?"

http://www.YouTube.com

Video: Episodes of "Primetime: What Would You Do?" that often include some commentary from experts in the field may be available at

http://www.abc.com

Video: From The Inquisitive Mind website, a great overview of different aspects of helping and pro-social behavior including - pluralistic ignorance, diffusion of responsibility, the bystander effect, and empathy.





Discussion Questions

1. Pluralistic ignorance suggests that inactions by other observers of an emergency will decrease the likelihood that help will be given. What do you think will happen if even one other observer begins to offer assistance to a victim?
2. In addition to those mentioned in the module, what other costs and rewards might affect a potential helper's decision of whether to help? Receiving help to solve some problem is an obvious benefit for someone in need; are there any costs that a person might have to bear as a result of receiving help from someone?
3. What are the characteristics possessed by your friends who are most helpful? By your friends who are least helpful? What has made your helpful friends and your unhelpful friends so different? What kinds of help have they given to you, and what kind of help have you given to them? Are you a helpful person?
4. Do you think that sex and gender differences in the frequency of helping and the kinds of helping have changed over time? Why? Do you think that we might expect more changes in the future?
5. What do you think is the primary motive for helping behavior: egoism or altruism? Are there any professions in which people are being "pure" altruists, or are some egoistic motivations always playing a role?
6. There are other prosocial behaviors in addition to the kind of helping discussed here. People volunteer to serve many different causes and organizations. People come together to cooperate with one another to achieve goals that no one individual could reach alone. How do you think the factors that affect helping might affect prosocial actions such as volunteering and cooperating? Do you think that there might be other factors that make people more or less likely to volunteer their time and energy or to cooperate in a group?

Vocabulary

Agreeableness

A core personality trait that includes such dispositional characteristics as being sympathetic, generous, forgiving, and helpful, and behavioral tendencies toward harmonious social relations and likeability.

Altruism

A motivation for helping that has the improvement of another's welfare as its ultimate goal, with no expectation of any benefits for the helper.

Arousal: cost–reward model

An egoistic theory proposed by Piliavin et al. (1981) that claims that seeing a person in need leads to the arousal of unpleasant feelings, and observers are motivated to eliminate that aversive state, often by helping the victim. A cost–reward analysis may lead observers to react in ways other than offering direct assistance, including indirect help, reinterpretation of the situation, or fleeing the scene.

Bystander intervention

The phenomenon whereby people intervene to help others in need even if the other is a complete stranger and the intervention puts the helper at risk.

Cost–benefit analysis

A decision-making process that compares the cost of an action or thing against the expected benefit to help determine the best course of action.

Diffusion of responsibility

When deciding whether to help a person in need, knowing that there are others who could also provide assistance relieves bystanders of some measure of personal responsibility, reducing the likelihood that bystanders will intervene.

Egoism

A motivation for helping that has the improvement of the helper's own circumstances as its primary goal.

Empathic concern

According to Batson's empathy–altruism hypothesis, observers who empathize with a person in need (that is, put themselves in the shoes of the victim and imagine how that person feels) will experience empathic concern and have an altruistic motivation for helping.

Empathy–altruism model

An altruistic theory proposed by Batson (2011) that claims that people who put themselves in the shoes of a victim and imagining how the victim feel will experience empathic concern that evokes an altruistic motivation for helping.

Helpfulness

A component of the prosocial personality orientation; describes individuals who have been helpful in the past and, because they believe they can be effective with the help they give, are more likely to be helpful in the future.

Helping

Prosocial acts that typically involve situations in which one person is in need and another provides the necessary assistance to eliminate the other's need.

Kin selection

According to evolutionary psychology, the favoritism shown for helping our blood relatives, with the goals of increasing the likelihood that some portion of our DNA will be passed on to future generations.

Negative state relief model

An egoistic theory proposed by Cialdini et al. (1982) that claims that people have learned through socialization that helping can serve as a secondary reinforcement that will relieve negative moods such as sadness.

Other-oriented empathy

A component of the prosocial personality orientation; describes individuals who have a strong sense of social responsibility, empathize with and feel emotionally tied to those in need, understand the problems the victim is experiencing, and have a heightened sense of moral obligations to be helpful.

Personal distress

According to Batson's empathy–altruism hypothesis, observers who take a detached view of a person in need will experience feelings of being "worried" and "upset" and will have an egoistic motivation for helping to relieve that distress.

Pluralistic ignorance

Relying on the actions of others to define an ambiguous need situation and to then erroneously conclude that no help or intervention is necessary.

Prosocial behavior

Social behavior that benefits another person.

Prosocial personality orientation

A measure of individual differences that identifies two sets of personality characteristics (other-oriented empathy, helpfulness) that are highly correlated with prosocial behavior.

Reciprocal altruism

According to evolutionary psychology, a genetic predisposition for people to help those who have previously helped them.

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7.2: Cooperation

By Jake P. Moskowitz and Paul K. Piff

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Humans are social animals. This means we work together in groups to achieve goals that benefit everyone. From building skyscrapers to delivering packages to remote island nations, modern life requires that people cooperate with one another. However, people are also motivated by self-interest, which often stands as an obstacle to effective cooperation. This module explores the concept of cooperation and the processes that both help and hinder it.

learning objectives

- Define "cooperation"
- Distinguish between different social value orientations
- List 2 influences on cooperation
- Explain 2 methods psychologists use to research cooperation

Introduction

As far back as the early 1800s, people imagined constructing a tunnel under the sea to connect France and England. But, digging under the English Channel—a body of water spanning more than 20 miles (32 km)—would be an enormous and difficult undertaking. It would require a massive amount of resources as well as coordinating the efforts of people from two separate nations, speaking two different languages. Not until 1988 did the idea of the Channel Tunnel (or “Chunnel” as it is known) change from dream to reality, as construction began. It took ten different construction companies-- financed by three separate banks-- six years to complete the project. Even today, decades later, the Chunnel is an amazing feat of engineering and collaboration. Seen through the lens of psychological science, it stands as an inspiring example of what is possible when people work together. Humans *need* to cooperate with others to survive and to thrive. **Cooperation**, or the coordination of multiple individuals toward a goal that benefits the entire group, is a fundamental feature of human social life.



The Channel Tunnel – an example of real-world cooperation between people. [Image: Sam Churchill, http://goo.gl/ildZrk, CC BY 2.0, goo.gl/v4Y0Zv]

Whether on the playground with friends, at home with family, or at work with colleagues, cooperation is a natural instinct (Keltner, Kogan, Piff, & Saturn, 2014). Children as young as 14 months cooperate with others on joint tasks (Warneken, Chen, & Tomasello 2006; Warneken & Tomasello, 2007). Humans’ closest evolutionary relatives, chimpanzees and bonobos, maintain long-term cooperative relationships as well, sharing resources and caring for each other’s young (de Waal & Lanting, 1997; Langergraber, Mitani, & Vigilant, 2007). Ancient animal remains found near early human settlements suggest that our ancestors hunted in cooperative groups (Mithen, 1996). Cooperation, it seems, is embedded in our evolutionary heritage.

Yet, cooperation can also be difficult to achieve; there are often breakdowns in people’s ability to work effectively in teams, or in their willingness to collaborate with others. Even with issues that can only be solved through large-scale cooperation, such as climate change and world hunger, people can have difficulties joining forces with others to take collective action. Psychologists

have identified numerous individual and situational factors that influence the effectiveness of cooperation across many areas of life. From the trust that people place in others to the lines they draw between “us” and “them,” many different processes shape cooperation. This module will explore these individual, situational, and cultural influences on cooperation.

The Prisoner’s Dilemma

Imagine that you are a participant in a social experiment. As you sit down, you are told that you will be playing a game with another person in a separate room. The other participant is also part of the experiment but the two of you will never meet. In the experiment, there is the possibility that you will be awarded some money. Both you and your unknown partner are required to make a choice: either choose to “cooperate,” maximizing your combined reward, or “defect,” (not cooperate) and thereby maximize your individual reward. The choice you make, along with that of the other participant, will result in one of three unique outcomes to this task, illustrated below in Figure 11.6.1. If you and your partner *both cooperate* (1), you will each receive $5. If you and your partner *both defect* (2), you will each receive $2. However, if *one partner defects and the other partner cooperates* (3), the defector will receive $8, while the cooperator will receive nothing. Remember, you and your partner cannot discuss your strategy. Which would you choose? Striking out on your own promises big rewards but you could also lose everything. Cooperating, on the other hand, offers the best benefit for the most people but requires a high level of trust.

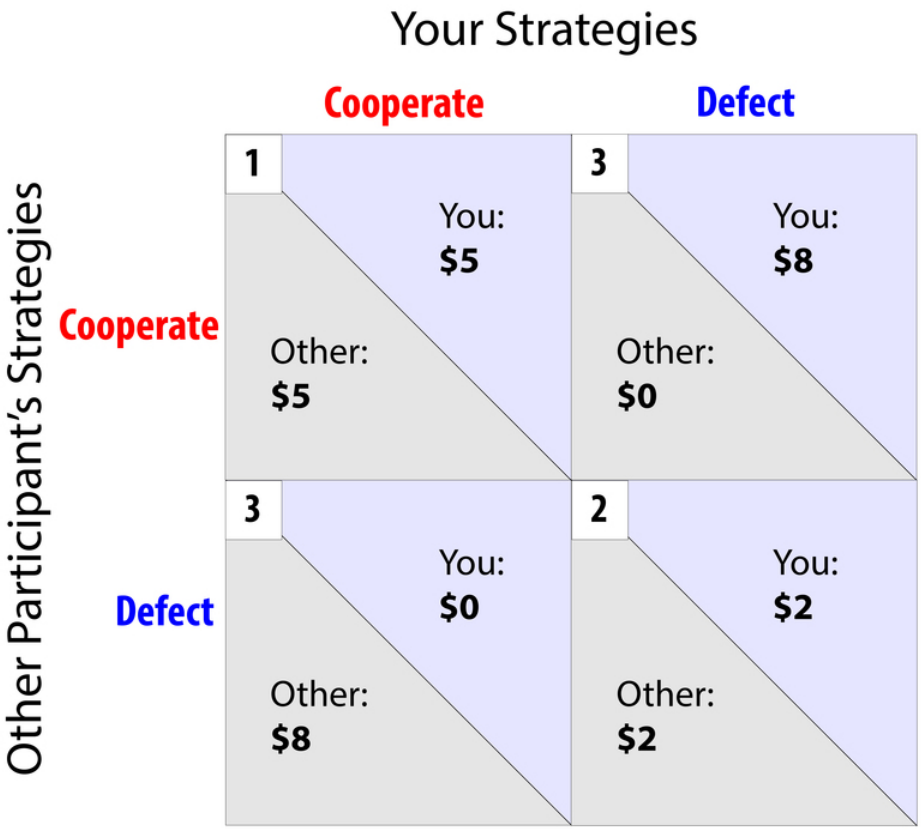


Figure 11.6.1: The various possible outcomes of a prisoner’s dilemma scenario

This scenario, in which two people independently choose between cooperation and defection, is known as the **prisoner’s dilemma**. It gets its name from the situation in which two prisoners who have committed a crime are given the opportunity to either (A) both confess their crime (and get a moderate sentence), (B) rat out their accomplice (and get a lesser sentence), or (C) both remain silent (and avoid punishment altogether). Psychologists use various forms of the prisoner’s dilemma scenario to study self-interest and cooperation. Whether framed as a monetary game or a prison game, the prisoner’s dilemma illuminates a conflict at the core of many decisions to cooperate: it pits the motivation to maximize *personal reward* against the motivation to maximize *gains for the group* (you and your partner combined).

For someone trying to maximize his or her own personal reward, the most “rational” choice is to defect (not cooperate), because defecting always results in a larger personal reward, regardless of the partner’s choice. However, when the two participants view

their partnership as a joint effort (such as a friendly relationship), cooperating is the best strategy of all, since it provides the largest combined sum of money ($10—which they share), as opposed to partial cooperation ($8), or mutual defection ($4). In other words, although defecting represents the “best” choice from an individual perspective, it is also the worst choice to make for the group as a whole.

This divide between personal and collective interests is a key obstacle that prevents people from cooperating. Think back to our earlier definition of cooperation: cooperation is when multiple partners work together toward a common goal that will benefit everyone. As is frequent in these types of scenarios, even though cooperation may benefit the whole group, individuals are often able to earn even larger, personal rewards by defecting—as demonstrated in the prisoner’s dilemma example above.

Do you like music? You can see a small, real-world example of the prisoner’s dilemma phenomenon at live music concerts. At venues with seating, many audience members will choose to stand, hoping to get a better view of the musicians onstage. As a result, the people sitting directly behind those now-standing people are also forced to stand to see the action onstage. This creates a chain reaction in which the entire audience now has to stand, just to see over the heads of the crowd in front of them. While choosing to stand may improve one’s own concert experience, it creates a literal barrier for the rest of the audience, hurting the overall experience of the group.

Simple models of **rational self-interest** predict 100% defection in cooperative tasks. That is, if people were only interested in benefiting themselves, we would always expect to see selfish behavior. Instead, there is a surprising tendency to cooperate in the prisoner’s dilemma and similar tasks (Batson & Moran, 1999; Oosterbeek, Sloof, Van De Kuilen, 2004). Given the clear benefits to defect, why then do some people choose to cooperate, whereas others choose to defect?

Individual Differences in Cooperation

Social Value Orientation

One key factor related to individual differences in cooperation is the extent to which people value not only their own outcomes, but also the outcomes of others. **Social value orientation** (SVO) describes people’s preferences when dividing important resources between themselves and others (Messick & McClintock, 1968). A person might, for example, generally be competitive with others, or cooperative, or self-sacrificing. People with different social values differ in the importance they place on their own positive outcomes relative to the outcomes of others. For example, you might give your friend gas money because she drives you to school, even though that means you will have less spending money for the weekend. In this example, you are demonstrating a cooperative orientation.

People generally fall into one of three categories of SVO: cooperative, individualistic, or competitive. While most people want to bring about positive outcomes for all (cooperative orientation), certain types of people are less concerned about the outcomes of others (individualistic), or even seek to undermine others in order to get ahead (competitive orientation).

Are you curious about your own orientation? One technique psychologists use to sort people into one of these categories is to have them play a series of **decomposed games**—short laboratory exercises that involve making a choice from various distributions of resources between oneself and an “other.” Consider the example shown in Figure 11.6.2, which offers three different ways to distribute a valuable resource (such as money). People with *competitive* SVOs, who try to maximize their relative advantage over others, are most likely to pick option A. People with *cooperative* SVOs, who try to maximize joint gain for both themselves and others, are more likely to split the resource evenly, picking option B. People with *individualistic* SVOs, who always maximize gains to the self, regardless of how it affects others, will most likely pick option C.

SVO decomposed game	A	B	C
You get	500	500	550
Other gets	100	500	300

Figure 11.6.2: Example of an SVO decomposed game used to determine how competitive or cooperative a person is.

Researchers have found that a person's SVO predicts how cooperative he or she is in both laboratory experiments and the outside world. For example, in one laboratory experiment, groups of participants were asked to play a **commons dilemma game**. In this game, participants each took turns drawing from a central collection of points to be exchanged for real money at the end of the experiment. These points represented a **common-pool resource** for the group, like valuable goods or services in society (such as farm land, ground water, and air quality) that are freely accessible to everyone but prone to overuse and degradation. Participants were told that, while the common-pool resource would gradually replenish after the end of every turn, taking too much of the resource too quickly would eventually deplete it. The researchers found that participants with cooperative SVOs withdrew fewer resources from the common-pool than those with competitive and individualistic SVOs, indicating a greater willingness to cooperate with others and act in a way that is sustainable for the group (Kramer, McClintock, & Messick, 1986; Roch & Samuelson, 1997).

Research has also shown that people with cooperative SVOs are more likely to commute to work using public transportation—an act of cooperation that can help reduce carbon emissions—rather than drive themselves, compared to people with competitive and individualistic SVOs (Van Vugt, Meertens, & Van Lange, 1995; Van Vugt, Van Lange, & Meertens, 1996). People with cooperative SVOs also more frequently engage in behavior intended to help others, such as volunteering and giving money to charity (McClintock & Allison, 1989; Van Lange, Bekkers, Schuyt, Van Vugt, 2007). Taken together, these findings show that people with cooperative SVOs act with greater consideration for the overall well-being of others and the group as a whole, using resources in moderation and taking more effortful measures (like using public transportation to protect the environment) to benefit the group.

Empathic Ability

Empathy is the ability to feel and understand another's emotional experience. When we empathize with someone else, we take on that person's perspective, imagining the world from his or her point of view and vicariously experiencing his or her emotions (Davis, 1994; Goetz, Keltner, & Simon-Thomas, 2010). Research has shown that when people empathize with their partner, they act with greater cooperation and overall **altruism**—the desire to help the partner, even at a potential cost to the self. People that can experience and understand the emotions of others are better able to work with others in groups, earning higher job performance ratings on average from their supervisors, even after adjusting for different types of work and other aspects of personality (Côté & Miners, 2006).



Feelings of empathy lead to greater levels of cooperation. Research shows that even young children cooperate more when experiencing feelings of empathy. [Image: US Army, goo.gl/psWXOe, CC BY 2.0, goo.gl/BRvSA7]

When empathizing with a person in distress, the natural desire to help is often expressed as a desire to cooperate. In one study, just before playing an economic game with a partner in another room, participants were given a note revealing that their partner had just gone through a rough breakup and needed some cheering up. While half of the subjects were urged by the experimenters to "remain objective and detached," the other half were told to "try and imagine how the other person feels." Though both groups received the same information about their partner, those who were encouraged to engage in empathy—by actively experiencing their partner's emotions—acted with greater cooperation in the economic game (Batson & Moran, 1999). The researchers also found that people who empathized with their partners were more likely to act cooperatively, even after being told that their partner had already made a choice to *not* cooperate (Batson & Ahmad, 2001)! Evidence of the link between empathy and cooperation has even been found in studies of preschool children (Marcus, Telleen, & Roke, 1979). From a very early age, emotional understanding can foster cooperation.

Although empathizing with a partner can lead to more cooperation between two people, it can also undercut cooperation within larger groups. In groups, empathizing with a single person can lead people to abandon broader cooperation in favor of helping only the target individual. In one study, participants were asked to play a cooperative game with three partners. In the game, participants were asked to (A) donate resources to a central pool, (B) donate resources to a specific group member, or (C) keep the resources for themselves. According to the rules, all donations to the central pool would be increased by 50% then distributed evenly, resulting in a net gain to the entire group. Objectively, this might seem to be the best option. However, when participants were encouraged to imagine the feelings of one of their partners said to be in distress, they were more likely to donate their tickets to that partner and not engage in cooperation with the group—rather than remaining detached and objective (Batson et al., 1995). Though empathy can create strong cooperative bonds between individuals, it can sometimes lead to actions that, despite being well-intentioned, end up undermining the group's best interests.

Situational Influences of Cooperation

Communication and Commitment

Open communication between people is one of the best ways to promote cooperation (Dawes, McTavish, & Shaklee, 1977; Dawes, 1988). This is because communication provides an opportunity to size up the trustworthiness of others. It also affords us a chance to prove our own trustworthiness, by verbally committing to cooperate with others. Since cooperation requires people to enter a **state of vulnerability** and trust with partners, we are very sensitive to the social cues and interactions of potential partners before deciding to cooperate with them.

In one line of research, groups of participants were allowed to chat for five minutes before playing a multi-round "public goods" game. During the chats, the players were allowed to discuss game strategies and make verbal commitments about their in-game actions. While some groups were able to reach a consensus on a strategy (e.g., "always cooperate"), other groups failed to reach a consensus within their allotted five minutes or even picked strategies that ensured *non*cooperation (e.g., "every person for themselves"). The researchers found that when group members made explicit commitments to each other to cooperate, they ended up honoring those commitments and acting with greater cooperation. Interestingly, the effect of face-to-face verbal commitments persisted even when the cooperation game itself was completely anonymous (Kerr and Kaufman-Gilliland, 1994; Kerr, Garst, Lewandowski, & Harris, 1997). This suggests that those who explicitly commit to cooperate are driven not by the fear of external punishment by group members, but by their own personal desire to honor such commitments. In other words, once people make a specific promise to cooperate, they are driven by "that still, small voice"—the voice of their own inner conscience—to fulfill that commitment (Kerr et al., 1997).

Trust



Trust is essential for cooperation, people are much more motivated to cooperate if they know others in the group will support one another. [Image: Wesley Fryer, https://goo.gl/LKNLWp, CC BY-SA 2.0, goo.gl/rxiUsF]

When it comes to cooperation, trust is key (Pruitt & Kimmel, 1977; Parks, Henager, & Scamahorn, 1996; Chaudhuri, Sopher, & Strand, 2002). Working with others toward a common goal requires a level of faith that our partners will repay our hard work and generosity, and not take advantage of us for their own selfish gains. Social trust, or the belief that another person's actions will be beneficial to one's own interests (Kramer, 1999), enables people to work together as a single unit, pooling their resources to accomplish more than they could individually. Trusting others, however, depends on their actions and reputation.

One common example of the difficulties in trusting others that you might recognize from being a student occurs when you are assigned a group project. Many students dislike group projects because they worry about "social loafing"—the way that one person expends less effort but still benefits from the efforts of the group. Imagine, for example, that you and five other students are assigned to work together on a difficult class project. At first, you and your group members split the work up evenly. As the project continues, however, you notice that one member of your team isn't doing his "fair share." He fails to show up to meetings, his work is sloppy, and he seems generally uninterested in contributing to the project. After a while, you might begin to suspect that this student is trying to get by with minimal effort, perhaps assuming others will pick up the slack. Your group now faces a difficult choice: either join the slacker and abandon all work on the project, causing it to collapse, or keep cooperating and allow for the possibility that the uncooperative student may receive a decent grade for others' work.

If this scenario sounds familiar to you, you're not alone. Economists call this situation the **free rider problem**—when individuals benefit from the cooperation of others without contributing anything in return (Grossman & Hart, 1980). Although these sorts of actions may benefit the free rider in the short-term, free riding can have a negative impact on a person's social reputation over time. In the above example, for instance, the "free riding" student may develop a reputation as lazy or untrustworthy, leading others to be less willing to work with him in the future.

Indeed, research has shown that a poor reputation for cooperation can serve as a warning sign for others *not* to cooperate with the person in disrepute. For example, in one experiment involving a group economic game, participants seen as being uncooperative were punished harshly by their fellow participants. According to the rules of the game, individuals took turns being either a "donor" or a "receiver" over the course of multiple rounds. If donors chose to give up a small sum of actual money, receivers would receive a slightly larger sum, resulting in an overall net gain. However, unbeknownst to the group, one participant was secretly instructed *never* to donate. After just a few rounds of play, this individual was effectively shunned by the rest of the group, receiving almost zero donations from the other members (Milinski, Semmann, Bakker, & Krambeck, 2001). When someone is seen being consistently uncooperative, other people have no incentive to trust him/her, resulting in a collapse of cooperation.

On the other hand, people are more likely to cooperate with others who have a good reputation for cooperation and are therefore deemed trustworthy. In one study, people played a group economic game similar to the one described above: over multiple rounds, they took turns choosing whether to donate to other group members. Over the course of the game, donations were more frequently given to individuals who had been generous in earlier rounds of the game (Wedekind & Milinski, 2000). In other words, individuals seen cooperating with others were afforded a reputational advantage, earning them more partners willing to cooperate and a larger overall monetary reward.



Sometimes the groups with which we identify can be formed based on preferences. Are you a dog person or a cat person? Just knowing that someone else shares your preference can affect the cooperation between you. [Image: Doris Meta F, https://goo.gl/k8Zi6N, CC BY-NC 2.0, goo.gl/tgFydH]

Another factor that can impact cooperation is a person's **social identity**, or the extent to which he or she identifies as a member of a particular social group (Tajfel & Turner, 1979/1986). People can identify with groups of all shapes and sizes: a group might be relatively small, such as a local high school class, or very large, such as a national citizenship or a political party. While these groups are often bound together by shared goals and values, they can also form according to seemingly arbitrary qualities, such as musical taste, hometown, or even completely randomized assignment, such as a coin toss (Tajfel, Billig, Bundy, & Flament, 1971; Bigler, Brown, & Markell, 2001; Locksley, Ortiz, & Hepburn, 1980). When members of a group place a high value on their group membership, their identity (the way they view themselves) can be shaped in part by the goals and values of that group.

When people strongly identify with a group, their own well-being becomes bound to the welfare of that group, increasing their willingness to make personal sacrifices for its benefit. We see this with sports fans. When fans heavily identify with a favorite team, they become elated when the team wins and sad when the team loses. Die-hard fans often make personal sacrifices to support their team, such as braving terrible weather, paying high prices for tickets, and standing and chanting during games.

Research shows that when people's group identity is emphasized (for example, when laboratory participants are referred to as "group members" rather than "individuals"), they are less likely to act selfishly in a commons dilemma game. In such experiments, so-called "group members" withdraw fewer resources, with the outcome of promoting the sustainability of the group (Brewer & Kramer, 1986). In one study, students who strongly identified with their university were less likely to leave a cooperative group of fellow students when given an attractive option to exit (Van Vugt & Hart, 2004). In addition, the strength of a person's identification with a group or organization is a key driver behind participation in large-scale cooperative efforts, such as collective action in political and workers' groups (Klandersman, 2002), and engaging in organizational citizenship behaviors (Cropanzano & Byrne, 2000).

Emphasizing group identity is not without its costs: although it can increase cooperation *within* groups, it can also undermine cooperation *between* groups. Researchers have found that groups interacting with other groups are more competitive and less cooperative than individuals interacting with other individuals, a phenomenon known as **interindividual-intergroup discontinuity** (Schopler & Insko, 1999; Wildschut, Pinter, Vevea, Insko, & Schopler, 2003). For example, groups interacting with other groups displayed greater self-interest and reduced cooperation in a prisoner's dilemma game than did individuals completing the same tasks with other individuals (Insko et al., 1987). Such problems with trust and cooperation are largely due to people's general reluctance to cooperate with members of an outgroup, or those outside the boundaries of one's own social group (Allport, 1954; Van Vugt, Biel, Snyder, & Tyler, 2000). **Outgroups** do not have to be explicit rivals for this effect to take place. Indeed, in one study, simply telling groups of participants that other groups preferred a different style of painting led them to behave less cooperatively than pairs of individuals completing the same task (Insko, Kirchner, Pinter, Efaw, & Wildschut, 2005). Though a strong group identity can bind individuals within the group together, it can also drive divisions between different groups, reducing overall trust and cooperation on a larger scope.

Under the right circumstances, however, even rival groups can be turned into cooperative partners in the presence of superordinate goals. In a classic demonstration of this phenomenon, Muzafer Sherif and colleagues observed the cooperative and competing behaviors of two groups of twelve-year-old boys at a summer camp in Robber's Cave State Park, in Oklahoma (Sherif, Harvey, White, Hood, & Sherif, 1961). The twenty-two boys in the study were all carefully interviewed to determine that none of them knew each other beforehand. Importantly, Sherif and colleagues kept both groups unaware of each other's existence, arranging for them to arrive at separate times and occupy different areas of the camp. Within each group, the participants quickly bonded and established their own group identity—"The Eagles" and "The Rattlers"—identifying leaders and creating flags decorated with their own group's name and symbols.

For the next phase of the experiment, the researchers revealed the existence of each group to the other, leading to reactions of anger, territorialism, and verbal abuse between the two. This behavior was further compounded by a series of competitive group activities, such as baseball and tug-of-war, leading the two groups to engage in even more spiteful behavior: The Eagles set fire to The Rattlers' flag, and The Rattlers retaliated by ransacking The Eagles' cabin, overturning beds and stealing their belongings. Eventually, the two groups refused to eat together in the same dining hall, and they had to be physically separated to avoid further conflict.

However, in the final phase of the experiment, Sherif and colleagues introduced a dilemma to both groups that could only be solved through mutual cooperation. The researchers told both groups that there was a shortage of drinking water in the camp, supposedly due to "vandals" damaging the water supply. As both groups gathered around the water supply, attempting to find a solution, members from each group offered suggestions and worked together to fix the problem. Since the lack of drinking water affected both groups equally, both were highly motivated to try and resolve the issue. Finally, after 45 minutes, the two groups managed to clear a stuck pipe, allowing fresh water to flow. The researchers concluded that when conflicting groups share a superordinate goal, they are capable of shifting their attitudes and bridging group differences to become cooperative partners. The insights from this study have important implications for group-level cooperation. Since many problems facing the world today, such as climate change and nuclear proliferation, affect individuals of all nations, and are best dealt with through the coordinated efforts of different groups and countries, emphasizing the shared nature of these dilemmas may enable otherwise competing groups to engage in cooperative and collective action.



There are cultural differences in how and how much people cooperate. Some societies require more cooperation to ensure survival. [Image: Cindy Cornett Seigle, http://goo.gl/u0kE9Z, CC BY-NC-SA 2.0, goo.gl/iF4hmM]

Culture can have a powerful effect on people's beliefs about and ways they interact with others. Might culture also affect a person's tendency toward cooperation? To answer this question, Joseph Henrich and his colleagues surveyed people from 15 small-scale societies around the world, located in places such as Zimbabwe, Bolivia, and Indonesia. These groups varied widely in the ways they traditionally interacted with their environments: some practiced small-scale agriculture, others foraged for food, and still others were nomadic herders of animals (Henrich et al., 2001).

To measure their tendency toward cooperation, individuals of each society were asked to play the **ultimatum game**, a task similar in nature to the prisoner's dilemma. The game has two players: Player A (the "allocator") is given a sum of money (equal to two days' wages) and allowed to donate any amount of it to Player B (the "responder"). Player B can then either accept or reject Player A's offer. If Player B accepts the offer, both players keep their agreed-upon amounts. However, if Player B rejects the offer, then neither player receives anything. In this scenario, the responder can use his/her authority to punish unfair offers, even though it requires giving up his or her own reward. In turn, Player A must be careful to propose an acceptable offer to Player B, while still trying to maximize his/her own outcome in the game.

According to a model of rational economics, a self-interested Player B should always choose to accept any offer, no matter how small or unfair. As a result, Player A should always try to offer the minimum possible amount to Player B, in order to maximize his/her own reward. Instead, the researchers found that people in these 15 societies donated on average 39% of the sum to their partner (Henrich et al., 2001). This number is almost identical to the amount that people of Western cultures donate when playing the ultimatum game (Oosterbeek et al., 2004). These findings suggest that allocators in the game, instead of offering the least possible amount, try to maintain a sense of fairness and "shared rewards" in the game, in part so that their offers will not be rejected by the responder.

Henrich and colleagues (2001) also observed significant variation between cultures in terms of their level of cooperation. Specifically, the researchers found that the extent to which individuals in a culture needed to collaborate with each other to gather resources to survive predicted how likely they were to be cooperative. For example, among the people of the Lamelara in

Indonesia, who survive by hunting whales in groups of a dozen or more individuals, donations in the ultimatum game were extremely high—approximately 58% of the total sum. In contrast, the Machiguenga people of Peru, who are generally economically independent at the family level, donated much less on average—about 26% of the total sum. The interdependence of people for survival, therefore, seems to be a key component of why people decide to cooperate with others.

Though the various survival strategies of small-scale societies might seem quite remote from your own experiences, take a moment to think about how your life is dependent on collaboration with others. Very few of us in industrialized societies live in houses we build ourselves, wear clothes we make ourselves, or eat food we grow ourselves. Instead, we depend on others to provide specialized resources and products, such as food, clothing, and shelter that are essential to our survival. Studies show that Americans give about 40% of their sum in the ultimatum game—less than the Lamelara give, but on par with most of the small-scale societies sampled by Henrich and colleagues (Oosterbeek et al., 2004). While living in an industrialized society might not require us to hunt in groups like the Lamelara do, we still depend on others to supply the resources we need to survive.

Conclusion

Cooperation is an important part of our everyday lives. Practically every feature of modern social life, from the taxes we pay to the street signs we follow, involves multiple parties working together toward shared goals. There are many factors that help determine whether people will successfully cooperate, from their culture of origin and the trust they place in their partners, to the degree to which they empathize with others. Although cooperation can sometimes be difficult to achieve, certain diplomatic practices, such as emphasizing shared goals and engaging in open communication, can promote teamwork and even break down rivalries. Though choosing not to cooperate can sometimes achieve a larger reward for an individual in the short term, cooperation is often necessary to ensure that the group as a whole—including all members of that group—achieves the optimal outcome.

Outside Resources

Article: Weber, J. M., Kopelman, S., & Messick, D. M. (2004). A conceptual review of decision making in social dilemmas: Applying a logic of appropriateness. Personality and Social Psychology Review, 8(3), 281-307.

http://psr.sagepub.com/content/8/3/281.abstract

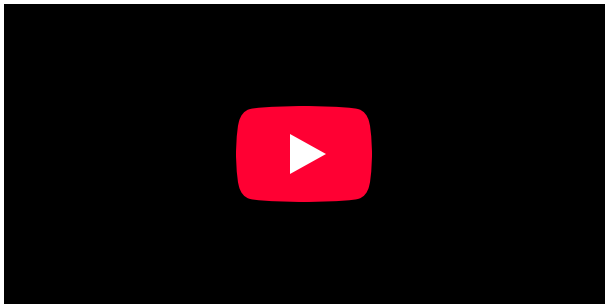
Book: Harvey, O. J., White, B. J., Hood, W. R., & Sherif, C. W. (1961). Intergroup conflict and cooperation: The Robbers Cave experiment. Norman, OK: University Book Exchange.

http://psychclassics.yorku.ca/Sherif/index.htm

Experiment: Intergroup Conflict and Cooperation: The Robbers Cave Experiment - An online version of Sherif, Harvey, White, Hood, and Sherif's (1954/1961) study, which includes photos.

http://psychclassics.yorku.ca/Sherif/

Video: A clip from a reality TV show, "Golden Balls", that pits players against each other in a high-stakes Prisoners' Dilemma situation.



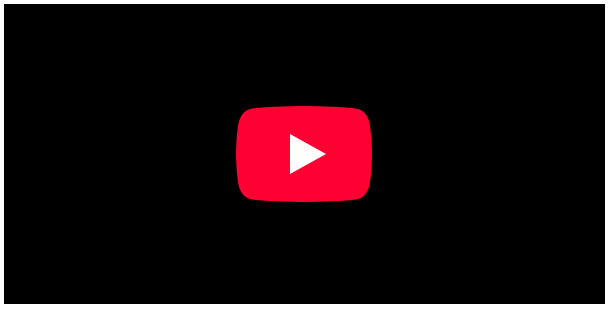


Video: Describes recent research showing how chimpanzees naturally cooperate with each other to accomplish tasks.





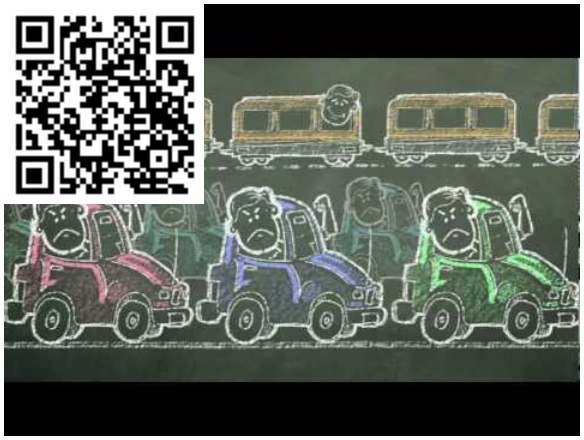
Video: The Empathic Civilization - A 10 minute, 39 second animated talk that explores the topics of empathy.



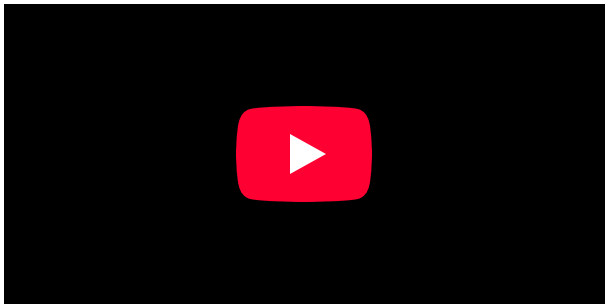


Video: Tragedy of the Commons, Part 1 - What happens when many people seek to share the same, limited resource?



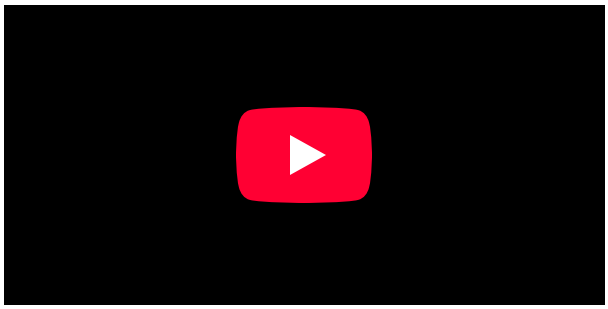


Video: Tragedy of the Commons, Part 2 - This video (which is 1 minute, 27 seconds) discusses how cooperation can be a solution to the commons dilemma.



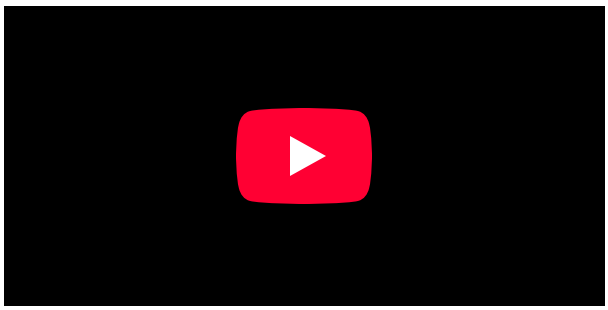


Video: Understanding the Prisoners' Dilemma.





Video: Why Some People are More Altruistic Than Others - A 12 minute, 21 second TED talk about altruism. A psychologist, Abigail Marsh, discusses the research about altruism.



We  test to determine your Social Values Orientation (SVO).
viab.eliz.ch/svo/index-normal.html

Web: What is Social Identity? - A brief explanation of social identity, which includes specific examples.
http://people.howstuffworks.com/what...l-identity.htm

Discussion Questions

1. Which groups do you identify with? Consider sports teams, home towns, and universities. How does your identification with these groups make you feel about other members of these groups? What about members of competing groups?
2. Thinking of all the accomplishments of humanity throughout history which do you believe required the greatest amounts of cooperation? Why?
3. In your experience working on group projects—such as group projects for a class—what have you noticed regarding the themes presented in this module (eg. Competition, free riding, cooperation, trust)? How could you use the material you have just learned to make group projects more effective?

Vocabulary

Altruism
A desire to improve the welfare of another person, at a potential cost to the self and without any expectation of reward.

Common-pool resource
A collective product or service that is freely available to all individuals of a society, but is vulnerable to overuse and degradation.

Commons dilemma game
A game in which members of a group must balance their desire for personal gain against the deterioration and possible collapse of a resource.

Cooperation
The coordination of multiple partners toward a common goal that will benefit everyone involved.

Decomposed games
A task in which an individual chooses from multiple allocations of resources to distribute between him- or herself and another person.

Empathy
The ability to vicariously experience the emotions of another person.

Free rider problem
A situation in which one or more individuals benefit from a common-pool resource without paying their share of the cost.

Interindividual-intergroup discontinuity
The tendency for relations between groups to be less cooperative than relations between individuals.

Outgroup
A social category or group with which an individual does not identify.

Prisoner's dilemma
A classic paradox in which two individuals must independently choose between defection (maximizing reward to the self) and cooperation (maximizing reward to the group).

Rational self-interest
The principle that people will make logical decisions based on maximizing their own gains and benefits.

Social identity
A person's sense of who they are, based on their group membership(s).

Social value orientation (SVO)
An assessment of how an individual prefers to allocate resources between him- or herself and another person.

State of vulnerability

When a person places him or herself in a position in which he or she might be exploited or harmed. This is often done out of trust that others will not exploit the vulnerability.

Ultimatum game

An economic game in which a proposer (Player A) can offer a subset of resources to a responder (Player B), who can then either accept or reject the given proposal.

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7.3: Attraction and Beauty

By Robert G. Franklin and Leslie Zebrowitz

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More attractive people elicit more positive first impressions. This effect is called the attractiveness halo, and it is shown when judging those with more attractive faces, bodies, or voices. Moreover, it yields significant social outcomes, including advantages to attractive people in domains as far-reaching as romance, friendships, family relations, education, work, and criminal justice. Physical qualities that increase attractiveness include youthfulness, symmetry, averageness, masculinity in men, and femininity in women. Positive expressions and behaviors also raise evaluations of a person's attractiveness. Cultural, cognitive, evolutionary, and overgeneralization explanations have been offered to explain why we find certain people attractive. Whereas the evolutionary explanation predicts that the impressions associated with the halo effect will be accurate, the other explanations do not. Although the research evidence does show some accuracy, it is too weak to satisfactorily account for the positive responses shown to more attractive people.

learning objectives

- Learn the advantages of attractiveness in social situations.
- Know what features are associated with facial, body, and vocal attractiveness.
- Understand the universality and cultural variation in attractiveness.
- Learn about the mechanisms proposed to explain positive responses to attractiveness.

We are ambivalent about attractiveness. We are enjoined not to "judge a book by its cover," and told that "beauty is only skin deep." Just as these warnings indicate, our natural tendency is to judge people by their appearance and to prefer those who are beautiful. The attractiveness of peoples' faces, as well as their bodies and voices, not only influences our choice of romantic partners, but also our impressions of people's traits and important social outcomes in areas that have nothing to do with romance. This module reviews these effects of attractiveness and examines what physical qualities increase attractiveness and why.

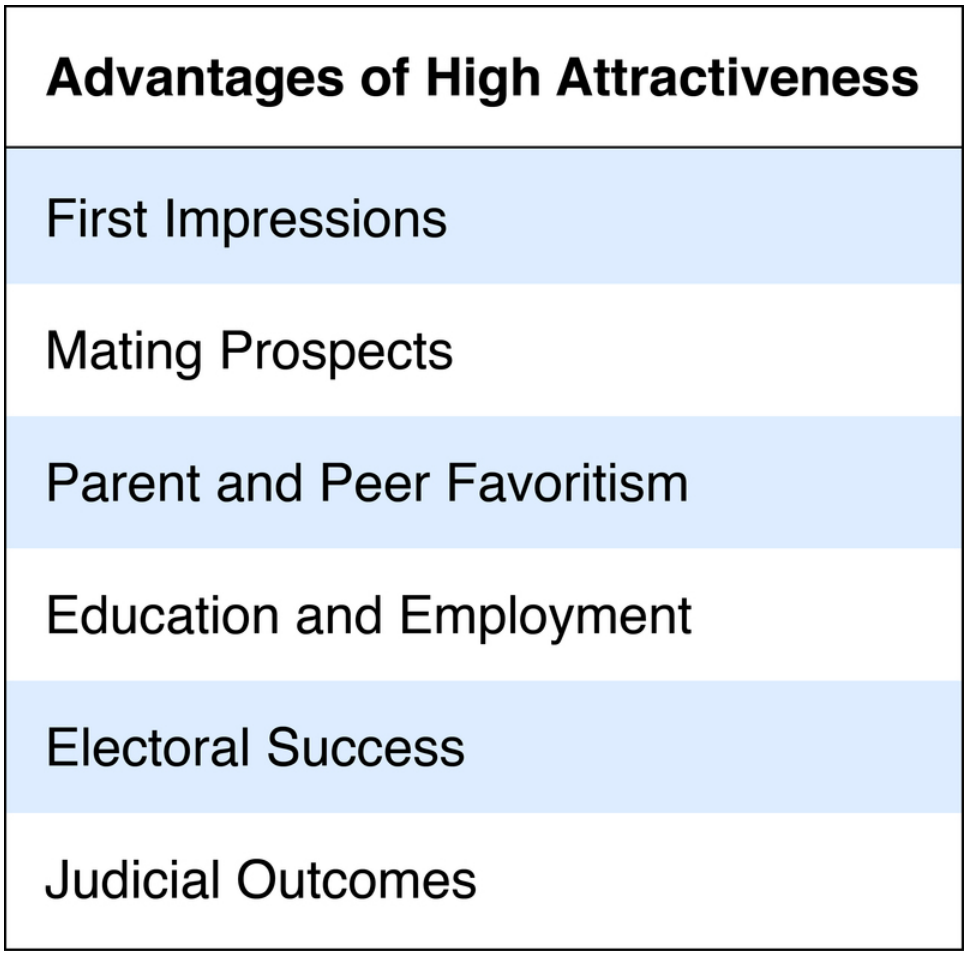
The Advantages of Attractiveness



Advertisements and films tend to showcase attractive people. [Image: CC0 Public Domain, goo.gl/m25gce]

Attractiveness is an asset. Although it may be no surprise that attractiveness is important in romantic settings, its benefits are found in many other social domains. More attractive people are perceived more positively on a wide variety of traits, being seen as more intelligent, healthy, trustworthy, and sociable. Although facial attractiveness has received the most research attention (Eagly, Ashmore, Makhijani, & Longo, 1991), people higher in body or vocal attractiveness also create more positive impressions (Riggio, Widaman, Tucker, & Salinas, 1991; Zuckerman & Driver, 1989). This advantage is termed the **attractiveness halo effect**, and it is widespread. Not only are attractive adults judged more positively than their less attractive peers, but even attractive babies are viewed more positively by their own parents, and strangers consider them more healthy, affectionate, attached to mother, cheerful,

responsive, likeable, and smart (Langlois et al., 2000). Teachers not only like attractive children better but also perceive them as less likely to misbehave, more intelligent, and even more likely to get advanced degrees. More positive impressions of those judged facially attractive are shown across many cultures, even within an isolated indigenous tribe in the Bolivian rainforest (Zebrowitz et al., 2012).



Attractiveness not only elicits positive trait impressions, but it also provides advantages in a wide variety of social situations. In a classic study, attractiveness, rather than measures of personality or intelligence, predicted whether individuals randomly paired on a blind date wanted to contact their partner again (Walster, Aronson, Abrahams, & Rottman, 1966). Although attractiveness has a greater influence on men's romantic preferences than women's (Feingold, 1990), it has significant effects for both sexes. Attractive men and women become sexually active earlier than their less attractive peers. Also, attractiveness in men is positively related to the number of short-term, but not long-term, sexual partners, whereas the reverse is true for women (Rhodes, Simmons, & Peters, 2005). These results suggest that attractiveness in both sexes is associated with greater reproductive success, since success for men depends more on short-term mating opportunities—more mates increases the probability of offspring—and success for women depends more on long-term mating opportunities—a committed mate increases the probability of offspring survival. Of course, not everyone can win the most attractive mate, and research shows a "matching" effect. More attractive people expect to date individuals higher in attractiveness than do unattractive people (Montoya, 2008), and actual romantic couples are similar in attractiveness (Feingold, 1988). The appeal of attractive people extends to platonic friendships. More attractive people are more popular with their peers, and this is shown even in early childhood (Langlois et al., 2000).

The *attractiveness halo* is also found in situations where one would not expect it to make such a difference. For example, research has shown that strangers are more likely to help an attractive than an unattractive person by mailing a lost letter containing a graduate school application with an attached photograph (Benson, Karabenick, & Lerner, 1976). More attractive job applicants are preferred in hiring decisions for a variety of jobs, and attractive people receive higher salaries (Dipboye, Arvey, & Terpstra, 1977; Hamermesh & Biddle, 1994; Hosoda, Stone-Romero, & Coats, 2003). Facial attractiveness also affects political and judicial

outcomes. More attractive congressional candidates are more likely to be elected, and more attractive defendants convicted of crimes receive lighter sentences (Stewart, 1980; Verhulst, Lodge, & Lavine, 2010). Body attractiveness also contributes to social outcomes. A smaller percentage of overweight than normal-weight college applicants are admitted despite similar high school records (Canning & Mayer, 1966), parents are less likely to pay for the education of their heavier weight children (Crandall, 1991), and overweight people are less highly recommended for jobs despite equal qualifications (Larkin & Pines, 1979). Voice qualities also have social outcomes. College undergraduates express a greater desire to affiliate with other students who have more attractive voices (Miyake & Zuckerman, 1993), and politicians with more attractive voices are more likely to win elections (Gregory & Gallagher, 2002; Tigue, Borak, O'Connor, Schandl, & Feinberg, 2012). These are but a few of the research findings clearly demonstrating that we are unable to adhere to the conventional wisdom not to judge a book by its cover.

What Makes a Person Attractive?

Most research investigating what makes a person attractive has focused on sexual attraction. However, attraction is a multifaceted phenomenon. We are attracted to infants (nurturant attraction), to friends (communal attraction), and to leaders (respectful attraction). Although some facial qualities may be universally attractive, others depend on the individual being judged as well as the "eye of the beholder." For example, babyish facial qualities are essential to the facial attractiveness of infants, but detract from the charisma of male leaders (Hildebrandt & Fitzgerald, 1979; Sternglanz, Gray, & Murakami, 1977; Mueller & Mazur, 1996), and the sexual attractiveness of particular facial qualities depends on whether the viewer is evaluating someone as a short-term or a long-term mate (Little, Jones, Penton-Voak, Burt, & Perrett, 2002). The fact that attractiveness is multifaceted is highlighted in research suggesting that attraction is a dual process, combining sexual and aesthetic preferences. More specifically, women's overall ratings of men's attractiveness are explained both by their ratings of how appealing a man is for a sexual situation, such as a potential date, and also by their ratings of how appealing he is for a nonsexual situation, such as a potential lab partner (Franklin & Adams, 2009). The dual process is further revealed in the finding that different brain regions are involved in judging sexual versus nonsexual attractiveness (Franklin & Adams, 2010).

Hallmarks of High Attractiveness
Youthfulness
Unblemished Skin
Symmetry
Averageness
Femininity in Women
Masculinity in Men
Positive Expressions
Positive Behaviors

More attractive facial features include youthfulness, unblemished skin, symmetry, a facial configuration that is close to the population average, and femininity in women or masculinity in men, with smaller chins, higher eyebrows, and smaller noses being some of the features that are more feminine/less masculine. Similarly, more feminine, higher-pitched voices are more attractive in women and more masculine, lower-pitched voices are more attractive in men (Collins, 2000; Puts, Barndt, Welling, Dawood, & Burriss, 2011). In the case of bodies, features that increase attractiveness include a more sex-typical waist-to-hip ratio—narrower waist than hips for women but not for men—as well as a physique that is not emaciated or grossly obese. Negative reactions to obesity are present from a young age. For example, a classic study found that when children were asked to rank-order their preferences for children with various disabilities who were depicted in pictures, the overweight child was ranked the lowest, even lower than a child who was missing a hand, one who was seated in a wheelchair, and one with a facial scar (Richardson, Goodman, Hastorf, & Dornbusch, 1961).

Although there are many physical qualities that influence attractiveness, no single quality seems to be a necessary or sufficient condition for high attractiveness. A person with a perfectly symmetrical face may not be attractive if the eyes are too close together or too far apart. One can also imagine a woman with beautiful skin or a man with a masculine facial features who is not attractive. Even a person with a perfectly average face may not be attractive if the face is the average of a population of 90-year-olds. These examples suggest that a combination of features are required for high attractiveness. In the case of men's attraction to women, a desirable combination appears to include perceived youthfulness, sexual maturity, and approachability (Cunningham, 1986). In contrast, a single quality, like extreme distance from the average face, is sufficient for low attractiveness. Although certain physical qualities are generally viewed as more attractive, anatomy is not destiny. Attractiveness is positively related to smiling and facial expressivity (Riggio & Friedman, 1986), and there also is some truth to the maxim "pretty is as pretty does." Research has shown that students are more likely to judge an instructor's physical appearance as appealing when his behavior is warm and friendly than when it is cold and distant (Nisbett & Wilson, 1977), and people rate a woman as more physically attractive when they have a favorable description of her personality (Gross & Crofton, 1977).

Why Are Certain People Attractive?

Cultural, cognitive, evolutionary, and overgeneralization explanations have been offered to account for why certain people are deemed attractive. Early explanations suggested that attractiveness was based on what a culture preferred. This is supported by the many variations in ornamentation, jewelry, and body modification that different cultures use to convey attractiveness.



Figure 12.5.1: The Kayan people are known for accentuating the neck line with neck rings. [Image: Leslie Zebrowitz, used with permission]

For example, the long neck on the woman shown in Figure 12.5.1 is unlikely to be judged attractive by Westerners. Yet, long necks have been preferred in a traditional Myanmar tribe, because they are thought to resemble a mythological dragon who spawned them. Despite cultural variations like this, research has provided strong evidence against the claim that attractiveness is only due to social learning. Indeed, young infants prefer to look at faces that adults have judged to be highly attractive rather than those judged to be less attractive (Kramer, Zebrowitz, San Giovanni, & Sherak, 1995; Langlois et al., 1987). Moreover, 12-month-olds are less likely to smile at or play with a stranger who is wearing a lifelike mask judged unattractive by adults than a mask judged as attractive (Langlois, Roggman, & Rieser-Danner, 1990). In addition, people across many cultures, including individuals in the Amazon rainforest who are isolated from Western culture, view the same faces as attractive (Cunningham, Roberts, Barbee, Druen, & Wu, 1995; Zebrowitz et al. 2012). On the other hand, there are more cultural variations in body attractiveness. In particular, whereas people from diverse cultures agree that very thin, emaciated-looking bodies are unattractive, they differ more in their appraisal of heavier bodies. Larger bodies are viewed more negatively in Western European cultures than other countries, especially those with lower socioeconomic statuses (Swami et al., 2010). There also is evidence that African Americans judge overweight women less harshly than do European Americans (Hebl & Heatherton, 1997).

Although cultural learning makes some contribution to who we find attractive, the universal elements of attractiveness require a culturally universal explanation. One suggestion is that attractiveness is a by-product of a more general cognitive mechanism that leads us to recognize and prefer familiar stimuli. People prefer category members that are closer to a category **prototype**, or the average member of the category, over those that are at the extremes of a category. Thus, people find average stimuli more attractive whether they are human faces, cars, or animals (Halberstadt, 2006). Indeed, a face **morph** that is the average of many individuals' faces is more attractive than the individual faces used to create it (Langlois & Roggman, 1990). Also, individual faces that have been morphed toward an average face are more attractive than those that have been morphed away from average (see Figure 12.5.2; face from Martinez & Benevente, 1998). The preference for stimuli closer to a category prototype is also consistent with the fact that we prefer men with more masculine physical qualities and women with more feminine ones. This preference would further

predict that the people who are most attractive depend on our learning experiences, since what is average or prototypical in a face, voice, or body will depend on the people we have seen. Consistent with an effect of learning experiences, young infants prefer face morphs that are an average of faces they have previously seen over morphs that are an average of novel faces (Rubenstein, Kalakanis, & Langlois, 1999). Short-term perceptual experiences can influence judgments of attractiveness even in adults. Brief exposure to a series of faces with the same distortion increases the rated attractiveness of new faces with that distortion (Rhodes, Jeffery, Watson, Clifford, & Nakayama, 2003), and exposure to morphs of human and chimpanzee faces increases the rated attractiveness of new human faces morphed with a small degree of chimpanzee face (Principe & Langlois, 2012).

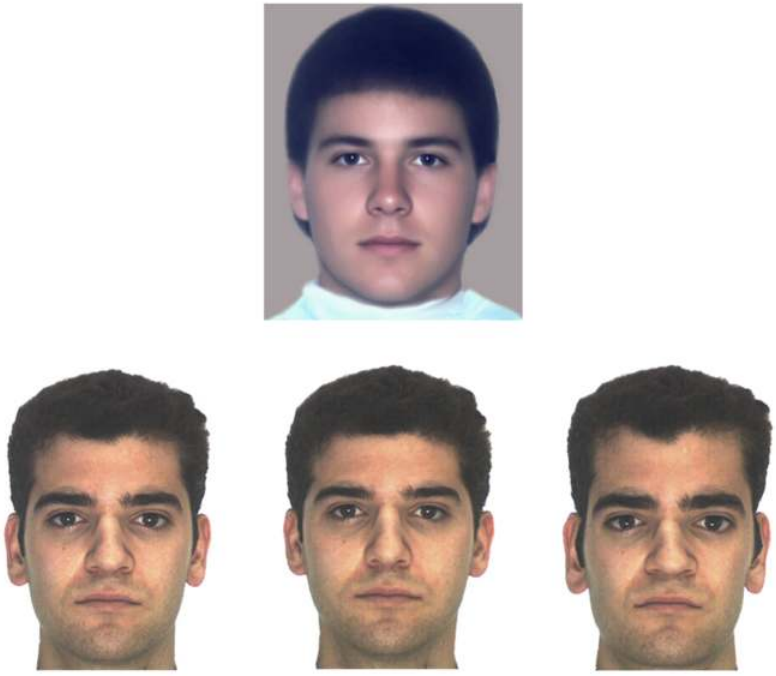


Figure 12.5.2: Top. An averaged face created from 32 individual faces. Bottom left. Original face from Martinez & Benevente (1998). Bottom middle. Original face morphed toward the average face. Bottom right. Original face morphed away from the average face.

One reason average stimuli, including faces, may be preferred is that they are easy to categorize, and when a stimulus is easy to categorize, it elicits positive emotion (Winkielman, Halberstadt, Fazendeiro, & Catty, 2006). Another possible reason average stimuli may be preferred is that we may be less apprehensive about familiar-looking stimuli (Zajonc, 2001). All other things equal, we prefer stimuli we have seen before over novel ones, a **mere-exposure effect**, and we also prefer stimuli that are similar to those we have seen before, a generalized mere-exposure effect. Consistent with a reduced apprehensiveness mechanism, exposure to other-race faces reduced neural activation in a region that responds to negatively valenced stimuli, not only for the faces the participants saw, but also new faces from the familiarized other-race category (Zebrowitz & Zhang, 2012). Such a generalized mere-exposure effect also could explain the preference for average stimuli, which look more familiar, although the effect may be more reliable for judgments of likeability than attractiveness (Rhodes, Halberstadt, & Brajkovich, 2001; Rhodes, Halberstadt, Jeffery, & Palermo, 2005). Whether due to ease of categorization or less apprehensiveness, the cognitive explanation holds that certain people are more attractive because perceptual learning has rendered them more familiar.

Origins of High Attractiveness
Cultural Learning
Preferences for Prototypes
Signal of Mate Quality
Overgeneralized Reactions to Disease or Bad Genes

In contrast to the cognitive explanation for why we find particular people attractive, the evolutionary explanation argues that preferences developed because it was adaptive to prefer those individuals. More specifically, the **good genes hypothesis** proposes that people with physical qualities like averageness, symmetry, sex prototypicality, and youthfulness are more attractive because they are better-quality mates. Mate quality may reflect better health, greater fertility, or better genetic traits that lead to better offspring and hence greater reproductive success (Thornhill & Gangestad, 1999). Theoretically, averageness and symmetry provide evidence of genetic fitness because they show the ability to develop normally despite environmental stressors (Scheib, Gangestad, & Thornhill, 1999). Averageness also signals genetic diversity (Thornhill & Gangestad, 1999), which is associated with a strong immune system (Penn, Damjanovich, & Potts, 2002). High masculinity in male faces may indicate fitness because it shows an ability to withstand the stress that testosterone places on the immune system (Folstad & Karter, 1992). High femininity in female faces may signal fitness by indicating sexual maturity and fertility. The evolutionary account also can explain the attractiveness of youthfulness, since aging is often associated with declines in cognitive and physical functioning and decreased fertility.



What do you look for in a mate – attractiveness, intelligence, both or something completely different? [Image: Will Fisher, CC BY-NC-SA 2.0, goo.gl/Toc0ZF]

Some researchers have investigated whether attractiveness actually does signal mate quality by examining the relationship between facial attractiveness and health (see Rhodes, 2006, for a review). Support for such a relationship is weak. In particular, people rated very low in attractiveness, averageness, or masculinity (in the case of men) tend to have poorer health than those who are average in these qualities. However, people rated high in attractiveness, averageness, or masculinity do not differ from those who are average (Zebrowitz & Rhodes, 2004). Low body attractiveness, as indexed by overweight or a sex-atypical waist-to-hip ratio, also may be associated with poorer health or lower fertility in women (Singh & Singh, 2011). Others have assessed whether attractiveness signals mate quality by examining the relationship with intelligence, since more intelligent mates may increase reproductive success. In particular, more intelligent mates may provide better parental care. Also, since intelligence is heritable, more intelligent mates may yield more intelligent offspring, who have a better chance of passing genes on to the next generation (Miller & Todd, 1998). The evidence indicates that attractiveness is positively correlated with intelligence. However, as in the case of health, the relationship is weak, and it appears to be largely due to lower-than-average intelligence among those who are very low in attractiveness rather than higher-than-average intelligence among those who are highly attractive (Zebrowitz & Rhodes, 2004). These results are consistent with the fact that subtle negative deviations from average attractiveness can signal low fitness. For example, minor facial anomalies that are too subtle for the layperson to recognize as a genetic anomaly are associated with lower intelligence (Foroud et al., 2012). Although the level of attractiveness provides a valid cue to low, but not high, intelligence or health, it is important to bear in mind that attractiveness is only a weak predictor of these traits, even in the range where it has some validity.

The finding that low, but not high, attractiveness can be diagnostic of actual traits is consistent with another explanation for why we find particular people attractive. This has been dubbed **anomalous face overgeneralization**, but it could equally apply to anomalous voices or bodies. The evolutionary account has typically assumed that as attractiveness increases, so does fitness, and it has emphasized the greater fitness of highly attractive individuals, a *good genes* effect (Buss, 1989). In contrast, the overgeneralization hypothesis argues that the level of attractiveness provides an accurate index *only* of low fitness. On this account, the *attractiveness halo* effect is a by-product of reactions to low fitness. More specifically, we overgeneralize the adaptive tendency to use low attractiveness as an indication of lower-than-average health and intelligence, and we mistakenly use higher-than-average attractiveness as an indication of higher-than-average health and intelligence (Zebrowitz & Rhodes, 2004). The overgeneralization hypothesis differs from the evolutionary hypothesis in another important respect. It is concerned with the importance of detecting low fitness not only when choosing a mate, but also in other social interactions. This is consistent with the fact that the attractiveness halo effect is present in many domains.

Whereas the cultural, cognitive, and overgeneralization accounts of attractiveness do not necessarily predict that the halo effect in impressions will be accurate, the evolutionary “good genes” account does. As we have seen, there is some support for this prediction, but the effects are too weak and circumscribed to fully explain the strong halo effect in response to highly attractive people. In addition, it is important to recognize that whatever accuracy there is does not necessarily imply a genetic link between attractiveness and adaptive traits, such as health or intelligence. One non-genetic mechanism is an influence of environmental factors. For example, the quality of nutrition and that a person receives may have an impact on the development of both attractiveness and health (Whitehead, Ozakinci, Stephen, & Perrett, 2012). Another non-genetic explanation is a self-fulfilling prophecy effect (Snyder, Tanke, & Berscheid, 1977). For example, the higher expectations that teachers have for more attractive students may nurture higher intelligence, an effect that has been shown when teachers have high expectations for reasons other than appearance (Rosenthal, 2003).

Conclusions



If you were to be asked to imagine an attractive person, what would they look like? What would they be like? Why? [Image: WOCinTech Chat, https://goo.gl/R8zJJu, CC BY 2.0, goo.gl/BRvSA7]

Although it may seem unfair, attractiveness confers many advantages. More attractive people are favored not only as romantic partners but, more surprisingly, by their parents, peers, teachers, employers, and even judges and voters. Moreover, there is substantial agreement about who is attractive, with infants and perceivers from diverse cultures showing similar responses. Although this suggests that cultural influences cannot completely explain attractiveness, experience does have an influence. There is controversy about why certain people are attractive to us. The cognitive account attributes higher attractiveness to the ease of processing *prototypes* or the safety associated with familiar stimuli. The evolutionary account attributes higher attractiveness to the adaptive value of preferring physical qualities that signal better health or genetic fitness when choosing mates. The overgeneralization account attributes higher attractiveness to the overgeneralization of an adaptive avoidance of physical qualities that signal poor health or low genetic fitness. Although there is debate as to which explanation is best, it is important to realize that all of the proposed mechanisms may have some validity.

Outside Resources

Article: For Couples, Time Can Upend the Laws of Attraction - This is an accessible New York Times article, summarizing research findings that show romantic couples' level of attractiveness is correlated if they started dating soon after meeting (predicted by the matching hypothesis). However, if they knew each other or were friends for a while before dating, they were less likely to match on physical attractiveness. This research highlights that while attractiveness is important, other factors such as acquaintanceship length can also be important.

http://nyti.ms/1HtIkFt

Article: Is Faceism Spoiling Your Life? - This is an accessible article that describes faceism, as well as how our expectations of people (based on their facial features) influence our reactions to them. It presents the findings from a few studies, such as

how participants making snap judgments of political candidates' faces predicted who won the election with almost 70% accuracy. It includes example photos of faces we would consider more or less competent, dominant, extroverted, or trustworthy.

http://www.bbc.com/future/story/20150707-is-faceism-spoiling-your-life

Video: Is Your Face Attractive? - This is a short video. The researcher in the video discusses and shows examples of face morphs, and then manipulates pictures of faces, making them more or less masculine or feminine. We tend to prefer women with more feminized faces and men with more masculine faces, and the video briefly correlates these characteristics to good health.

www.discovery.com/tv-shows/other-shows/videos/science-of-sex-appeal-is-your-face-attractive/

Video: Multiple videos realted to the science of beauty

http://dsc.discovery.com/search.htm?...ence+of+beauty

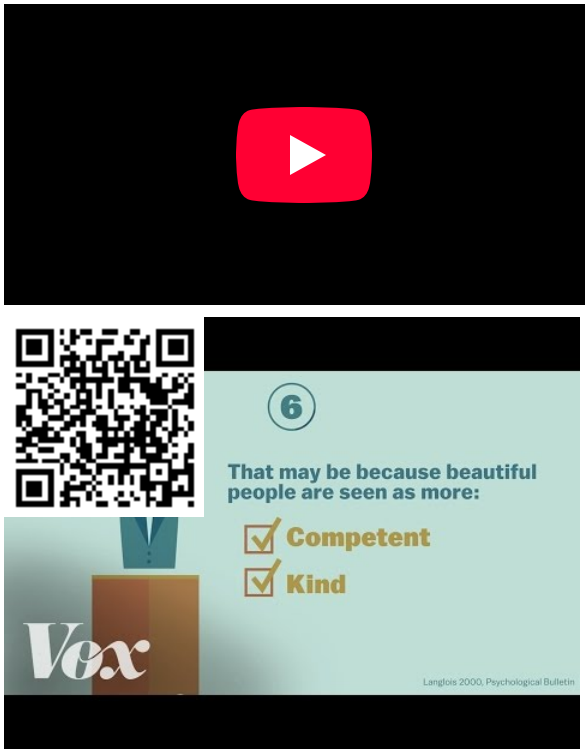
Video: Multiple videos related to the science of sex appeal

http://dsc.discovery.com/search.htm?...+of+sex+appeal

Video: The Beauty of Symmetry - A short video about facial symmetry. It describes facial symmetry, and explains why our faces aren't always symmetrical. The video shows a demonstration of a researcher photographing a man and a woman and then manipulating the photos.

www.discovery.com/tv-shows/other-shows/videos/science-of-sex-appeal-the-beauty-of-symmetry/

Video: The Economic Benefits of Being Beautiful - Less than 2-minute video with cited statistics about the advantages of being beautiful. The video starts with information about how babies are treated differently, and it quickly cites 14 facts about the advantages of being attractive, including the halo effect.



Discussion Questions

1. Why do you think the attractiveness halo exists even though there is very little evidence that attractive people are more intelligent or healthy?
2. What cultural influences affect whom you perceive as attractive? Why?
3. How do you think evolutionary theories of why faces are attractive apply in a modern world, where people are much more likely to survive and reproduce, regardless of how intelligent or healthy they are?
4. Which of the theories do you think provides the most compelling explanation for why we find certain people attractive?

Vocabulary

Anomalous face overgeneralization hypothesis

Proposes that the attractiveness halo effect is a by-product of reactions to low fitness. People overgeneralize the adaptive tendency to use low attractiveness as an indicator of negative traits, like low health or intelligence, and mistakenly use higher-than-average attractiveness as an indicator of high health or intelligence.

Attractiveness halo effect

The tendency to associate attractiveness with a variety of positive traits, such as being more sociable, intelligent, competent, and healthy.

Good genes hypothesis

Proposes that certain physical qualities, like averageness, are attractive because they advertise mate quality—either greater fertility or better genetic traits that lead to better offspring and hence greater reproductive success.

Mere-exposure effect

The tendency to prefer stimuli that have been seen before over novel ones. There also is a generalized mere-exposure effect shown in a preference for stimuli that are similar to those that have been seen before.

Morph

A face or other image that has been transformed by a computer program so that it is a mixture of multiple images.

Prototype

A typical, or average, member of a category. Averageness increases attractiveness.

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7.4: Positive Relationships

By Nathaniel M. Lambert

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Most research in the realm of relationships has examined that which can go wrong in relationships (e.g., conflict, infidelity, intimate partner violence). I summarize much of what has been examined about what goes right in a relationship and call these positive relationship deposits. Some research indicates that relationships need five positive interactions for every negative interaction. Active-constructive responding, gratitude, forgiveness, and time spent together are some sources of positive deposits in one's relational bank account. These kinds of deposits can reduce the negative effects of conflict on marriage and strengthen relationships.

learning objectives

- Understand some of the challenges that plague close relationships today.
- Become familiar with the concept of positive emotional deposits.
- Review some of the research that is relevant to positive emotional deposits.
- Describe several ways people make positive emotional deposits.

Introduction

The status of close relationships in America can sometimes look a bit grim. More than half of marriages now end in divorce in the United States (Pinsof, 2002). Infidelity is the leading cause of divorce (Previti & Amato, 2004) and is on the rise across all age groups (Allen et al., 2008). Cybersex has likely contributed to the increased rates of infidelity, with some 65% of those who look for sex online having intercourse with their "Internet" partner offline as well. Research on intimate partner violence indicates that it occurs at alarmingly high rates, with over one-fifth of couples reporting at least one episode of violence over the course of a year (Schafer, Caetano, & Clark, 1998). These and other issues that arise in relationships (e.g., substance abuse, conflict) represent significant obstacles to close relationships. With so many problems that plague relationships, how can a positive relationship be cultivated? Is there some magic bullet or ratio? Yes, kind of.



Many people consider romantic attachments one of the most significant relationships and invest them with time and resources. [Image: Ly Thien Hoang (Lee), https://goo.gl/JQbLVe, CC BY 2.0, goo.gl/BRvSA7]

The Magic Formula

Of course, no research is perfect, and there really is no panacea that will cure any relationship. However, we do have some research that suggests that long-term, stable marriages have been shown to display a particular ratio between positive and negative interactions. That ratio is not 1:1, in fact, 1:1 is approximately the ratio of couples who were heading toward divorce. Thus, in a couple where a spouse gives one compliment for each criticism, the likely outcome is divorce. Happier couples have five positive interactions for every one negative interaction (Gottman, 1994).

What can you do to increase the ratio of positive interactions on a regular basis?—through positive relationship deposits. Naturally, making positive relationship deposits will boost your overall positive emotions—so by making positive relationships a priority in your life you can boost your positive emotions, becoming a flourishing individual.

Positive Relationship Deposits

In *Seven Habits of Highly Effective People*, Covey (1989) compared human relationships to actual bank accounts—suggesting that every day we make deposits or withdrawals from our relationship accounts with each person in our lives. He recommended that to keep an overall positive balance, we need to make regular positive deposits. This will ultimately help buffer the negatives that are bound to occur in relationships. Keeping this metaphor of emotional capital in mind could be beneficial for promoting the well-being of the relationships in one's life.



Research suggests that if you focus on the positive aspects of a relationship you are more likely to stay in that relationship. [Image: adwriter, goo.gl/Hz9BOJ, CC BY-NC 2.0, goo.gl/tgFydH]

Some research suggests that people, on average, have more positive than negative experiences (Gable & Haidt, 2005). Thus, there are far more opportunities for deposits than for withdrawals. Conversely, even though there may be fewer negatives, Baumeister, Bratslavsky, Finkenauer, and Vohs (2001) argue quite persuasively that bad events overpower good events in one's life, which suggests that the negative withdrawals are more salient and more impactful. This further accentuates the need to ensure that we

have a healthy store of positive deposits that can help to counteract these more impactful account withdrawals. Positive deposits that accumulate over time should provide a buffer against the withdrawals that happen in every relationship. In other words, the inevitable occasional conflict is not nearly so bad for the relationship when it occurs in a partnership that is otherwise highly positive. What opportunities does relationships science suggest are effective opportunities each day to make positive relationship deposits?

Common Opportunities for Daily Positive Deposits

An individual's general sentiment of his or her partner is dependent on ongoing interactions, and these interactions provide many opportunities for deposits or withdrawals. To illustrate how much daily interaction can give opportunities to make deposits in relationships, I will describe research that has been done on **capitalization** and **active-constructive responding**, gratitude, forgiveness, and spending time together in meaningful ways. Although there are several other ways by which positive relationship deposits can be made, these four have received quite a bit of attention by researchers. Then I will discuss some evidence on how an accumulation of such daily relationship deposits seems to provide a safeguard against the impact of conflict.

Building Intimacy Through Capitalization and Active-Constructive Responding

Intimacy has been defined as a close and familiar bond with another person. Intimacy has been positively related with satisfaction in marriage (Patrick, Sells, Giordano & Tollerud, 2007) and well-being in general (e.g., Waltz & Badura, 1987; Prager & Buhrmester, 1998). On the other hand, lacking marital intimacy is related to higher severity of depression (Waring & Patton, 1984). Thus, achieving intimacy with one's partner is essential for a happy marriage and happiness in general and is something worth seeking.

Given that 60% to 80% of the time, people disclose their most positive daily experiences with their partner (Gable et al., 2004), this becomes a regular opportunity for intimacy building. When we disclose certain private things about ourselves, we increase the potential intimacy that we can have with another person, however, we also make ourselves vulnerable to getting hurt by the other person. What if they do not like what I have disclosed or react negatively? It can be a double-edged sword. Disclosing positive news from one's day is a great opportunity for a daily deposit if the response from the other person is positive. What constitutes a positive response?

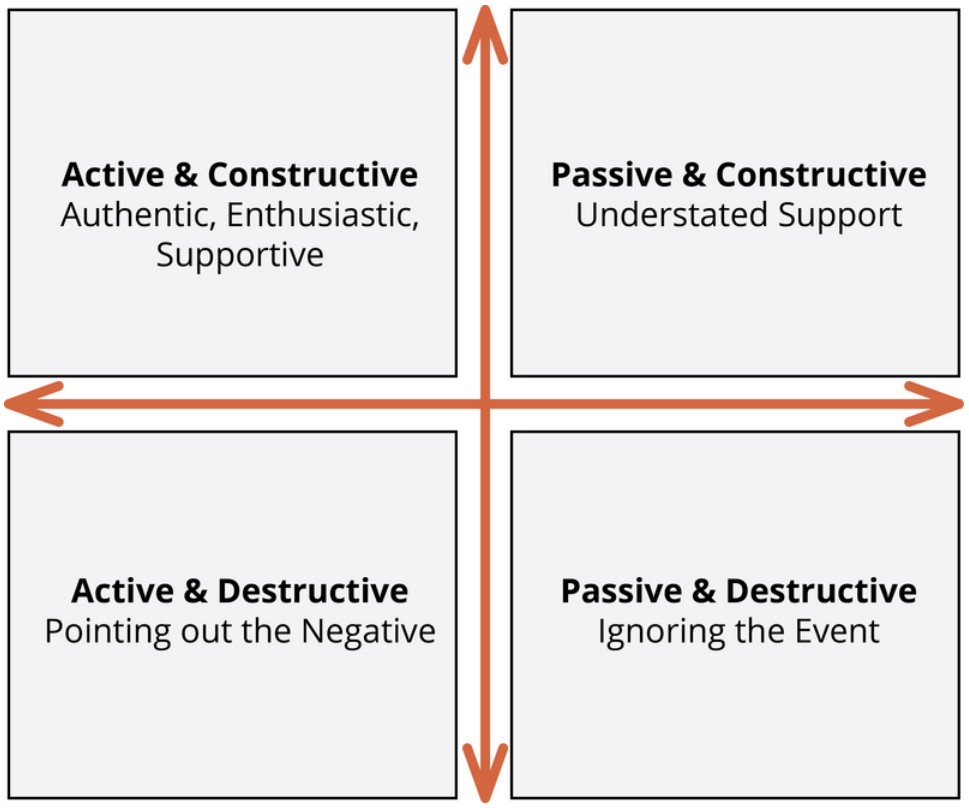


Figure 11.10.1: Types of Responding (figure used with permission from thecoachinghouse.ca)

To achieve intimacy we must respond positively to remarks our partner makes. When a person responds enthusiastically to a partner's good news, this fosters higher levels of intimacy (Gable, Reis, Impett, & Asher, 2004). Thus, responding in a positive manner to a relationship partner's good news provides frequent opportunities to make deposits in the **relationship bank account**. In fact, most people are presented the chance to make this kind of relationship deposit almost every day. Most research has focused on support (partners' responses to negative events), however, one study found that responses to positive events tend to be better predictors of relationship well-being than responses to negative events (Gable, Gonzaga, & Strachman, 2006).

When one person seeks out another person with the intent to share positive news, it has been called capitalization (Gable et al., 2004). The best, supportive response to someone who shares good news has been termed active-constructive and is characterized by enthusiastic support. These active-constructive responses are positively associated with trust, satisfaction, commitment, and intimacy. On the other hand, when the listener points out something negative about what is said, it is called active-destructive responding. Ignoring what is said is termed passive-destructive, and understating support is called passive-constructive. All of these types of responses (see Figure 11.10.1) have been related to adverse relationship outcomes (Gable et al., 2004).

If partners listen and are enthusiastic about the good news of the other, they build a stronger relationship. If they ignore the good news, change the subject, devalue the good news, or refocus the good news to be about themselves, they may make a withdrawal from the account. Being aware of this research and findings can help individuals to focus on better providing helpful responses to those they care about.

Gratitude



Being grateful is one of the ways an individual contributes positively to a relationship. [Image: LarynDawn, goo.gl/n1AJwg, CC BY-SA 3.0, goo.gl/eLCn2O]

Relationship researchers report that expressing gratitude on a regular basis is an important means by which positive deposits may be made into relationship bank accounts. In a recent study, participants were randomly assigned to write about daily events, express gratitude to a friend, discuss a positive memory with a friend, or think grateful thoughts about a friend twice a week for three weeks. At the conclusion of the three weeks, those who were randomly assigned to express gratitude to their friend reported higher positive regard for their friend and more comfort voicing relationship concerns than did those in the two control conditions (Lambert & Fincham, 2011). Also, those who expressed gratitude to a close relationship partner reported greater perceived

communal strength (e.g., caring, willingness to sacrifice) than participants in all control conditions (Lambert, Clark, Durtschi, Fincham, & Graham, 2010). Similarly, Algoe, Fredrickson, and Gable (2013) found that benefactors' positive perceptions of beneficiaries were increased when gratitude was expressed for the benefit, and these perceptions enhanced relationship quality. These studies suggest that expressing gratitude to someone you are close to is an important way of making positive relationship deposits.

Forgiveness

Forgiveness is something else you can do regularly to aid relationship satisfaction (e.g., Fincham, 2000; Paleari, Regalia, & Fincham, 2003) and commitment (e.g., Finkel, Rusbult, Kumashiro, & Hannon, 2002; Karremans & Van Lange, 2008). Unresolved conflict can put couples at risk of developing the negative cycle of interaction that causes further harm to relationships. For instance, one study found that lack of forgiveness is linked to ineffective conflict resolution (Fincham, Beach, & Davila, 2004). For instance, if Cindy cannot forgive Joe, Cindy will struggle to effectively resolve other disagreements in their relationship. Yet, those who do forgive report much better conflict resolution a year later (Fincham, Beach, & Davila, 2007). It appears that forgiveness can be an important way of building emotional capital in the relationship. Not forgiving the people in your life can block positive deposits to the relationship bank account.

Spending Time in Meaningful Ways



Do you and your romantic partner have similar hobbies? Research suggests that spending time in meaningful ways also positively contributes to your relationships. [Image: Lucky Sunny, goo.gl/IADzgz, CC BY-NC-ND 2.0, goo.gl/FuDJ6c]

Some suggest that the best way to spell love is T-I-M-E. In our fast-paced society, many relationships are time deprived. In the beginning phases of a relationship, this rarely seems to be an issue given the novelty and excitement of the relationship, however, discovering new things about one's partner declines and couples can slump into relationship boredom. The **self-expansion model**(Aron & Aron, 1996) suggests that people naturally seek to expand their capacity and that intimate relationships are an important way by which they accomplish self-expansion. They have found that couples who engaged in more challenging and novel activities felt more satisfied with their relationship immediately afterward than control couples (Aron et al., 2000). The takeaway message here is that simply watching TV with one's romantic partner will not make nearly the magnitude of a deposit in a relational bank account as would a more engaging or challenging joint activity.

Accumulated Positive Deposits and Conflict Management

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.



Don't neglect your relationship bank account. Make daily positive deposits and you'll be better prepared for the inevitable negative interaction. [Image: AndreaPerryAbbott, https://goo.gl/8iTE7t, CC BY-NC 2.0, goo.gl/VnKlK8]

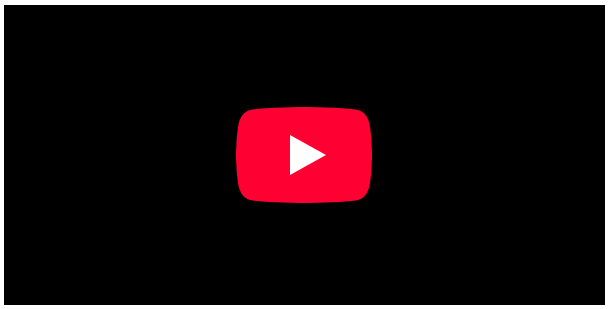
Relationships today are riddled with problems including divorce, infidelity, intimate partner violence, and chronic conflict. If you want to avoid some of these common pitfalls of relationships , if you want to build a good relationship with a partner or with your friends, it is crucial to make daily positive deposits in your relationship bank accounts. Doing so will help you enjoy each other more and also help you weather the inevitable conflicts that pop up over time. Some of the ways that have been most explored by researchers as a way to build your positive relationship bank account are through building intimacy by active constructive responding, expressing gratitude to the others, forgiving, and spending time in engaging joint activities. Although these are not the only ways that you can make positive deposits in one's relationship bank accounts, they are some of the best examined. Consider how you might do more to make positive relationship deposits through these or other means for the survival and improvement of your relationships.

Outside Resources

A Primer on Teaching Positive Psychology

http://www.apa.org/monitor/oct03/primer.aspx

An Experiment in Gratitude





Positive Psychology Center

www.ppc.sas.upenn.edu/videolectures.htm

Relationship Matters Podcast Series

http://spr.sagepub.com/site/podcast/podcast_dir.xhtml

Understanding Forgiveness

http://www.pbs.org/thisemotionallife...ng-forgiveness

Discussion Questions

1. What are some of the main challenges that face relationships today?
2. How would you describe the concept of an emotional bank account?
3. What are some ways people can make deposits to their relationship bank accounts?
4. What do you think are the most effective ways for making positive relationship deposits?
5. What are some of the most powerful relationship deposits that others have made into your relationship bank account?
6. What would you consider to be some challenging or engaging activities that you would consider doing more of with a close relationship partner?
7. Are there relationships of yours that have gotten into a negative spiral and could profit from positive relationship deposits?

Vocabulary

Active-constructive responding

Demonstrating sincere interest and enthusiasm for the good news of another person.

Capitalization

Seeking out someone else with whom to share your good news.

Relationship bank account

An account you hold with every person in which a positive deposit or a negative withdrawal can be made during every interaction you have with the person.

Self-expansion model

Seeking to increase one’s capacity often through an intimate relationship.

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7.5: Love, Friendship, and Social Support

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Friendship and love, and more broadly, the relationships that people cultivate in their lives, are some of the most valuable treasures a person can own. This module explores ways in which we try to understand how friendships form, what attracts one person to another, and how love develops. It also explores how the Internet influences how we meet people and develop deep relationships. Finally, this module will examine social support and how this can help many through the hardest times and help make the best times even better.

learning objectives

- Understand what attracts us to others.
- Review research that suggests that friendships are important for our health and well-being.
- Examine the influence of the Internet on friendship and developing relationships.
- Understand what happens to our brains when we are in love.
- Consider the complexity of love.
- Examine the construct and components of social support.

Introduction



Interpersonal relationships are vital to our physiological and psychological health. [CC0 Public Domain, goo.gl/m25gce]

The importance of relationships has been examined by researchers for decades. Many researchers point to sociologist Émile Durkheim's classic study of suicide and social ties (1951) as a starting point for this work. Durkheim argued that being socially connected is imperative to achieving personal well-being. In fact, he argued that a person who has no close relationships is likely a person who is at risk for suicide. It is those relationships that give a person meaning in their life. In other words, suicide tends to be higher among those who become disconnected from society. What is interesting about that notion is when people are asked to describe the basic necessities for life—people will most often say food, water, and shelter, but seldom do people list "close relationships" in the top three. Yet time and time again, research has demonstrated that we are social creatures and we need others to survive and thrive. Another way of thinking about it is that close relationships are the psychological equivalent of food and water; in other words, these relationships are necessary for survival. Baumeister and Leary (1995) maintain that humans have basic needs and one of them is the need to belong; these needs are what makes us human and give a sense of purpose and identity to our lives (Brissette, Cohen, & Seeman, 2000; Ryff, 1989).

Given that close relationships are so vital to well-being, it is important to ask how interpersonal relationships begin. What makes us like or love one person but not another? Why is it that when bad things happen, we frequently want to talk to our friends or family about the situation? Though these are difficult questions to answer because relationships are complicated and unique, this module

will examine how relationships begin; the impact of technology on relationships; and why coworkers, acquaintances, friends, family, and intimate partners are so important in our lives.

Attraction: The Start of Friendship and Love

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.

Proximity



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, goo.gl/crCc0Q, CC BY-SA 2.0, goo.gl/rxiUsF]

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 couples such as Sandra Bullock and Jesse James, or 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).



Having best friends make us feel better about ourselves and buffers us from stress. [Image: CC0 Public Domain, goo.gl/m25gce]

> *"In poverty and other misfortunes of life, true friends are a sure refuge. They keep the young out of mischief; they comfort and aid the old in their weakness, and they incite those in the prime of life to noble deeds."—Aristotle*

Research has found that close friendships can protect our mental and physical health when times get tough. For example, Adams, Santo, and Bukowski (2011) asked fifth- and sixth-graders to record their experiences and self-worth, and to provide saliva samples for 4 days. Children whose best friend was present during or shortly after a negative experience had significantly lower levels of the stress hormone cortisol in their saliva compared to those who did not have a best friend present. Having a best friend also seemed to protect their feelings of self-worth. Children who did not identify a best friend or did not have an available best friend during distress experienced a drop in self-esteem over the course of the study.

Workplace friendships

Friendships often take root in the workplace, due to the fact that people are spending as much, or more, time at work than they are with their family and friends (Kaufman & Hotchkiss, 2003). Often, it is through these relationships that people receive mentoring and obtain social support and resources, but they can also experience conflicts and the potential for misinterpretation when sexual attraction is an issue. Indeed, Elsesser and Peplau (2006) found that many workers reported that friendships grew out of collaborative work projects, and these friendships made their days more pleasant.

In addition to those benefits, Riordan and Griffeth (1995) found that people who worked in an environment where friendships could develop and be maintained were more likely to report higher levels of job satisfaction, job involvement, and organizational commitment, and they were less likely to leave that job. Similarly, a Gallup poll revealed that employees who had "close friends" at work were almost 50% more satisfied with their jobs than those who did not (Armour, 2007).

Internet friendships

What influence does the Internet have on friendships? It is not surprising that people use the Internet with the goal of meeting and making new friends (Fehr, 2008; McKenna, 2008). Researchers have wondered if the issue of not being face-to-face reduces the authenticity of relationships, or if the Internet really allows people to develop deep, meaningful connections. Interestingly, research has demonstrated that virtual relationships are often as intimate as in-person relationships; in fact, Bargh and colleagues found that online relationships are sometimes more intimate (Bargh et al., 2002). This can be especially true for those individuals who are more socially anxious and lonely—such individuals who are more likely to turn to the Internet to find new and meaningful relationships (McKenna, Green, & Gleason, 2002). McKenna et al. (2002) suggest that for people who have a hard time meeting and maintaining relationships, due to shyness, anxiety, or lack of face-to-face social skills, the Internet provides a safe,

nonthreatening place to develop and maintain relationships. Similarly, Penny Benford (2008) found that for high-functioning autistic individuals, the Internet facilitated communication and relationship development with others, which would have been more difficult in face-to-face contexts, leading to the conclusion that Internet communication could be empowering for those who feel frustrated when communicating face to face.

Love



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, 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.

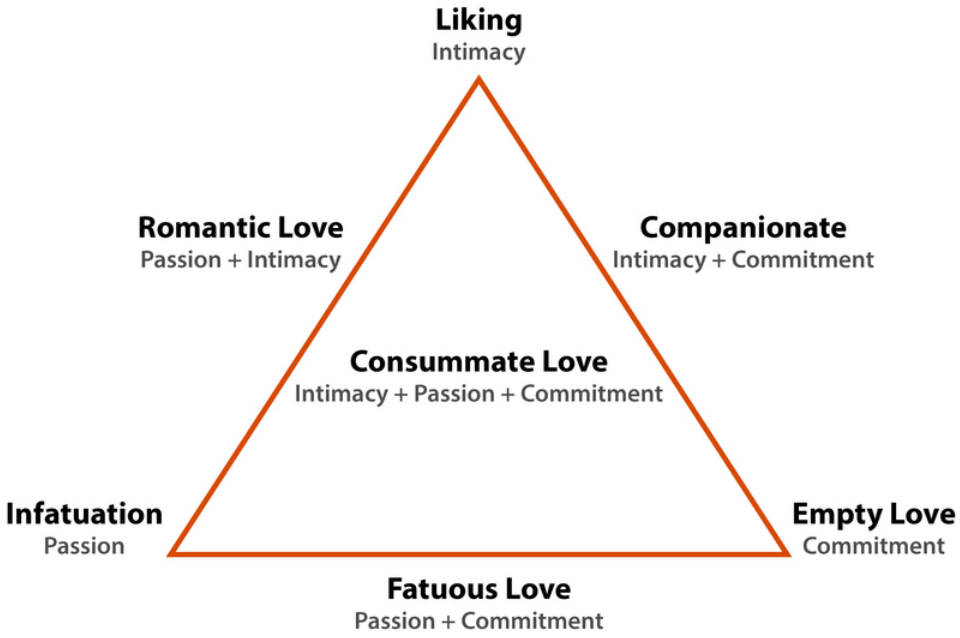


Figure 11.8.1: Triangular Theory of Love. Adapted from Wikipedia Creative Commons, 2013

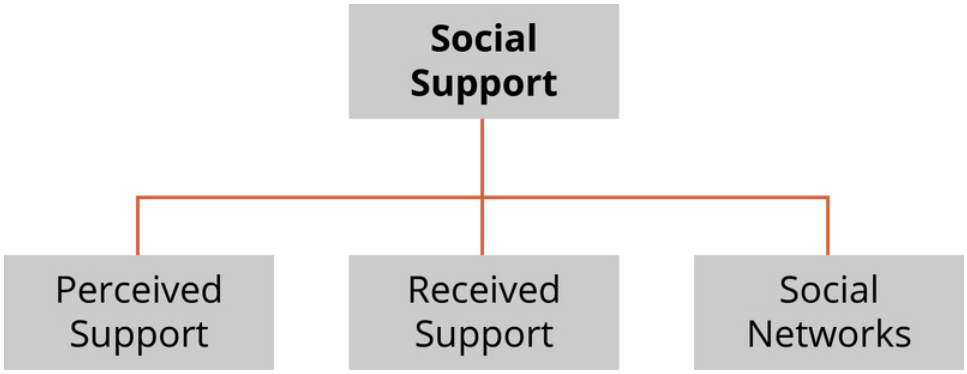
Taking this theory a step further, anthropologist Helen Fisher explained that she scanned the brains (using fMRI) of people who had just fallen in love and observed that their brain chemistry was "going crazy," similar to the brain of an addict on a drug high (Cohen, 2007). Specifically, serotonin production 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).

Love 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.

Social Support



When bad things happen, it is important for people to know that others care about them and can help them out. Unsurprisingly, research has found that this is a common thread across cultures (Markus & Kitayma, 1991; Triandis, 1995) and over time (Reis, Sheldon, Gable, Roscoe, & Ryan, 2000); in other words, social support is the active ingredient that makes our relationships particularly beneficial. But what *is* social support? One way of thinking about social support is that it consists of three discrete conceptual components.

Perceived Social Support

Have you ever thought that when things go wrong, you know you have friends/family members that are there to help you? This is what psychologists call **perceived social support** or "a psychological sense of support" (Gottlieb, 1985). How powerful is this belief that others will be available in times of need? To examine this question, Dr. Arnberg and colleagues asked 4,600 survivors of the tragic 2004 Indian Ocean (or Boxing Day) Tsunami about their perception of social support provided by friends and family

after the event. Those who experienced the most amount of stress found the most benefit from just knowing others were available if they needed anything (i.e., perceived support). In other words, the magnitude of the benefits depended on the extent of the stress, but the bottom line was that for these survivors, knowing that they had people around to support them if they needed it helped them all to some degree.

Perceived support has also been linked to well-being. Brannan and colleagues (2012) found that perceived support predicted each component of well-being (high positive affect, low negative affect, high satisfaction with life) among college students in Iran, Jordan, and the United States. Similarly, Cohen and McKay (1984) found that a high level of perceived support can serve as a buffer against stress. Interestingly enough, Dr. Cohen found that those with higher levels of social support were less likely to catch the common cold. The research is clear—perceived social support increases happiness and well-being and makes our live better in general (Diener & Seligman, 2002; Emmons & Colby, 1995).

Received Social Support



Social support is one of the ways people maintain healthy communities. [Image: Fort Belvoir Community Hospital, https://goo.gl/9f1c9N, CC BY-NC 2.0, goo.gl/VnKlK8]

Received support is the actual receipt of support or helping behaviors from others (Cohen & Wills, 1985). Interestingly, unlike perceived support, the benefits of *received* support have been beset with mixed findings (Stroebe & Stroebe, 1996). Similar to perceived support, receiving support can buffer people from stress and positively influence some individuals—however, others might not want support or think they need it. For example, dating advice from a friend may be considered more helpful than such advice from your mom! Interestingly, research has indicated that regardless of the support-provider's intentions, the support may not be considered as helpful to the person receiving the support if it is unwanted (Dunkel-Schetter, Blasband, Feinstein, & Herbert, 1992; Cutrona, 1986). Indeed, mentor support was viewed negatively by novice ESOL teachers (those teaching English as a second language in other countries; Brannan & Bleistein, 2012). Yet received support from family was perceived as very positive—the teachers said that their family members cared enough to ask about their jobs and told them how proud they were. Conversely, received mentor support did not meet teachers' needs, instead making them feel afraid and embarrassed to receive mentor support.

Quality or Quantity?

With so many mixed findings, psychologists have asked whether it is the quality of social support that matters or the quantity (e.g., more people in my **support network**). Interestingly, research by Friedman and Martin (2011) examining 1,500 Californians over 8 decades found that while quality does matter, individuals with larger social networks lived significantly longer than those with smaller networks. This research suggests we should count the number of our friends / family members—the more, the better, right? Not necessarily: Dunbar (1992; 1993) argued that we have a cognitive limit with regard to how many people with whom we can maintain social relationships. The general consensus is about 150—we can only "really" know (maintain contact and relate to)

about 150 people. Finally, research shows that diversity also matters in terms of one's network, such that individuals with more diverse social networks (i.e., different types of relationships including friends, parents, neighbors, and classmates) were less likely to get the common cold compared to those with fewer and less diverse networks (Cohen, Doyle, Turner, Alper, & Skoner, 2003). In sum, it is important to have quality relationships as well as quantity—and as the Beatles said, "all you need is love—love is all you need."

Outside Resources

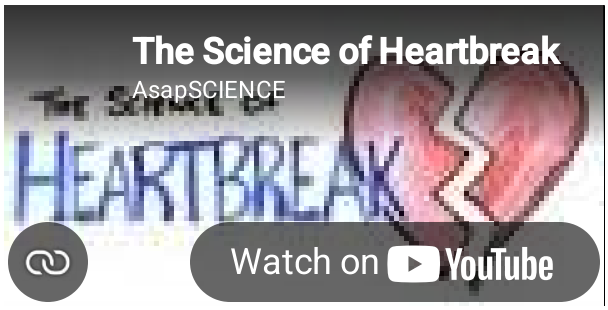
Movie: Official Website of Catfish the Movie

www.iamrogue.com/catfish

Video: Ted Talk from Helen Fisher on the brain in love

http://www.ted.com/talks/helen_fishe...n_in_love.html

Video: The Science of Heartbreak





Web: Groundbreaking longitudinal study on longevity from Howard S. Friedman and Leslie R. Martin

http://www.howardsfriedman.com/longevityproject/

Discussion Questions

1. What is more important—perceived social support or received social support? Why?
2. We understand how the Internet has changed the dating scene—how might it further change how we become romantically involved?
3. Can you love someone whom you have never met?
4. Do you think it is the quality or quantity of your relationships that really matters most?

Vocabulary

Functional distance

The frequency with which we cross paths with others.

Mere-exposure effect

The notion that people like people/places/things merely because they are familiar with them.

Perceived social support

A person's perception that others are there to help them in times of need.

Proximity

Physical nearness.

Received social support

The actual act of receiving support (e.g., informational, functional).

Support support network

The people who care about and support a person.

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7.6: Attachment Through the Life Course

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The purpose of this module is to provide a brief review of attachment theory—a theory designed to explain the significance of the close, emotional bonds that children develop with their caregivers and the implications of those bonds for understanding personality development. The module discusses the origins of the theory, research on individual differences in attachment security in infancy and childhood, and the role of attachment in adult relationships.

learning objectives

- Explain the way the attachment system works and its evolutionary significance.
- Identify three commonly studied attachment patterns and what is known about the development of those patterns.
- Describe what is known about the consequences of secure versus insecure attachment in adult relationships.

Introduction

Some of the most rewarding experiences in people's lives involve the development and maintenance of close relationships. For example, some of the greatest sources of joy involve falling in love, starting a family, being reunited with distant loved ones, and sharing experiences with close others. And, not surprisingly, some of the most painful experiences in people's lives involve the disruption of important social bonds, such as separation from a spouse, losing a parent, or being abandoned by a loved one.

Why do close relationships play such a profound role in human experience? Attachment theory is one approach to understanding the nature of close relationships. In this module, we review the origins of the theory, the core theoretical principles, and some ways in which attachment influences human behavior, thoughts, and feelings across the life course.



Close relationships are the fabric of society, and are integral to the maintenance of our species. [Image: CC0 Public Domain, goo.gl/m25gce]

Attachment Theory: A Brief History and Core Concepts

Attachment theory was originally developed in the 1940s by John Bowlby, a British psychoanalyst who was attempting to understand the intense distress experienced by infants who had been separated from their parents. Bowlby (1969) observed that infants would go to extraordinary lengths to prevent separation from their parents or to reestablish proximity to a missing parent. For example, he noted that children who had been separated from their parents would often cry, call for their parents, refuse to eat or play, and stand at the door in desperate anticipation of their parents' return. At the time of Bowlby's initial writings, psychoanalytic writers held that these expressions were manifestations of immature defense mechanisms that were operating to repress emotional pain. However, Bowlby observed that such expressions are common to a wide variety of mammalian species and speculated that these responses to separation may serve an evolutionary function (see Focus Topic 1).

Focus Topic 1: Harlow's research on contact comfort

When Bowlby was originally developing his theory of attachment, there were alternative theoretical perspectives on why infants were emotionally attached to their primary caregivers (most often, their biological mothers). Bowlby and other theorists, for example, believed that there was something important about the responsiveness and contact provided by mothers. Other theorists, in contrast, argued that young infants feel emotionally connected to their mothers because mothers satisfy more basic needs, such as the need for food. That is, the child comes to feel emotionally connected to the mother because she is associated with the reduction of primary drives, such as hunger, rather than the reduction of drives that might be relational in nature.

In a classic set of studies, psychologist Harry Harlow placed young monkeys in cages that contained two artificial, surrogate "mothers" (Harlow, 1958). One of those surrogates was a simple wire contraption; the other was a wire contraption covered in cloth. Both of the surrogate mothers were equipped with a feeding tube so that Harrow and his colleagues had the option to allow the surrogate to deliver or not deliver milk. Harlow found that the young macaques spent a disproportionate amount of time with the cloth surrogate as opposed to the wire surrogate. Moreover, this was true even when the infants were fed by the wire surrogate rather than the cloth surrogate. This suggests that the strong emotional bond that infants form with their primary caregivers is rooted in something more than whether the caregiver provides food per se. Harlow's research is now regarded as one of the first experimental demonstrations of the importance of "contact comfort" in the establishment of infant–caregiver bonds.

Drawing on evolutionary theory, Bowlby (1969) argued that these behaviors are adaptive responses to separation from a primary **attachment figure**—a caregiver who provides support, protection, and care. Because human infants, like other mammalian infants, cannot feed or protect themselves, they are dependent upon the care and protection of "older and wiser" adults for survival. Bowlby argued that, over the course of evolutionary history, infants who were able to maintain proximity to an attachment figure would be more likely to survive to a reproductive age.

According to Bowlby, a motivational system, what he called the **attachment behavioral system**, was gradually "designed" by natural selection to regulate proximity to an attachment figure. The attachment system functions much like a thermostat that continuously monitors the ambient temperature of a room, comparing that temperature against a desired state and adjusting behavior (e.g., activating the furnace) accordingly. In the case of the attachment system, Bowlby argued that the system continuously monitors the accessibility of the primary attachment figure. If the child perceives the attachment figure to be nearby, accessible, and attentive, then the child feels loved, secure, and confident and, behaviorally, is likely to explore his or her environment, play with others, and be sociable. If, however, the child perceives the attachment figure to be inaccessible, the child experiences anxiety and, behaviorally, is likely to exhibit attachment behaviors ranging from simple visual searching on the low extreme to active searching, following, and vocal signaling on the other. These **attachment behaviors** continue either until the child is able to reestablish a desirable level of physical or psychological proximity to the attachment figure or until the child exhausts himself or herself or gives up, as may happen in the context of a prolonged separation or loss.

Individual Differences in Infant Attachment



Think of your earliest memory, does it involve just you, or does it include your loved ones, your family and caretakers? [Image: CC0 Public Domain, goo.gl/m25gce]

Although Bowlby believed that these basic dynamics captured the way the attachment system works in most children, he recognized that there are individual differences in the way children appraise the accessibility of the attachment figure and how they regulate their attachment behavior in response to threats. However, it was not until his colleague, Mary Ainsworth, began to systematically study infant–parent separations that a formal understanding of these individual differences emerged. Ainsworth and her students developed a technique called the **strange situation**—a laboratory task for studying infant–parent attachment (Ainsworth, Blehar, Waters, & Wall, 1978). In the strange situation, 12-month-old infants and their parents are brought to the laboratory and, over a period of approximately 20 minutes, are systematically separated from and reunited with one another. In the strange situation, most children (about 60%) behave in the way implied by Bowlby's normative theory. Specifically, they become upset when the parent leaves the room, but, when he or she returns, they actively seek the parent and are easily comforted by him or her. Children who exhibit this pattern of behavior are often called secure. Other children (about 20% or less) are ill at ease initially and, upon separation, become extremely distressed. Importantly, when reunited with their parents, these children have a difficult time being soothed and often exhibit conflicting behaviors that suggest they want to be comforted, but that they also want to "punish" the parent for leaving. These children are often called anxious-resistant. The third pattern of attachment that Ainsworth and her colleagues documented is often labeled avoidant. Avoidant children (about 20%) do not consistently behave as if they are stressed by the separation but, upon reunion, actively avoid seeking contact with their parent, sometimes turning their attention to play objects on the laboratory floor.

Ainsworth's work was important for at least three reasons. First, she provided one of the first empirical demonstrations of how attachment behavior is organized in unfamiliar contexts. Second, she provided the first empirical taxonomy of individual differences in infant **attachment patterns**. According to her research, at least three types of children exist: those who are secure in their relationship with their parents, those who are anxious-resistant, and those who are anxious-avoidant. Finally, she demonstrated that these individual differences were correlated with infant–parent interactions in the home during the first year of life. Children who appear secure in the strange situation, for example, tend to have parents who are responsive to their needs. Children who appear insecure in the strange situation (i.e., anxious-resistant or avoidant) often have parents who are insensitive to their needs, or inconsistent or rejecting in the care they provide.

Antecedents of Attachment Patterns



Is attachment style multi-generational? How does one person's childhood attachment style translate to the way they interact with their own children? [Image: CC0 Public Domain, goo.gl/m25gce]

In the years that have followed Ainsworth's ground-breaking research, researchers have investigated a variety of factors that may help determine whether children develop secure or insecure relationships with their primary attachment figures. As mentioned above, one of the key determinants of attachment patterns is the history of sensitive and responsive interactions between the caregiver and the child. In short, when the child is uncertain or stressed, the ability of the caregiver to provide support to the child is critical for his or her psychological development. It is assumed that such supportive interactions help the child learn to regulate his or her emotions, give the child the confidence to explore the environment, and provide the child with a safe haven during stressful circumstances.

Evidence for the role of sensitive caregiving in shaping attachment patterns comes from longitudinal and experimental studies. For example, Grossmann, Grossmann, Spangler, Suess, and Unzner (1985) studied parent–child interactions in the homes of 54 families, up to three times during the first year of the child's life. At 12 months of age, infants and their mothers participated in the strange situation. Grossmann and her colleagues found that children who were classified as secure in the strange situation at 12 months of age were more likely than children classified as insecure to have mothers who provided responsive care to their children in the home environment.

Van den Boom (1994) developed an intervention that was designed to enhance maternal sensitive responsiveness. When the infants were 9 months of age, the mothers in the intervention group were rated as more responsive and attentive in their interaction with their infants compared to mothers in the control group. In addition, their infants were rated as more sociable, self-soothing, and more likely to explore the environment. At 12 months of age, children in the intervention group were more likely to be classified as secure than insecure in the strange situation.

Attachment Patterns and Child Outcomes

Attachment researchers have studied the association between children's attachment patterns and their adaptation over time. Researchers have learned, for example, that children who are classified as secure in the strange situation are more likely to have high functioning relationships with peers, to be evaluated favorably by teachers, and to persist with more diligence in challenging tasks. In contrast, insecure-avoidant children are more likely to be construed as "bullies" or to have a difficult time building and maintaining friendships (Weinfield, Sroufe, Egeland, & Carlson, 2008).

Attachment in Adulthood

Although Bowlby was primarily focused on understanding the nature of the infant–caregiver relationship, he believed that attachment characterized human experience across the life course. It was not until the mid-1980s, however, that researchers began to take seriously the possibility that attachment processes may be relevant to adulthood. Hazan and Shaver (1987) were two of the first researchers to explore Bowlby's ideas in the context of romantic relationships. According to Hazan and Shaver, the emotional bond that develops between adult romantic partners is partly a function of the same motivational system—the attachment behavioral system—that gives rise to the emotional bond between infants and their caregivers. Hazan and Shaver noted that in both kinds of relationship, people (a) feel safe and secure when the other person is present; (b) turn to the other person during times of sickness, distress, or fear; (c) use the other person as a "secure base" from which to explore the world; and (d) speak to one another in a unique language, often called "motherese" or "baby talk." (See Focus Topic 2)

Focus Topic 2: Attachment and social media

Social media websites and mobile communication services are coming to play an increasing role in people's lives. Many people use Facebook, for example, to keep in touch with family and friends, to update their loved ones regarding things going on in their lives, and to meet people who share similar interests. Moreover, modern cellular technology allows people to get in touch with their loved ones much easier than was possible a mere 20 years ago.

From an attachment perspective, these innovations in communications technology are important because they allow people to stay connected virtually to their attachment figures—regardless of the physical distance that might exist between them. Recent research has begun to examine how attachment processes play out in the use of social media. Oldmeadow, Quinn, and Kowert (2013), for example, studied a diverse sample of individuals and assessed their attachment security and their use of Facebook. Oldmeadow and colleagues found that the use of Facebook may serve attachment functions. For example, people were more likely to report using Facebook to connect with others when they were experiencing negative emotions. In addition, the researchers found that people who were more anxious in their attachment orientation were more likely to use Facebook frequently, but people who were more avoidant used Facebook less and were less open on the site.

On the basis of these parallels, Hazan and Shaver (1987) argued that adult romantic relationships, such as infant–caregiver relationships, are attachments. According to Hazan and Shaver, individuals gradually transfer attachment-related functions from parents to peers as they develop. Thus, although young children tend to use their parents as their primary attachment figures, as they reach adolescence and young adulthood, they come to rely more upon close friends and/or romantic partners for basic attachment-related functions. Thus, although a young child may turn to his or her mother for comfort, support, and guidance when

distressed, scared, or ill, young adults may be more likely to turn to their romantic partners for these purposes under similar situations.

Hazan and Shaver (1987) asked a diverse sample of adults to read the three paragraphs below and indicate which paragraph best characterized the way they think, feel, and behave in close relationships:

1. 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, others want me to be more intimate than I feel comfortable being.
2. 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 worry about being abandoned or about someone getting too close to me.
3. 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 get very close to my partner, and this sometimes scares people away.

Conceptually, these descriptions were designed to represent what Hazan and Shaver considered to be adult analogues of the kinds of attachment patterns Ainsworth described in the strange situation (avoidant, secure, and anxious, respectively). Hazan and Shaver (1987) found that the distribution of the three patterns was similar to that observed in infancy. In other words, about 60% of adults classified themselves as secure (paragraph B), about 20% described themselves as avoidant (paragraph A), and about 20% described themselves as anxious-resistant (paragraph C). Moreover, they found that people who described themselves as secure, for example, were more likely to report having had warm and trusting relationships with their parents when they were growing up. In addition, they were more likely to have positive views of romantic relationships. Based on these findings, Hazan and Shaver (1987) concluded that the same kinds of individual differences that exist in infant attachment also exist in adulthood.

Research on Attachment in Adulthood

Attachment theory has inspired a large amount of literature in social, personality, and clinical psychology. In the sections below, I provide a brief overview of some of the major research questions and what researchers have learned about attachment in adulthood.

Who Ends Up with Whom?



People who had relatively secure attachments as children go on to have more secure romantic attachments. [Image: CC0 Public Domain, goo.gl/m25gce]

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—the kinds of attributes that characterize a "secure" caregiver (Chappell & Davis, 1998). But 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), for example, 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.

Relationship Functioning

Research has consistently demonstrated that individuals who are relatively secure are more likely than insecure individuals to have high functioning relationships—relationships that are more satisfying, more enduring, and less characterized by conflict. For example, Feeney and Noller (1992) found that insecure individuals were more likely than secure individuals to experience a breakup of their relationship. In addition, secure individuals are more likely to report satisfying relationships (e.g., Collins & Read, 1990) and are more likely to provide support to their partners when their partners were feeling distressed (Simpson, Rholes, & Nelligan, 1992).

Do Early Experiences Shape Adult Attachment?



Sharing food, celebrations, and traditions are some of the ways we establish secure attachments with our loved ones from an early age. [Image: iwona_kellie, https://goo.gl/B406LK, CC BY-NC-SA 2.0, goo.gl/Toc0ZF]

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 1 to 3, 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.

Outside Resources

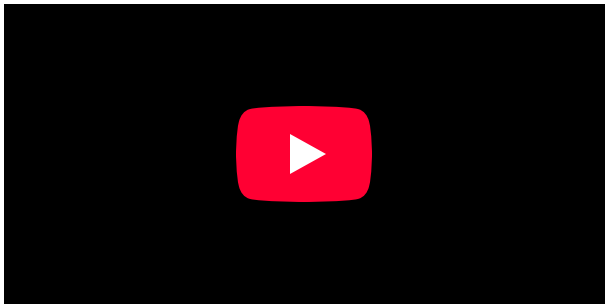
Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. Journal of Personality and Social Psychology, 52, 511-524. Retrieved from:

http://www2.psych.ubc.ca/~schaller/P...Shaver1987.pdf

Hofer, M. A. (2006). Psychobiological roots of early attachment. Current Directions in Psychological Science, 15, 84-88. doi:10.1111/j.0963-7214.2006.00412.x

http://cdp.sagepub.com/content/15/2/84.short

Strange Situation Video

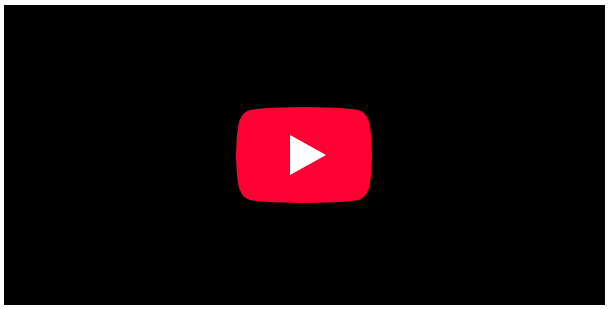




Survey: Learn more about your attachment patterns via this online survey

http://www.yourpersonality.net/relstructures/

Video on Harry Harlow's Research with Rhesus Monkeys





Discussion Questions

1. What kind of relationship did you have with your parents or primary caregivers when you were young? Do you think that had any bearing on the way you related to others (e.g., friends, relationship partners) as you grew older?
2. There is variation across cultures in the extent to which people value independence. Do you think this might have implications for the development of attachment patterns?
3. As parents age, it is not uncommon for them to have to depend on their adult children. Do you think that people's history of experiences in their relationships with their parents might shape people's willingness to provide care for their aging parents? In other words, are secure adults more likely to provide responsive care to their aging parents?
4. Some people, despite reporting insecure relationships with their parents, report secure, well-functioning relationships with their spouses. What kinds of experiences do you think might enable someone to develop a secure relationship with their partners despite having an insecure relationship with other central figures in their lives?
5. Most attachment research on adults focuses on attachment to peers (e.g., romantic partners). What other kinds of things may serve as attachment figures? Do you think siblings, pets, or gods can serve as attachment figures?

Vocabulary

Attachment behavioral system

A motivational system selected over the course of evolution to maintain proximity between a young child and his or her primary attachment figure.

Attachment behaviors

Behaviors and signals that attract the attention of a primary attachment figure and function to prevent separation from that individual or to reestablish proximity to that individual (e.g., crying, clinging).

Attachment figure

Someone who functions as the primary safe haven and secure base for an individual. In childhood, an individual's attachment figure is often a parent. In adulthood, an individual's attachment figure is often a romantic partner.

Attachment patterns

(also called "attachment styles" or "attachment orientations") Individual differences in how securely (vs. insecurely) people think, feel, and behave in attachment relationships.

Strange situation

A laboratory task that involves briefly separating and reuniting infants and their primary caregivers as a way of studying individual differences in attachment behavior.

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7.7: Relationships and Well-being

By Kenneth Tan and Louis Tay

Purdue University

The relationships we cultivate in our lives are essential to our well-being—namely, happiness and health. Why is that so? We begin to answer this question by exploring the types of relationships—family, friends, colleagues, and lovers—we have in our lives and how they are measured. We also explore the different aspects of happiness and health, and show how the quantity and quality of relationships can affect our happiness and health.

learning objectives

- Understand why relationships are key to happiness and health.
- Define and list different forms of relationships.
- List different aspects of well-being.
- Explain how relationships can enhance well-being.
- Explain how relationships might not enhance well-being.

Introduction



One of the most basic human needs is the need to belong. [Image: CC0 Public Domain, goo.gl/m25gce]

In Daniel Defoe's classic novel *Robinson Crusoe*(1719), the main character is shipwrecked. For years he lives alone, creating a shelter for himself and marking the passage of time on a wooden calendar. It is a lonely existence, and Crusoe describes climbing a hilltop in the hopes of seeing a passing ship and possible rescue. He scans the horizon until, in his own words, he is "almost blind." Then, without hope, he sits and weeps.

Although it is a work of fiction, *Robinson Crusoe*contains themes we can all relate to. One of these is the idea of loneliness. Humans are social animals and we prefer living together in groups. We cluster in families, in cities, and in groups of friends. In fact, most people spend relatively few of their waking hours alone. Even introverts report feeling happier when they are with others! Yes, being surrounded by people and feeling connected to others appears to be a natural impulse.

In this module we will discuss relationships in the context of well-being. We will begin by defining well-being and then presenting research about different types of relationships. We will explore how both the quantity and quality of our relationships affect us, as well as take a look at a few popular conceptions (or misconceptions) about relationships and happiness.

The Importance of Relationships

If you were to reflect on the best moments of your life, chances are they involved other people. We feel good sharing our experiences with others, and our desire for high quality relationships may be connected to a deep-seated psychological impulse: the need to belong (Baumeister & Leary, 1995). Aristotle commented that humans are fundamentally social in nature. Modern society is full of evidence that Aristotle was right. For instance, people often hold strong opinions about single child families—usually concerning what are often viewed as problematic "only child" characteristics—and most parents choose to have multiple kids. People join book clubs to make a solitary activity—reading—into a social activity. Prisons often punish offenders by putting them in solitary confinement, depriving them of the company of others. Perhaps the most obvious expression of the need to belong in contemporary life is the prevalence of social media. We live in an era when, for the first time in history, people effectively have two overlapping sets of social relationships: those in the real world and those in the virtual world.

It may seem intuitive that our strong urge to connect with others has to do with the boost we receive to our own well-being from relationships. After all, we derive considerable meaning from our relational bonds—as seen in the joy a newborn brings to its parents, the happiness of a wedding, and the good feelings of having reliable, supportive friendships. In fact, this intuition is borne out by research suggesting that relationships can be sources of intimacy and closeness (Reis, Clark & Holmes, 2004), comfort and relief from stress (Collins & Feeney, 2000), and accountability—all of which help toward achieving better health outcomes (Tay, Tan, Diener, & Gonzalez, 2013; Taylor, 2010). Indeed, scholars have long considered social relationships to be fundamental to happiness and well-being (Argyle, 2001; Myers, 2000). If the people in our lives are as important to our happiness as the research suggests, it only makes sense to investigate how relationships affect us.

The Question of Measurement

Despite the intuitive appeal of the idea that good relationships translate to more happiness, researchers must collect and analyze data to arrive at reliable conclusions. This is particularly difficult with the concepts of relationships and happiness, because both can be difficult to define. What counts as a relationship? A pet? An old friend from childhood you haven't seen in ten years? Similarly, it is difficult to pinpoint exactly what qualifies as happiness. It is vital to define these terms, because their definitions serve as the guidelines by which they can be measured, a process called **operationalization**. Scientifically speaking, the two major questions any researcher needs to answer before he or she can begin to understand how relationships and well-being interact are, "How do I best measure relationships?" and "How do I best measure well-being?"



Scientists are interested in objective measures such as the number of friends a person has and subjective measures such as feelings of social support. [Image: CC0 Public Domain, goo.gl/m25gce]

Let's begin with relationships. There are both *objective* and *subjective* ways to measure social relationships. **Objective social variables** are factors that are based on evidence rather than opinions. They focus on the *presence* and *frequency* of different types of relationships, and the *degree of contact* and *amount of shared activities* between people. Examples of these measures include participants' marital status, their number of friends and work colleagues, and the size of their social networks. Each of these variables is factually based (e.g., you have *x* number of coworkers, etc.). Another objective social variable is **social integration**, or

one's degree of integration into social networks. This can be measured by looking at the frequency and amount of social activity or contact one has with others (see Okun, Stock, Haring, & Witter, 1984; Pinquart & Sorensen, 2000). The strength of objective measures is that they generally have a single correct answer. For example, a person is either married or not; there is no in-between.

Subjective social variables, as the name suggests, are those that focus on the subjective qualities of social relationships. These are the products of personal opinions and feelings rather than facts. A key subjective variable is **social support**—the extent to which individuals feel cared for, can receive help from others, and are part of a supportive network. Measures of social support ask people to report on their perceived levels of support as well as their satisfaction with the support they receive (see Cohen, Underwood, & Gottlieb, 2000). Other subjective social variables assess the nature and quality of social relationships themselves—that is, what types of relationships people have, and whether these social relationships are good or bad. These can include measures that ask about the quality of a marriage (e.g., Dyadic Adjustment Scale; Spanier, 1976), the amount of conflict in a relationship (e.g., Conflict Tactics Scale; Straus, 1979), or the quality of each relationship in one's social network (e.g., Network of Relationships Inventory (NRI); Furman & Buhrmester, 1985). The strength of subjective measures is that they provide insight into people's personal experience. A married person, for example, might love or hate his/her marriage; subjective measures tell us which of these is the case.

Objective and subjective measures are often administered in a way that asks individuals to make a global assessment of their relationships (i.e., "How much social support do you receive?"). However, scientists have more recently begun to study social relationships and activity using methods such as daily diary methodology (Bolger, Davis, & Rafaeli, 2003), whereby individuals report on their relationships on a regular basis (e.g., three times a day). This allows researchers to examine in-the-moment instances and/or day-to-day trends of how social relationships affect happiness and well-being compared to more global measures. Many researchers try to include multiple types of measurement—objective, subjective, and daily diaries—to overcome the weaknesses associated with any one measurement technique.

Just as researchers must consider how to best measure relationships, they must also face the issue of measuring well-being. Well-being is a topic many people have an opinion about. If you and nine other people were to write down your own definitions of happiness, or of well-being, there's a good chance you'd end up with ten unique answers. Some folks define happiness as a sense of peace, while others think of it as being healthy. Some people equate happiness with a sense of purpose, while others think of it as just another word for joy. Modern researchers have wrestled with this topic for decades. They acknowledge that both psychological and physical approaches are relevant to defining well-being, and that many dimensions—satisfaction, joy, meaning—are all important.

One prominent psychological dimension of well-being is happiness. In psychology, the scientific term for happiness is **subjective well-being**, which is defined by three different components: high *life satisfaction*, which refers to positive evaluations of one's life in general (e.g., "Overall, I am satisfied with my life"); *positive feelings*, which refers to the amount of positive emotions one experiences in life (e.g., peace, joy); and *low negative feelings*, which refers to the amount of negative emotions one experiences in life (e.g., sadness, anger) (Diener, 1984). These components are commonly measured using subjective self-report scales.



The Satisfaction with Life Scale is one of the most widely used measures of well-being in the world

The physical dimension of well-being is best thought of as one's **health**. Health is a broad concept and includes, at least in part, being free of illness or infirmity. There are several aspects of physical health that researchers commonly consider when thinking about well-being and relationships. For example, health can be defined in terms of (A) injury, (B) disease, and (C) mortality. Health can also include physiological indicators, such as blood pressure or the strength of a person's immune system. Finally, there are **health behaviors** to be considered, such as dietary consumption, exercise, and smoking. Researchers often examine a variety of health variables in order to better understand the possible benefits of good relationships.

Presence and Quality of Relationships and Well-Being

If you wanted to investigate the connection between social relationships and well-being, where would you start? Would you focus on teenagers? Married couples? Would you interview religious people who have taken a vow of silence? These are the types of considerations well-being researchers face. It is impossible for a single study to look at all types of relationships across all age groups and cultures. Instead, researchers narrow their focus to specific variables. They tend to consider two major elements: the presence of relationships, and the quality of relationships.

Presence of relationships

The first consideration when trying to understand how relationships influence well-being is the presence of relationships. Simply put, researchers need to know whether or not people have relationships. Are they married? Do they have many friends? Are they a member of a club? Finding this out can be accomplished by looking at objective social variables, such as the size of a person's social network, or the number of friends they have. Researchers have discovered that the more social relationships people have, in general, the more positively their sense of well-being is impacted (Lucas, Dyrenforth, & Diener 2008). In one study of more than 200 undergraduate students, psychologists Ed Diener and Martin Seligman (2002) compared the happiest 10% to the unhappiest 10%. The researchers were curious to see what differentiated these two groups. Was it gender? Exercise habits? Religion? The

answer turned out to be relationships! The happiest students were much more satisfied with their relationships, including with close friends, family, and romantic partnerships, than the unhappiest. They also spent less time alone.

Some people might be inclined to dismiss the research findings above because they focused primarily on college students. However, in a worldwide study of people of all ages from 123 nations, results showed that having even a few high quality social relationships was consistently linked with subjective well-being (Tay & Diener, 2011). This is an important finding because it means that a person doesn't have to be a social butterfly in order to be happy. Happiness doesn't depend necessarily on having dozens of friends, but rather on having at least a few close connections.

Another way of gaining an understanding of the presence of relationships is by looking at the *absence* of relationships. A lack of social connections can lead to loneliness and depression. People lose well-being when social relationships are denied—as in cases of **ostracism**. In many societies, withholding social relationships is used as a form of punishment. For example, in some Western high schools, people form social groups known as "cliques," in which people share interests and a sense of identity. Unlike clubs, cliques do not have explicit rules for membership but tend to form organically, as exclusive group friendships. When one member of a clique conflicts with the others, the offending member may be socially rejected.



Ostracism is a form of social rejection and isolation that has a negative impact on well-being. [Image: CC0 Public Domain, goo.gl/m25gce]

Similarly, some small societies practice **shunning**, a temporary period during which members withhold emotion, communication, and other forms of social contact as a form of punishment for wrongdoing. The Amish—a group of traditional Christian communities in North America who reject modern conveniences such as electricity—occasionally practice shunning (Hostetler, 1993). Members who break important social rules, for example, are made to eat alone rather than with their family. This typically lasts for one to two weeks. Individuals' well-being has been shown to dramatically suffer when they are ostracized in such a way (Williams, 2009). Research has even shown that the areas of the brain that process physical pain when we are injured are the same areas that process emotional pain when we are ostracized (Eisenberger, Lieberman, & Williams, 2003).

Quality of relationships

Simply having a relationship is not, in itself, sufficient to produce well-being. We're all familiar with instances of awful relationships: Cinderella and her step-sisters, loveless marriages, friends who have frequent falling-outs (giving birth to the word "frenemy"). In order for a relationship to improve well-being it has to be a good one. Researchers have found that higher friendship quality is associated with increased happiness (Demir & Weitekamp, 2007). Friendships aren't the only relationships that help, though. Researchers have found that high quality relationships between parents and children are associated with increased happiness, both for teenagers (Gohm, Oishi, Darlington, & Diener, 1998) and adults (Amato & Afifi, 2006).

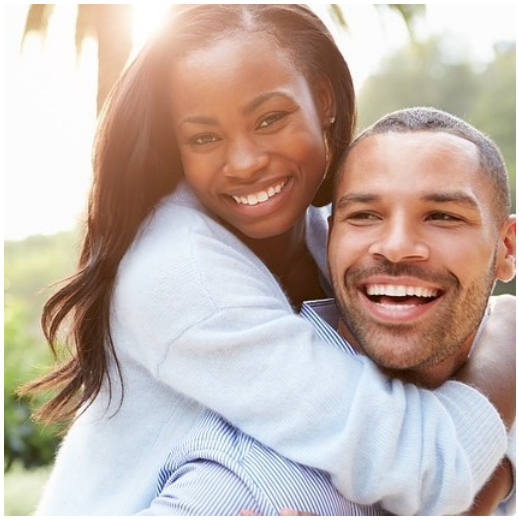
Finally, an argument can be made for looking at relationships' effects on each of the distinct components of subjective well-being. Walen and Luchman (2000) investigated a mix of relationships, including family, friends, and romantic partners. They found that social support and conflict were associated with all three aspects of subjective well-being (life satisfaction, positive affect, and negative affect). Similarly, in a cross-cultural study comparing college students in Iran, Jordan, and the United States, researchers

found that social support was linked to higher life satisfaction, higher positive affect, and lower negative affect (Brannan, Biswas-Diener, Mohr, Mortazavi, & Stein, 2012).

It may seem like common sense that good relationships translate to more happiness. You may be surprised to learn, however, that good relationships also translate to better health. Interestingly, both the *quality* and *quantity* of social relationships can affect a person's health (Cohen 1988; House, Landis, & Umberson, 1988). Research has shown that having a larger social network and high quality relationships can be beneficial for health, whereas having a small social network and poor quality relationships can actually be *detrimental* to health (Uchino, 2006). Why might it be the case that good relationships are linked to health? One reason is that friends and romantic partners might share health behaviors, such as wearing seat belts, exercising, or abstaining from heavy alcohol consumption. Another reason is that people who experience social support might feel less stress. Stress, it turns out, is associated with a variety of health problems. Other discussions on social relationships and health can also be found in Noba (http://noba.to/4tm85z2x).

Types of Relationships

Intimate relationships



Intimate Relationships have been shown to have a strong positive impact on individuals' well-being. [Image: CC0 Public Domain, goo.gl/m25gce]

It makes sense to consider the various types of relationships in our lives when trying to determine just how relationships impact our well-being. For example, would you expect a person to derive the exact same happiness from an ex-spouse as from a child or coworker? Among the most important relationships for most people is their long-time romantic partner. Most researchers begin their investigation of this topic by focusing on intimate relationships because they are the closest form of social bond. Intimacy is more than just physical in nature; it also entails psychological closeness. Research findings suggest that having a single **confidante**—a person with whom you can be authentic and trust not to exploit your secrets and vulnerabilities—is more important to happiness than having a large social network (see Taylor, 2010 for a review).

Another important aspect of relationships is the distinction between formal and informal. Formal relationships are those that are bound by the rules of politeness. In most cultures, for instance, young people treat older people with formal respect, avoiding profanity and slang when interacting with them. Similarly, workplace relationships tend to be more formal, as do relationships with new acquaintances. Formal connections are generally less relaxed because they require a bit more work, demanding that we exert more self-control. Contrast these connections with informal relationships—friends, lovers, siblings, or others with whom you can relax. We can express our true feelings and opinions in these informal relationships, using the language that comes most naturally to us, and generally being more authentic. Because of this, it makes sense that more intimate relationships—those that are more comfortable and in which you can be more vulnerable—might be the most likely to translate to happiness.

The most common way researchers investigate intimacy is by examining marital status. Although marriage is just one type of intimate relationship, it is by far the most common type. In some research, the well-being of married people is compared to that of people who are single or have never been married, and in other research, married people are compared to people who are divorced

or widowed (Lucas & Dyrenforth, 2005). Researchers have found that the transition from singlehood to marriage brings about an increase in subjective well-being (Haring-Hidore, Stock, Okun, & Witter, 1985; Lucas, 2005; Williams, 2003). Research has also shown that progress through the stages of relationship commitment (i.e., from singlehood to dating to marriage) is also associated with an increase in happiness (Dush & Amato, 2005). On the other hand, experiencing divorce, or the death of a spouse, leads to adverse effects on subjective well-being and happiness, and these effects are stronger than the positive effects of being married (Lucas, 2005).

Although research frequently points to marriage being associated with higher rates of happiness, this does not guarantee that getting married will make you happy! The quality of one's marriage matters greatly. When a person remains in a problematic marriage, it takes an emotional toll. Indeed, a large body of research shows that people's overall life satisfaction is affected by their satisfaction with their marriage (Carr, Freedman, Cornman, Schwarz, 2014; Dush, Taylor, & Kroeger, 2008; Karney, 2001; Luhmann, Hofmann, Eid, & Lucas, 2012; Proulx, Helms, & Buehler, 2007). The lower a person's self-reported level of marital quality, the more likely he or she is to report depression (Bookwala, 2012). In fact, longitudinal studies—those that follow the same people over a period of time—show that as marital quality declines, depressive symptoms increase (Fincham, Beach, Harold, & Osborne, 1997; Karney, 2001). Proulx and colleagues (2007) arrived at this same conclusion after a systematic review of 66 cross-sectional and 27 longitudinal studies.

What is it about bad marriages, or bad relationships in general, that takes such a toll on well-being? Research has pointed to conflict between partners as a major factor leading to lower subjective well-being (Gere & Schimmack, 2011). This makes sense. Negative relationships are linked to ineffective social support (Reblin, Uchino, & Smith, 2010) and are a source of stress (Holt-Lunstad, Uchino, Smith, & Hicks, 2007). In more extreme cases, physical and psychological abuse can be detrimental to well-being (Follingstad, Rutledge, Berg, Hause, & Polek, 1990). Victims of abuse sometimes feel shame, lose their sense of self, and become less happy and prone to depression and anxiety (Arias & Pape, 1999). However, the unhappiness and dissatisfaction that occur in abusive relationships tend to dissipate once the relationships end. (Arriaga, Capezza, Goodfriend, Rayl & Sands, 2013).



Since we spend so much of our time at work it's essential to our well-being that we get along with our coworkers! [Image: Editor B, https://goo.gl/pnc4G6, CC BY 2.0, goo.gl/BRvSA7]

Working adults spend a large part of their waking hours in relationships with coworkers and supervisors. Because these relationships are forced upon us by work, researchers focus less on their presence or absence and instead focus on their quality. High quality work relationships can make jobs enjoyable and less stressful. This is because workers experience mutual trust and support in the workplace to overcome work challenges. Liking the people we work with can also translate to more humor and fun on the job. Research has shown that supervisors who are more supportive have employees who are more likely to thrive at work (Paterson, Luthans, & Jeung, 2014; Monnot & Beehr, 2014; Winkler, Busch, Clasen, & Vowinkel, 2015). On the other hand, poor quality work relationships can make a job feel like drudgery. Everyone knows that horrible bosses can make the workday unpleasant. Supervisors that are sources of stress have a negative impact on the subjective well-being of their employees (Monnot & Beehr, 2014). Specifically, research has shown that employees who rate their supervisors high on the so-called "dark triad"—**psychopathy**, **narcissism**, and **Machiavellianism**—reported greater psychological distress at work, as well as less job satisfaction (Mathieu, Neumann, Hare, & Babiak, 2014).

In addition to the direct benefits or costs of work relationships on our well-being, we should also consider how these relationships can impact our job performance. Research has shown that feeling engaged in our work and having a high job performance predicts better health and greater life satisfaction (Shimazu, Schaufeli, Kamiyama, & Kawakami, 2015). Given that so many of our waking hours are spent on the job—about ninety thousand hours across a lifetime—it makes sense that we should seek out and invest in positive relationships at work.

Fact or Myth: Are Social Relationships the Secret to Happiness?

If you read pop culture magazines or blogs, you've likely come across many supposed "secrets" to happiness. Some articles point to exercise as a sure route to happiness, while others point to gratitude as a crucial piece of the puzzle. Perhaps the most written about "secret" to happiness is having high quality social relationships. Some researchers argue that social relationships are central to subjective well-being (Argyle, 2001), but others contend that social relationships' effects on happiness have been exaggerated. This is because, when looking at the **correlations**—the size of the associations—between social relationships and well-being, they are typically small (Lucas & Dyrenforth, 2006; Lucas et al., 2008). Does this mean that social relationships are not actually important for well-being? It would be premature to draw such conclusions, because even though the effects are small, they are robust and reliable across different studies, as well as other domains of well-being. There may be no single secret to happiness but there may be a recipe, and, if so, good social relationships would be one ingredient.

Outside Resources

Article: The New Yorker Magazine—"Hellhole" article on solitary confinement

http://www.newyorker.com/magazine/2009/03/30/hellhole

Blog: The Gottman Relationship Blog

https://www.gottman.com/blog/

Helen Fisher on Millennials' Dating Trends

https://www.theatlantic.com/video/index/504626/tinder-wont-change-love/

Web: Science of Relationship's website on social relationships and health

http://www.scienceofrelationships.co...rceived-p.html

Web: Science of Relationship's website on social relationships and well-being

www.scienceofrelationships.co...ell-being.html

Discussion Questions

1. What is more important to happiness: the quality or quantity of your social relationships?
2. What do you think has more influence on happiness: friends or family relationships? Do you think that the effect of friends and family on happiness will change with age? What about relationship duration?
3. Do you think that single people are likely to be unhappy?
4. Do you think that same-sex couples who get married will have the same benefits, in terms of happiness and well-being, compared to heterosexual couples?
5. What elements of subjective well-being do you think social relationships have the largest impact on: life satisfaction, positive affect, or negative affect?
6. Do you think that if you are unhappy you can have good quality relationships?
7. Do you think that social relationships are important for happiness more so for women compared to men?

Vocabulary

Confidante

A trusted person with whom secrets and vulnerabilities can be shared.

Correlation

A measure of the association between two variables, or how they go together.

Health

The complete state of physical, mental, and social well-being—not just the absence of disease or infirmity.

Health behaviors

Behaviors that are associated with better health. Examples include exercising, not smoking, and wearing a seat belt while in a vehicle.

Machiavellianism

Being cunning, strategic, or exploitative in one's relationships. Named after Machiavelli, who outlined this way of relating in his book, The Prince.

Narcissism

A pervasive pattern of grandiosity (in fantasy or behavior), a need for admiration, and lack of empathy.

Objective social variables

Targets of research interest that are factual and not subject to personal opinions or feelings.

Operationalization

The process of defining a concept so that it can be measured. In psychology, this often happens by identifying related concepts or behaviors that can be more easily measured.

Ostracism

Being excluded and ignored by others.

Psychopathy

A pattern of antisocial behavior characterized by an inability to empathize, egocentricity, and a desire to use relationships as tools for personal gain.

Shunning

The act of avoiding or ignoring a person, and withholding all social interaction for a period of time. Shunning generally occurs as a punishment and is temporary.

Social integration

Active engagement and participation in a broad range of social relationships.

Social support

A social network's provision of psychological and material resources that benefit an individual.

Subjective social variables

Targets of research interest that are not necessarily factual but are related to personal opinions or feelings

Subjective well-being

The scientific term used to describe how people experience the quality of their lives in terms of life satisfaction and emotional judgments of positive and negative affect.

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CHAPTER OVERVIEW

8: INDUSTRIAL

8.1: Industrial
8.1.1: Organizational (I
8.1.1.1: Industrial/Organizational (I/O) Psychology

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8.1: Industrial

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8.1.1: Organizational (I

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8.1.1.1: Industrial/Organizational (I/O) Psychology

By Berrin Erdogan and Talya N. Bauer

Portland State University, Koç University

This module provides an introduction to industrial and organizational (I/O) psychology. I/O psychology is an area of psychology that specializes in the scientific study of behavior in organizational settings and the application of psychology to understand work behavior. The U.S. Department of Labor estimates that I/O psychology, as a field, will grow 26% by the year 2018. I/O psychologists typically have advanced degrees such as a Ph.D. or master's degree and may work in academic, consulting, government, military, or private for-profit and not-for-profit organizational settings. Depending on the state in which they work, I/O psychologists may be licensed. They might ask and answer questions such as "What makes people happy at work?" "What motivates employees at work?" "What types of leadership styles result in better performance of employees?" "Who are the best applicants to hire for a job?" One hallmark of I/O psychology is its basis in data and evidence to answer such questions, and I/O psychology is based on the scientist-practitioner model. The key individuals and studies in the history of I/O psychology are addressed in this module. Further, professional I/O associations are discussed, as are the key areas of competence developed in I/O master's programs.

learning objectives

- Define industrial and organizational (I/O) psychology.
- Describe what an I/O psychologist does.
- List the professional associations of I/O psychologists.
- Identify major milestones in the history of I/O psychology.

What is Industrial and Organizational (I/O) Psychology?



The term Industrial Organizational psychology can be applied to businesses, schools, clubs, and even to sports teams. [Image: Kevin Dooley, https://goo.gl/b45OFM, CC BY 2.0, goo.gl/BRvSA7]

Psychology as a field is composed of many different areas. When thinking of psychology, the person on the street probably imagines the clinical psychologist who studies and treats dysfunctional behavior or maybe the criminal psychologist who has become familiar due to popular TV shows such as *Law & Order*. I/O psychology may be underrepresented on TV, but it is a fast-growing and influential branch of psychology.

What is **I/O psychology**? Briefly, it can be defined as the scientific study of behavior in organizational settings and the application of psychology to understand work behavior. In other words, while general psychology concerns itself with behavior of individuals in general, I/O psychology focuses on understanding employee behavior in work settings. For example, they ask questions such as: *How can organizations recruit and select the people they need in order to remain productive? How can organizations assess and improve the performance of their employees? What work and non-work factors contribute to the happiness, effectiveness, and well-being of employees in the workplace? How does work influence non-work behavior and happiness? What motivates employees at work?* All of these important queries fall within the domain of I/O psychology. Table 1 presents a list of tasks I/O psychologists may perform in their work. This is an extensive list, and one person will not be responsible for all these tasks. The I/O psychology field prepares and trains individuals to be more effective in performing the tasks listed in this table.

Task	Description
Job Analysis	Conducting interviews or distributing surveys to collect information about jobs, and then determining skill, knowledge, and ability requirements of jobs, as well as preparing job descriptions.
Developing Employee Selection Systems	Ensuring that job candidates fit job requirements by developing employee selection systems. Evaluating tests and other selection procedures such as interviews or work samples to determine whether test scores actually predict future high and low performers, and ensuring that the selection method in place is legal and effective in meeting the current and future talent needs of the organization.
Designing Performance Appraisal Systems	Measuring employee performance to differentiate between high and low performers and identify improvement opportunities. Performance assessment systems are used for the purposes of making decisions about employees, such as promotion, termination, or reward, as well as providing feedback to employees to improve future performance.
Developing Compensation Systems	Designing pay systems that ensure employees are compensated in an equitable way. Effective compensation systems are fair when compared with how similar employees are rewarded in other organizations, rewards competencies that are strategically important to the organization, and differentiates between high and low performers.
Training and Development	Creating systems to identify employees with training and development needs, designing training programs to meet these needs, conducting these training programs, and assessing the effectiveness of these training programs.
Solve Talent Management Problems	Helping resolve problems relating to talent management using data-driven approaches. For example, I/O psychologists may conduct exit interviews and analyze employee attitude survey data to determine causes of employee engagement problems and derive solutions to solve these problems.

Table 1. Sample Tasks I/O Psychologists May Perform

At this point you may be asking yourself: *Does psychology really need a special field to study work behaviors? In other words, wouldn't the findings of general psychology be sufficient to understand how individuals behave at work?* The answer is an underlined *no*. Employees behave differently at work compared with how they behave in general. While some fundamental principles of psychology definitely explain how employees behave at work (such as selective perception or the desire to relate to those who are similar to us), organizational settings are unique. To begin with, organizations have a hierarchy. They have job descriptions for employees. Individuals go to work not only to seek fulfillment and to remain active, but also to receive a paycheck and satisfy their financial needs. Even when they dislike their jobs, many stay and continue to work until a better alternative comes along. All these constraints suggest that how we behave at work may be somewhat different from how we would behave without these constraints. According to the U.S. Bureau of Labor Statistics, in 2011, more than 149 million individuals worked at least part time and spent many hours of the week working—see Figure 12.1.1 for a breakdown (U.S. Department of Labor, 2011). In other words, we spend a large portion of our waking hours at work. How happy we are with our jobs and our careers is a primary predictor of how happy and content we are with our lives in general (Erdogan, Bauer, Truxillo, & Mansfield, 2012). Therefore, the I/O psychology field has much to offer to individuals and organizations interested in increasing employee productivity, retention, and effectiveness while at the same time ensuring that employees are happy and healthy.

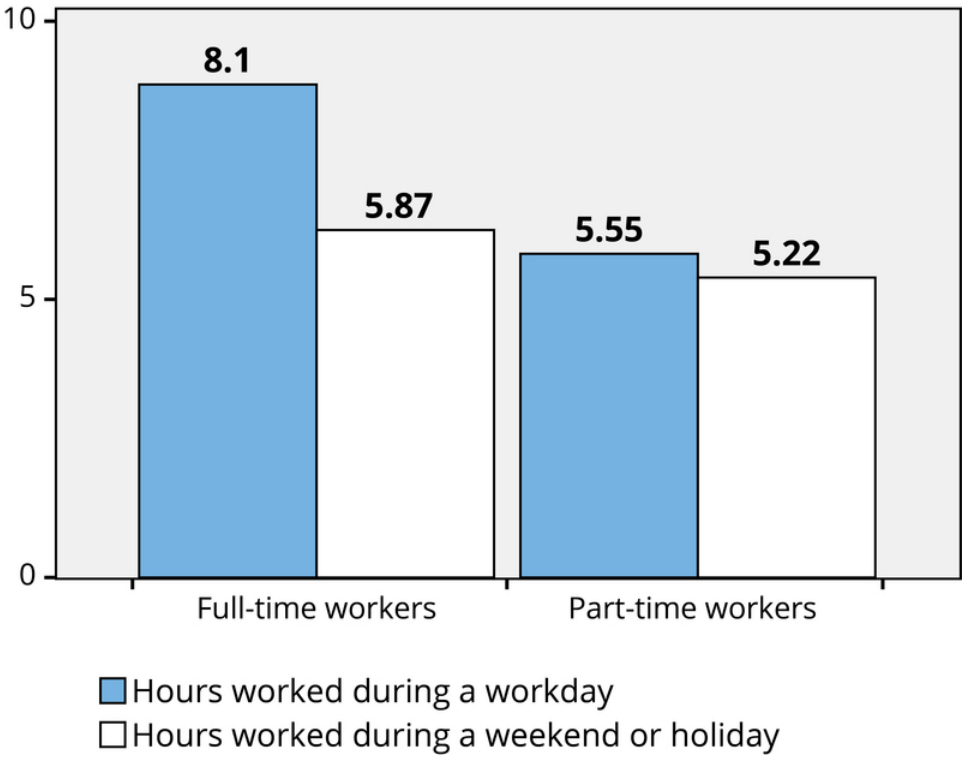


Figure 12.1.1: Average Hours Worked by Full Time and Part Time Workers

It seems that I/O psychology is useful for organizations, but how is it helpful to you? Findings of I/O psychology are useful and relevant to everyone who is planning to work in an organizational setting. Note that we are not necessarily taking about a business setting. Even if you are planning to form your own band, or write a novel, or work in a not-for-profit organization, you will likely be working in, or interacting with, organizations. Understanding why people behave the way they do will be useful to you by helping you motivate and influence your coworkers and managers, communicate your message more effectively, negotiate a contract, and manage your own work life and career in a way that fits your life and career goals.

What Does an I/O Psychologist Do?



I/O psychologists conduct studies that look at important questions such as “What makes people happy at work?” and “What types of leadership styles result in better performance of employees?”

I/O psychology is a scientific discipline. Similar to other scientific fields, it uses research methods and approaches, and tests hypotheses. However, I/O psychology is a social science. This means that its findings will always be less exact than in physical sciences. Physical sciences study natural matter in closed systems and in controlled conditions. Social sciences study human

behavior in its natural setting, with multiple factors that can affect behavior, so their predictive ability will never be perfect. While we can expect that two hydrogen and one oxygen atom will always make water when combined, combining job satisfaction with fair treatment will not always result in high performance. There are many influences on employee behaviors at work, and how they behave depends on the person interacting with a given situation on a given day.

Despite the lack of precise results, I/O psychology uses scientific principles to study organizational phenomena. Many of those who conduct these studies are located at universities, in psychology or management departments, but there are also many who work in private, government, or military organizations who conduct studies about I/O-related topics. These scholars conduct studies to understand topics such as “What makes people happy at work?” “What motivates employees at work?” “What types of leadership styles result in better performance of employees?” I/O psychology researchers tend to have a Ph.D. degree, and they develop hypotheses, find ways of reasonably testing those hypotheses in organizational settings, and distribute their findings by publishing in academic journals.

I/O psychology is based on the **scientist-practitioner model**. In other words, while the science part deals with understanding how and why things happen at work, the practitioner side takes a data-driven approach to understand organizational problems and to apply these findings to solving these specific problems facing the organization. While practitioners may learn about the most recent research findings by reading the journals that publish these results, some conduct their own research in their own companies, and some companies employ many I/O psychologists. Google is one company that collects and analyzes data to deal with talent-related issues. Google uses an annual *Googlegeist* (roughly translating to the spirit of Google) survey to keep tabs on how happy employees are. When survey results as well as turnover data showed that new mothers were twice as likely to leave the company as the average employee, the company made changes in its maternity leave policy and mitigated the problem (Manjoo, 2013). In other words, I/O psychologists both contribute to the science of workplace behavior by generating knowledge and solve actual problems organizations face by designing the workplace recruitment, selection, and workforce management policies using this knowledge.

While the scientist-practitioner model is the hoped-for ideal, not everyone agrees that it captures the reality. Some argue that practitioners are not always up to date about what scientists know and, conversely, that scientists do not study what practitioners really care about often enough (Briner & Rousseau, 2011). At the same time, consumers of research should be wary, as there is some pseudo-science out there. The issues related to I/O psychology are important to organizations, which are sometimes willing to pay a lot of money for solutions to their problems, with some people trying to sell their most recent invention in employee testing, training, performance appraisal, and coaching to organizations. Many of these claims are not valid, and there is very little evidence that some of these products, in fact, improve the performance or retention of employees. Therefore, organizations and consumers of I/O-related knowledge and interventions need to be selective and ask to see such evidence (which is not the same as asking to see the list of other clients who purchased their products!).



I/O Psychologists work in a variety of settings that include, but are not limited to education, research and government organizations. [Image: WOCinTech Chat, https://goo.gl/RxTG7B, CC BY 2.0, goo.gl/BRvSA7]

The U.S. Department of Labor estimates that I/O psychology as a field is expected to grow 26% by the year 2018 (American Psychological Association, 2011) so the job outlook for I/O psychologists is good. Helping organizations understand and manage their workforce more effectively using science-based tools is important regardless of the shape of the economy, and I/O psychology as a field remains a desirable career option for those who have an interest in psychology in a work-related context coupled with an affinity for research methods and statistics.

If you would like to refer to yourself as a psychologist in the United States, then you would need to be licensed, and this requirement also applies to I/O psychologists. Licensing requirements vary by state (see www.siop.org for details). However, it is possible to pursue a career relating to I/O psychology without holding the title psychologist. Licensing requirements usually include a doctoral degree in psychology. That said, there are many job opportunities for those with a master's degree in I/O psychology, or in related fields such as organizational behavior and human resource management.

Academics and practitioners who work in I/O psychology or related fields are often members of the **Society for Industrial and Organizational Psychology (SIOP)**. Students with an interest in I/O psychology are eligible to become an affiliated member of this organization, even if they are not pursuing a degree related to I/O psychology. SIOP membership brings benefits including networking opportunities and subscriptions to an academic journal of I/O research and a newsletter detailing current issues in I/O. The organization supports its members by providing forums for information and idea exchange, as well as monitoring developments about the field for its membership. SIOP is an independent organization but also a subdivision of American Psychological Association (APA), which is the scientific organization that represents psychologists in the United States. Different regions of the world have their own associations for I/O psychologists. For example, the European Association for Work and Organizational Psychology (EAWOP) is the premiere organization for I/O psychologists in Europe, where I/O psychology is typically referred to as **work and organizational psychology**. A global federation of I/O psychology organizations, named the Alliance for Organizational Psychology, was recently established. It currently has three member organizations (SIOP, EAWOP, and the Organizational Psychology Division of the International Association for Applied Psychology, or Division 1), with plans to

expand in the future. The Association for Psychological Science (APS) is another association to which many I/O psychologists belong.

Those who work in the I/O field may be based at a university, teaching and researching I/O-related topics. Some private organizations employing I/O psychologists include DDI, HUMRRO, Corporate Executive Board (CEB), and IBM Smarter Workforce. These organizations engage in services such as testing, performance management, and administering attitude surveys. Many organizations also hire in-house employees with expertise in I/O psychology–related fields to work in departments including human resource management or "people analytics." According to a 2011 membership survey of SIOP, the largest percentage of members were employed in academic institutions, followed by those in consulting or independent practice, private sector organizations, and public sector organizations (Society for Industrial and Organizational Psychology, 2011). Moreover, the majority of respondents (86%) were not licensed.

History of I/O Psychology

The field of I/O psychology is almost as old as the field of psychology itself. In order to understand any field, it helps to understand how it started and evolved. Let's look at the pioneers of I/O psychology and some defining studies and developments in the field (see Koppes, 1997; Landy, 1997).

The term "founding father" of I/O psychology is usually associated with Hugo Munsterberg of Harvard University. His 1913 book on *Psychology and Industrial Efficiency*, is considered to be the first textbook in I/O psychology. The book is the first to discuss topics such as how to find the best person for the job and how to design jobs to maintain efficiency by dealing with fatigue.



Hugo Munsterberg, the founding father of I/O psychology who in turn was influenced by the writings of Wilhelm Wundt, the founding father of experimental psychology. [Image: CC0 Public Domain, goo.gl/m25gce]

One of his contemporaries, Frederick Taylor, was not a psychologist and is considered to be a founding father not of I/O psychology but of scientific management. Despite his non-psychology background, his ideas were important to the development of the I/O psychology field, because they evolved at around the same time, and some of his innovations, such as job analysis, later became critically important aspects of I/O psychology. Taylor was an engineer and management consultant who pioneered time studies where management observed how work was being performed and how it could be performed better. For example, after analyzing how workers shoveled coal, he decided that the optimum weight of coal to be lifted was 21 pounds, and he designed a shovel to be distributed to workers for this purpose. He instituted mandatory breaks to prevent fatigue, which increased efficiency of workers. His book *Principles of Scientific Management* was highly influential in pointing out how management could play a role in increasing efficiency of human factors.

Lillian Gilbreth was an engineer and I/O psychologist, arguably completing the first Ph.D. in I/O psychology. She and her husband, Frank Gilbreth, developed Taylor's ideas by conducting time and motion studies, but also bringing more humanism to these efforts.

Gilbreth underlined the importance of how workers felt about their jobs, in addition to how they could perform their jobs more efficiently. She was also the first to bring attention to the value of observing job candidates while they performed their jobs, which is the foundation behind work sample tests. The Gilbreths ran a successful consulting business based on these ideas. Her advising of GE in kitchen redesign resulted in foot-pedal trash cans and shelves in refrigerator doors. Her life with her husband and 12 kids is detailed in a book later made into a 1950 movie, *Cheaper by the Dozen*, authored by two of her children.

World War I was a turning point for the field of I/O psychology, as it popularized the notion of testing for placement purposes. During and after the war, more than 1 million Americans were tested, which exposed a generation of men to the idea of using tests as part of selection and placement. Following the war, the idea of testing started to take root in the private industry. American Psychological Association President Robert Yerkes, as well as Walter Dill Scott and Walter Van Dyke Bingham from the Carnegie Institute of Technology (later Carnegie Mellon University) division of applied psychology department were influential in popularizing the idea of testing by offering their services to the U.S. Army.

Another major development in the field was the **Hawthorne Studies**, conducted under the leadership of Harvard University researchers Elton Mayo and Fritz Roethlisberger at the Western Electric Co. in the late 1920s. Originally planned as a study of the effects of lighting on productivity, this series of studies revealed unexpected and surprising findings. For example, one study showed that regardless of the level of change in lighting, productivity remained high and started worsening only when it was reduced to the level of moonlight. Further exploration resulted in the hypothesis that employees were responding to being paid attention to and being observed, rather than the level of lighting (called the "**Hawthorne effect**"). Another study revealed the phenomenon of group pressure on individuals to limit production to be below their capacity. These studies are considered to be classics in I/O psychology due to their underlining the importance of understanding employee psychology to make sense of employee behavior in the workplace.

Since then, thousands of articles have been published on topics relating to I/O psychology, and it is one of the influential subdimensions of psychology. I/O psychologists generate scholarly knowledge and have a role in recruitment, selection, assessment and development of talent, and design and improvement of the workplace. One of the major projects I/O psychologists contributed to is **O*Net**, a vast database of occupational information sponsored by the U.S. government, which contains information on hundreds of jobs, listing tasks, knowledge, skill, and ability requirements of jobs, work activities, contexts under which work is performed, as well as personality and values that are critical to effectiveness on those jobs. This database is free and a useful resource for students, job seekers, and HR professionals.

Findings of I/O psychology have the potential to contribute to the health and happiness of people around the world. When people are asked how happy they are with their lives, their feelings about the work domain are a big part of how they answer this question. I/O psychology research uncovers the secrets of a happy workplace (see Table 2). Organizations designed around these principles will see direct benefits, in the form of employee happiness, well-being, motivation, effectiveness, and retention.

Need Satisfaction	Make sure that employee basic needs are met. Work is how people around the world satisfy their financial, belonging, status, and power needs.
Meaningful Engagement	Ensure that work provides a challenge and is meaningful. Be sure that work provides growth opportunities.
Stress	Work is a major source of stress. Make stress manageable by ensuring that work does not overly interfere with personal life. Be aware of work related stressors such as poor quality management, unreasonable deadlines, harassment, and unfairness.

Table 2. Designing Work for Happiness: Research Based Recommendations. Based on research summarized in Erdogan et al., 2012.

We have now reviewed what I/O psychology is, what I/O psychologists do, the history of I/O, associations related to I/O psychology, and accomplishments of I/O psychologists. Those interested in finding out more about I/O psychology are encouraged to visit the outside resources below to learn more.

Outside Resources

Careers: Occupational information via O*Net\'s database containing information on hundreds of standardized and occupation-specific descriptors

http://www.onetonline.org/

Organization: Society for Industrial/Organizational Psychology (SIOP)

http://www.siop.org

Organization: Alliance for Organizational Psychology (AOP)

www.allianceorgpsych.org

Organization: American Psychological Association (APA)

http://www.apa.org

Organization: Association for Psychological Science (APS)

http://www.psychologicalscience.org/

Organization: European Association of Work and Organizational Psychology (EAWOP)

http://www.eawop.org

Organization: International Association for Applied Psychology (IAAP)

www.iaapsy.org/division1/

Training: For more about graduate training programs in I/O psychology and related fields

www.siop.org/gtp/

Video: An introduction to I/O Psychology produced by the Society for Industrial and Organizational Psychology.



Discussion Questions

1. If your organization is approached by a company stating that it has an excellent training program in leadership, how would you assess if the program is good or not? What information would you seek before making a decision?
2. After reading this module, what topics in I/O psychology seemed most interesting to you?
3. How would an I/O psychologist go about establishing whether a selection test is better than an alternative?
4. What would be the advantages and downsides of pursuing a career in I/O psychology?

Vocabulary

Hawthorne Effect

An effect in which individuals change or improve some facet of their behavior as a result of their awareness of being observed.

Hawthorne Studies

A series of well-known studies conducted under the leadership of Harvard University researchers, which changed the perspective of scholars and practitioners about the role of human psychology in relation to work behavior.

Industrial/Organizational psychology

Scientific study of behavior in organizational settings and the application of psychology to understand work behavior.

O*Net

A vast database of occupational information containing data on hundreds of jobs.

Scientist-practitioner model

The dual focus of I/O psychology, which entails practical questions motivating scientific inquiry to generate knowledge about the work-person interface and the practitioner side applying this scientific knowledge to organizational problems.

Society for Industrial and Organizational Psychology (SIOP)

A professional organization bringing together academics and practitioners who work in I/O psychology and related areas. It is Division 14 of the American Psychological Association (APA).

Work and organizational psychology

Preferred name for I/O psychology in Europe.

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    - 7.1: Helping and Prosocial Behavior - *CC BY-NC-SA 4.0*
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    - 7.3: Attraction and Beauty - *CC BY-NC-SA 4.0*
    - 7.4: Positive Relationships - *CC BY-NC-SA 4.0*
    - 7.5: Love, Friendship, and Social Support - *CC BY-NC-SA 4.0*
    - 7.6: Attachment Through the Life Course - *CC BY-NC-SA 4.0*
    - 7.7: Relationships and Well-being - *CC BY-NC-SA 4.0*
  - 8: INDUSTRIAL - *CC BY-NC-SA 4.0*
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      - 8.1.1: Organizational (I - *CC BY-NC-SA 4.0*
        - 8.1.1.1: Industrial/Organizational (I/O) Psychology - *CC BY-NC-SA 4.0*
  - Back Matter - *Undeclared*
    - Index - *Undeclared*
    - Glossary - *Undeclared*
    - Detailed Licensing - *Undeclared*