



# Social Psychology



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*RYAN CURTIS*



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# Introduction

RYAN CURTIS

When I was an undergraduate, I wasn't sure that I wanted to be a psychology major. I knew I liked psychology, but I wasn't sure if I liked something else even more. Then I took my Social Psychology course. Here was a class where they were showing me experimental evidence about the topics that I was just debating with my roommates. Relationships, emotions, groups, and discrimination all had experimental evidence with answers to those questions. I was fascinated that there was a field of study where you could run experiments on the topics that I was thinking about anyway. Not only was I fascinated that this field exists, but I was elated by the that I could earn money pursuing this field. That's when I knew I would graduate in psychology.

This textbook covers many of those topics that I have wondered about since I was an undergrad. The book is a compilation of Open Educational Resources (OER) written by many generous people who have made their knowledge available to the world. They are listed in the Acknowledgments section and in the individual chapters.

I hope you enjoy learning about these topics as much as I have!

# Acknowledgements

The creation of this work “Social Psychology” was supported by Open CU Boulder 2020-2021, a grant funded by the Colorado Department of Higher Education with additional support from the CU Office of the President, CU Office of Academic Affairs, CU Boulder Office of the Provost, and CU Boulder University Libraries.

Many of the chapters were taken from the [NOBA Project](#). I would like to thank all of their contributors and especially the following authors:

- Max H. Bazerman
- Robert Biswas-Diener
- Debi Brannan
- Christia Spears Brown
- Jerry M. Burger
- Brad J. Bushman
- Edward Diener
- Susan T. Fiske
- Robert G. Franklin
- Donelson R. Forsyth
- Jennifer Fox
- Yanine D. Hess
- Jennifer A. Jewell
- Nathaniel M. Lambert
- Robert V. Levine
- Don Lucas
- Dan P. McAdams
- Cynthia D. Mohr
- Cynthia L. Pickett
- Dennis L. Poepsel
- Christie Napa Scallon
- David A. Schroeder

- Michelle J. Tam
- Leslie Zebrowitz

Several chapters come from my former professor, Charles Stangor and his OER: *Principles of Social Psychology*.

I would also like to thank Scott Roberts and especially Dylan Selterman. Both of them contributed with me on the OER [OpenPsyc](#) and I have taken many of the chapters from a list of chapters that Dylan created for his own Social Psychology course.

Thank you all for your selfless contributions.



# I. What is Social Psychology?

ROBERT BISWAS-DIENER

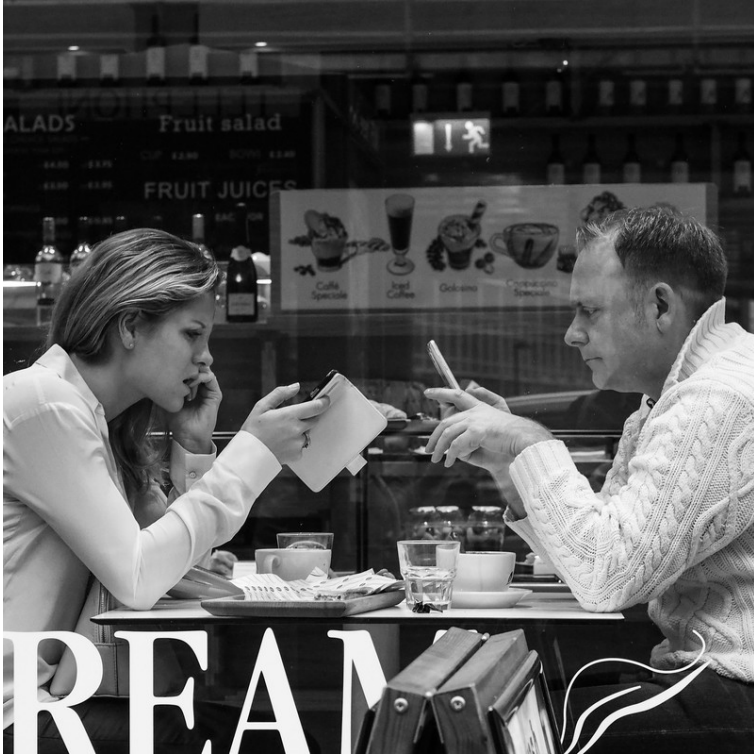
This chapter is from:

Biswas-Diener, R. (2021). An introduction to the science of social psychology. In R. Biswas-Diener & E. Diener (Eds), Noba textbook series: Psychology. Champaign, IL: DEF publishers. Retrieved from <http://noba.to/s64y5c2m>

## 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, <https://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, <https://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.

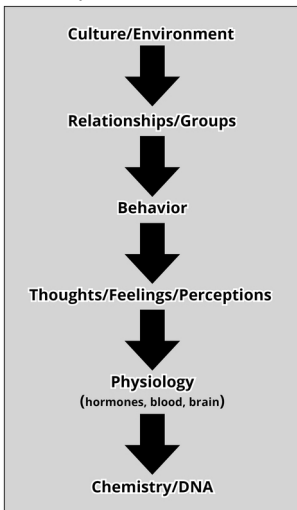


Figure 1 – The levels of analysis in psychology.

In psychology, there are varying [levels of analysis](#). Figure 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, <https://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, <https://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, <https://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.

## Peace & Conflict



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, <https://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, <http://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, <http://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.

# 2. Research Methods in Social Psychology

CHRISTIE NAPA SCALLON

This chapter is from:

Scollon, C. N. (2021). Research designs. In R. Biswas-Diener & E. Diener (Eds), Noba textbook series: Psychology. Champaign, IL: DEF publishers. Retrieved from <http://noba.to/acxb2thy>

# 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, <http://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, <http://goo.gl/KwuGGM>, CC BY-SA 4.0, <http://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.

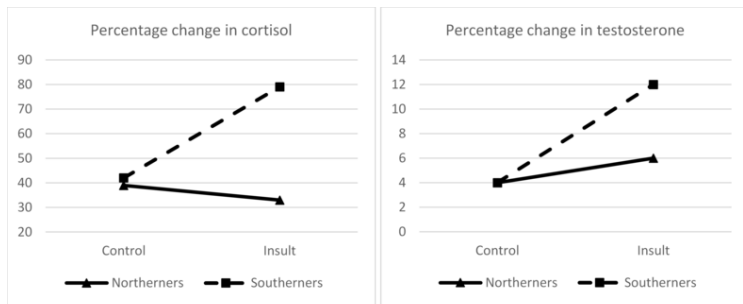


Figure 1

## 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 of 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, <http://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, <https://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, <http://goo.gl/g6nfcj>]

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/NtvIU8>, CC BY-SA 2.0, <http://goo.gl/eH69he>]

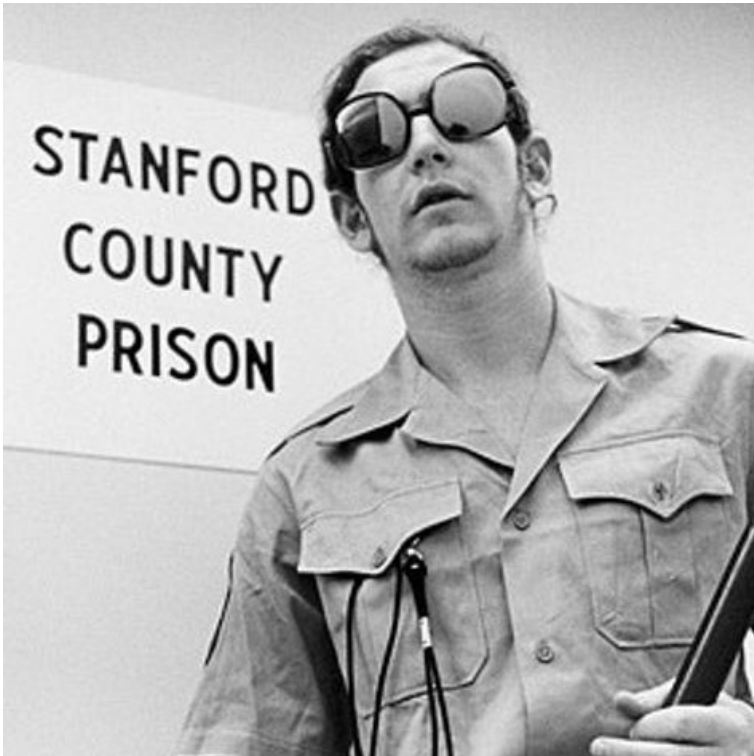
Along with our counterparts in the other areas of psychology, social psychologists have been guilty of largely recruiting [samples of convenience](#) from the thin slice of humanity—students—found at universities and colleges ([Sears, 1986](#)). This presents a problem

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, <http://goo.gl/0LJReB>, CC BY-SA 4.0, <http://goo.gl/etjyD>]

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.

# 3. Replication Crisis in Psychology

EDWARD DIENER AND ROBERT BISWAS-DIENER

This chapter is from:

Diener, E. & Biswas-Diener, R. (2021). The replication crisis in psychology. In R. Biswas-Diener & E. Diener (Eds), Noba textbook series: Psychology. Champaign, IL: DEF publishers. Retrieved from <http://noba.to/q4cvydeh>

## The Disturbing Problem

If you were driving down the road and you saw a pirate standing at an intersection you might not believe your eyes. But if you continued driving and saw a second, and then a third, you might become more confident in your observations. The more pirates you saw the less likely the first sighting would be a false positive (you were driving fast and the person was just wearing an unusual hat and billowy shirt) and the more likely it would be the result of a logical reason (there is a pirate themed conference in town). This somewhat absurd example is a real-life illustration of replication: the repeated findings of the same results.



If you saw a pirate you might not believe it; but if you saw another one you would feel more confident in your observation. In science, this is the process of replication. [Image: Dave Hamster, <https://goo.gl/xg5QKi>, CC BY 2.0, <https://goo.gl/BRvSA7>]

The replication of findings is one of the defining hallmarks of science. Scientists must be able to replicate the results of studies or their findings do not become part of scientific knowledge. Replication protects against false positives (seeing a result that is not really there) and also increases confidence that the result actually exists. If you collect satisfaction data among homeless people living in Kolkata, India, for example, it might seem strange that they would report fairly high satisfaction with their food (which is exactly what we found in [Biswas-Diener & Diener, 2001](#)). If you find the exact same result, but at a *different* time, and with a *different* sample of homeless people living in Kolkata, however, you can feel more confident that this result is true (as we did in [Biswas-Diener & Diener, 2006](#)).

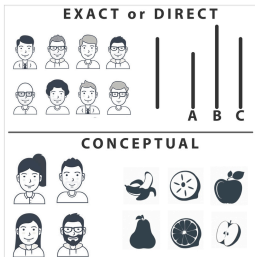
In modern times, the science of psychology is facing a crisis. It turns out that many studies in psychology—including many highly

cited studies—do not replicate. In an era where news is instantaneous, the failure to replicate research raises important questions about the scientific process in general and psychology specifically. People have the right to know if they can trust research evidence. For our part, psychologists also have a vested interest in ensuring that our methods and findings are as trustworthy as possible.

Psychology is not alone in coming up short on replication. There have been notable failures to replicate findings in other scientific fields as well. For instance, in 1989 scientists reported that they had produced “cold fusion,” achieving nuclear fusion at room temperatures. This could have been an enormous breakthrough in the advancement of clean energy. However, other scientists were unable to replicate the findings. Thus, the potentially important results did not become part of the scientific canon, and a new energy source did not materialize. In medical science as well, a number of findings have been found not to replicate—which is of vital concern to all of society. The non-reproducibility of medical findings suggests that some treatments for illness could be ineffective. One example of non-replication has emerged in the study of genetics and diseases: when replications were attempted to determine whether certain gene-disease findings held up, only about 4% of the findings consistently did so.

The non-reproducibility of findings is disturbing because it suggests the possibility that the original research was done sloppily. Even worse is the suspicion that the research may have been falsified. In science, faking results is *the biggest* of sins, the unforgivable sin, and for this reason the field of psychology has been thrown into an uproar. However, as we will discuss, there are a number of explanations for non-replication, and not all are bad.

# What is Replication?



Example of direct replication and conceptual replication of Asch's conformity experiment.

There are different types of replication. First, there is a type called “[exact replication](#)” (also called “direct replication”). In this form, a scientist attempts to exactly recreate the scientific methods used in conditions of an earlier study to determine whether the results come out the same. If, for instance, you wanted to exactly replicate Asch's (1956) classic findings on conformity, you would follow the original methodology: you would use only male participants, you would use groups of 8, and you would present the same stimuli (lines of differing lengths) in the same order. The second type of replication is called “[conceptual replication](#).” This occurs when—instead of an exact replication, which reproduces the methods of the earlier study as closely as possible—a scientist tries to confirm the previous findings using a different set of specific methods that test the same idea. The same hypothesis is tested, but using a different set of methods and measures. A conceptual replication of Asch's research might involve both male and female [confederates](#) purposefully misidentifying types of fruit to investigate conformity—rather than only males misidentifying line lengths.

Both exact and conceptual replications are important because they each tell us something new. Exact replications tell us whether the original findings are true, at least under the exact conditions



tested. Conceptual replications help confirm whether the theoretical idea behind the findings is true, and under what conditions these findings will occur. In other words, conceptual replication offers insights into how generalizable the findings are.

## Enormity of the Current Crisis

Journal	% Findings Replicated
Journal of Personality and Social Psychology: Social	23
Journal of Experimental Psychology: Learning, Memory, and Cognition	48
Psychological Science, social articles	29
Psychological Science, cognitive articles	53
<b>Overall</b>	<b>36</b>

Table 1: The Reproducibility of Psychological Science

Recently, there has been growing concern as psychological research fails to replicate. To give you an idea of the extent of non-replicability of psychology findings, below are data reported in 2015 by the Open Science Collaboration project, led by University of Virginia psychologist Brian Nosek ([Open Science Collaboration, 2015](#)). Because these findings were reported in the prestigious journal, *Science*, they received widespread attention from the media. Here are the percentages of research that replicated—selected from several highly prestigious journals:

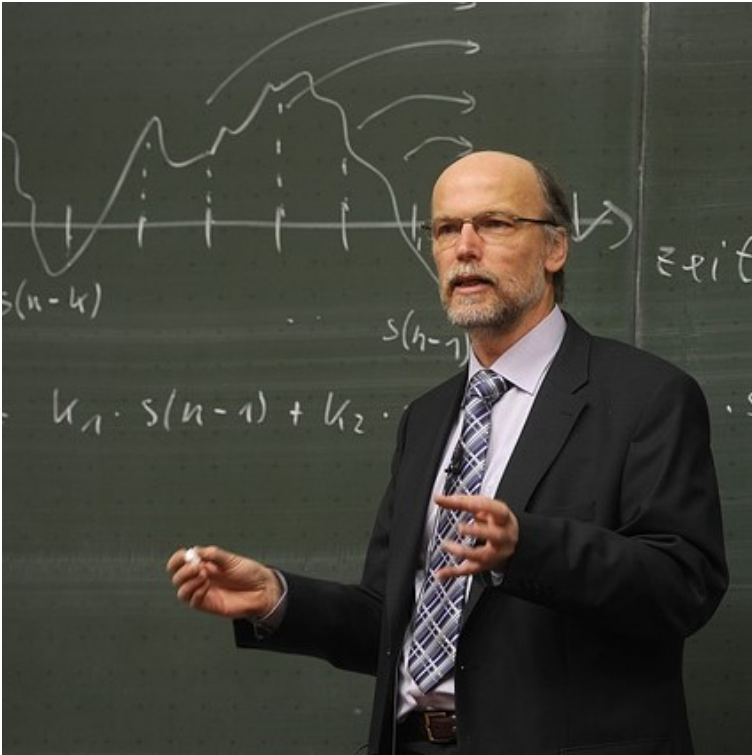
Clearly, there is a very large problem when only about 1/3 of the psychological studies in premier journals replicate! It appears that

this problem is particularly pronounced for social psychology but even the 53% replication level of cognitive psychology is cause for concern.

The situation in psychology has grown so worrisome that the Nobel Prize-winning psychologist Daniel Kahneman called on social psychologists to clean up their act ([Kahneman, 2012](#)). The Nobel laureate spoke bluntly of doubts about the integrity of psychology research, calling the current situation in the field a “mess.” His missive was pointed primarily at researchers who study social “priming,” but in light of the non-replication results that have since come out, it might be more aptly directed at the behavioral sciences in general.

## Examples of Non-replications in Psychology

A large number of scientists have attempted to replicate studies on what might be called “metaphorical priming,” and more often than not these replications have failed. [Priming](#) is the process by which a recent reference (often a subtle, subconscious cue) can increase the accessibility of a trait. For example, if your instructor says, “Please put aside your books, take out a clean sheet of paper, and write your name at the top,” you might find your pulse quickening. Over time, you have learned that this cue means you are about to be given a pop quiz. This phrase primes all the features associated with pop quizzes: they are anxiety-provoking, they are tricky, your performance matters.



In one study, researchers enhanced test performance by priming participants with stereotypes of intelligence. But subsequent studies have not been able to replicate those results. [Image: CC0 Public Domain, <https://goo.gl/m25gce>]

One example of a priming study that, at least in some cases, does not replicate, is the priming of the idea of intelligence. In theory, it might be possible to prime people to actually become more intelligent (or perform better on tests, at least). For instance, in one study, priming students with the idea of a stereotypical professor versus soccer hooligans led participants in the “professor” condition to earn higher scores on a trivia game (Dijksterhuis & van Knippenberg, 1998). Unfortunately, in several follow-up instances this finding has not replicated (Shanks et al., 2013). This is

unfortunate for all of us because it would be a very easy way to raise our test scores and general intelligence. If only it were true.

Another example of a finding that seems not to replicate consistently is the use of spatial distance cues to prime people's feelings of emotional closeness to their families ([Williams & Bargh, 2008](#)). In this type of study, participants are asked to plot points on graph paper, either close together or far apart. The participants are then asked to rate how close they are to their family members. Although the original researchers found that people who plotted close-together points on graph paper reported being closer to their relatives, studies reported on PsychFileDrawer—an internet repository of replication attempts—suggest that the findings frequently do not replicate. Again, this is unfortunate because it would be a handy way to help people feel closer to their families.

As one can see from the examples, some of the studies that fail to replicate report extremely interesting findings—even counterintuitive findings that appear to offer new insights into the human mind. Critics claim that psychologists have become too enamored with such newsworthy, surprising “discoveries” that receive a lot of media attention. Which raises the question of timing: might the current crisis of non-replication be related to the modern, media-hungry context in which psychological research (indeed, all research) is conducted? Put another way: is the non-replication crisis new?

Nobody has tried to systematically replicate studies from the past, so we do not know if published studies are becoming less replicable over time. In [1990](#), however, Amir and Sharon were able to successfully replicate most of the main effects of six studies from another culture, though they did fail to replicate many of the interactions. This particular shortcoming in their overall replication may suggest that published studies are becoming less replicable over time, but we cannot be certain. What we can be sure of is that there is a significant problem with replication in psychology, and it's a trend the field needs to correct. Without replicable findings, nobody will be able to believe in scientific psychology.

## Reasons for Non-replication

When findings do not replicate, the original scientists sometimes become indignant and defensive, offering reasons or excuses for non-replication of their findings—including, at times, attacking those attempting the replication. They sometimes claim that the scientists attempting the replication are unskilled or unsophisticated, or do not have sufficient experience to replicate the findings. This, of course, might be true, and it is one possible reason for non-replication.

One reason for defensive responses is the unspoken implication that the original results might have been falsified. Faked results are only one reason studies may not replicate, but it is the most disturbing reason. We hope faking is rare, but in the past decade a number of shocking cases have turned up. Perhaps the most well-known come from social psychology. Diederik Stapel, a renowned social psychologist in the Netherlands, admitted to faking the results of a number of studies. Marc Hauser, a popular professor at Harvard, apparently faked results on morality and cognition. Karen Ruggiero at the University of Texas was also found to have [falsified](#) a number of her results (proving that bad behavior doesn't have a gender bias). Each of these psychologists—and there are quite a few more examples—was believed to have faked data. Subsequently, they all were disgraced and lost their jobs.

Another reason for non-replication is that, in studies with small [sample sizes](#), statistically-significant results may often be the result of chance. For example, if you ask five people if they believe that aliens from other planets visit Earth and regularly abduct humans, you may get three people who agree with this notion—simply by chance. Their answers may, in fact, not be at all representative of the larger population. On the other hand, if you survey one thousand people, there is a higher probability that their belief in alien abductions reflects the actual attitudes of society. Now consider this scenario in the context of replication: if you try to

replicate the first study—the one in which you interviewed only five people—there is only a small chance that you will randomly draw five new people with exactly the same (or similar) attitudes. It's far more likely that you will be able to replicate the findings using another large sample, because it is simply more likely that the findings are accurate.

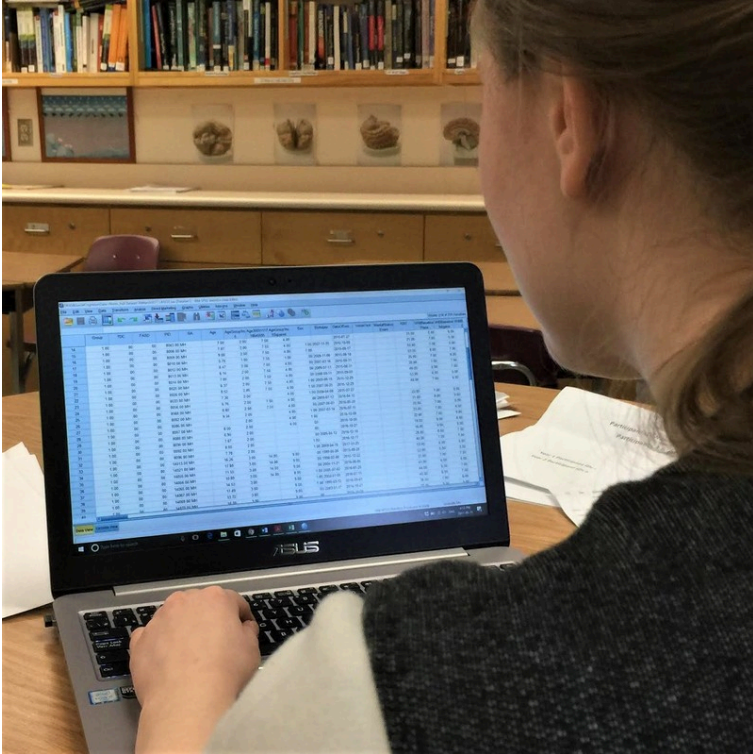
Another reason for non-replication is that, while the findings in an original study may be true, they may only be true for some people in some circumstances and not necessarily universal or enduring. Imagine that a survey in the 1950s found a strong majority of respondents to have trust in government officials. Now imagine the same survey administered today, with vastly different results. This example of non-replication does not invalidate the original results. Rather, it suggests that attitudes have shifted over time.

A final reason for non-replication relates to the quality of the replication rather than the quality of the original study. Non-replication might be the product of scientist-error, with the newer investigation not following the original procedures closely enough. Similarly, the attempted replication study might, itself, have too small a sample size or insufficient statistical power to find significant results.

## In Defense of Replication Attempts

Failures in replication are not all bad and, in fact, some non-replication should be expected in science. Original studies are conducted when an answer to a question is uncertain. That is to say, scientists are venturing into new territory. In such cases we should expect some answers to be uncovered that will not pan out in the long run. Furthermore, we hope that scientists take on challenging new topics that come with some amount of risk. After all, if scientists were only to publish safe results that were easy to replicate, we might have very boring studies that do not advance

our knowledge very quickly. But, with such risks, some non-replication of results is to be expected.



Researchers use specialized statistical software to store, analyze, and share data. Saving data over time and sharing data with others can be useful in conducting replications. [Image: Kwantlen Polytechnic University Psychology Department, CC BY 2.0, <https://goo.gl/BRvSA7>]

A recent example of risk-taking can be seen in the research of social psychologist Daryl Bem. In [2011](#), Bem published an article claiming he had found in a number of studies that future events could influence the past. His proposition turns the nature of time, which is assumed by virtually everyone except science fiction writers to run in one direction, on its head. Needless to say, attacks on Bem's article came fast and furious, including attacks on his

statistics and methodology ([Ritchie, Wiseman & French, 2012](#)). There were attempts at replication and most of them failed, but not all. A year after Bem's article came out, the prestigious journal where it was published, *Journal of Personality and Social Psychology*, published another paper in which a scientist failed to replicate Bem's findings in a number of studies very similar to the originals ([Galak, Lebeouf, Nelson & Simmons, 2012](#)).

Some people viewed the publication of Bem's (2011) original study as a failure in the system of science. They argued that the paper should not have been published. But the editor and reviewers of the article had moved forward with publication because, although they might have thought the findings provocative and unlikely, they did not see obvious flaws in the methodology. We see the publication of the Bem paper, and the ensuing debate, as a strength of science. We are willing to consider unusual ideas if there is evidence to support them: we are open-minded. At the same time, we are critical and believe in replication. Scientists should be willing to consider unusual or risky hypotheses but ultimately allow good evidence to have the final say, not people's opinions.

## Solutions to the Problem

### Dissemination of Replication Attempts

- [Psychfiledrawer.org](#): Archives attempted replications of specific studies and whether replication was achieved.
- Center for Open Science: Psychologist Brian Nosek, a champion of replication in psychology, has created the Open Science Framework, where replications can be reported.
- Association of Psychological Science: Has registered replications of studies, with the overall results published



in *Perspectives on Psychological Science*.

- Plos One: Public Library of Science—publishes a broad range of articles, including failed replications, and there are occasional summaries of replication attempts in specific areas.
- The Replication Index: Created in 2014 by Ulrich Schimmack, the so-called “R Index” is a statistical tool for estimating the replicability of studies, of journals, and even of specific researchers. Schimmack describes it as a “doping test”.

The fact that replications, including failed replication attempts, now have outlets where they can be communicated to other researchers is a very encouraging development, and should strengthen the science considerably. One problem for many decades has been the near-impossibility of publishing replication attempts, regardless of whether they’ve been positive or negative.

## More Systematic Programs of Scientific Research

### 6 Principles of Open Science

- Open Data
  - Open Source
  - Open Access
  - Open Methodology
  - Open Peer Review
  - Open Educational Resources
- 

Figure 1: 6 Principles of Open Science – adapted from

openscienceASAP. [Underlying Image: Greg

Emmerich, <https://goo.gl/UmVaoD>, CC BY-SA 2.0, <https://goo.gl/rxiUsF>]

The reward structure in academia has served to discourage replication. Many psychologists—especially those who work full time at universities—are often rewarded at work—with promotions, pay raises, tenure, and prestige—through their research. Replications of one’s own earlier work, or the work of others, is typically

discouraged because it does not represent original thinking. Instead, academics are rewarded for high numbers of publications, and flashy studies are often given prominence in media reports of published studies.

Psychological scientists need to carefully pursue programmatic research. Findings from a single study are rarely adequate, and should be followed up by additional studies using varying methodologies. Thinking about research this way—as if it were a program rather than a single study—can help. We would recommend that laboratories conduct careful sets of interlocking studies, where important findings are followed up using various methods. It is not sufficient to find some surprising outcome, report it, and then move on. When findings are important enough to be published, they are often important enough to prompt further, more conclusive research. In this way scientists will discover whether their findings are replicable, and how broadly generalizable they are. If the findings do not always replicate, but do sometimes, we will learn the conditions in which the pattern does or doesn't hold. This is an important part of science—to discover how generalizable the findings are.

When researchers criticize others for being unable to replicate the original findings, saying that the conditions in the follow-up study were changed, this is important to pay attention to as well. Not all criticism is knee-jerk defensiveness or resentment. The replication crisis has stirred heated emotions among research psychologists and the public, but it is time for us to calm down and return to a more scientific attitude and system of programmatic research.

## Textbooks and Journals

Some psychologists blame the trend toward non-replication on specific journal policies, such as the policy of *Psychological*

Science to publish short single studies. When single studies are published we do not know whether even the authors themselves can replicate their findings. The journal *Psychological Science* has come under perhaps the harshest criticism. Others blame the rash of nonreplicable studies on a tendency of some fields for surprising and counterintuitive findings that grab the public interest. The irony here is that such counterintuitive findings are in fact less likely to be true precisely because they are so strange—so they should perhaps warrant *more* scrutiny and further analysis.

The criticism of journals extends to textbooks as well. In our opinion, psychology textbooks should stress true science, based on findings that have been demonstrated to be replicable. There are a number of inaccuracies that persist across common psychology textbooks, including small mistakes in common coverage of the most famous studies, such as the Stanford Prison Experiment ([Griggs & Whitehead, 2014](#)) and the Milgram studies ([Griggs & Whitehead, 2015](#)). To some extent, the inclusion of non-replicated studies in textbooks is the product of market forces. Textbook publishers are under pressure to release new editions of their books, often far more frequently than advances in psychological science truly justify. As a result, there is pressure to include “sexier” topics such as controversial studies.

Ultimately, people also need to learn to be intelligent consumers of science. Instead of getting overly-excited by findings from a single study, it's wise to wait for replications. When a corpus of studies is built on a phenomenon, we can begin to trust the findings. Journalists must be educated about this too, and learn not to readily broadcast and promote findings from single flashy studies. If the results of a study seem too good to be true, maybe they are. Everyone needs to take a more skeptical view of scientific findings, until they have been replicated.

# 4. Social Cognition

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This chapter is from:

Hess, Y. D. & Pickett, C. L. (2021). Social cognition and attitudes. In R. Biswas-Diener & E. Diener (Eds), *Noba textbook series: Psychology*. Champaign, IL: DEF publishers. Retrieved from <http://noba.to/6xanb4j9>

## 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, <https://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

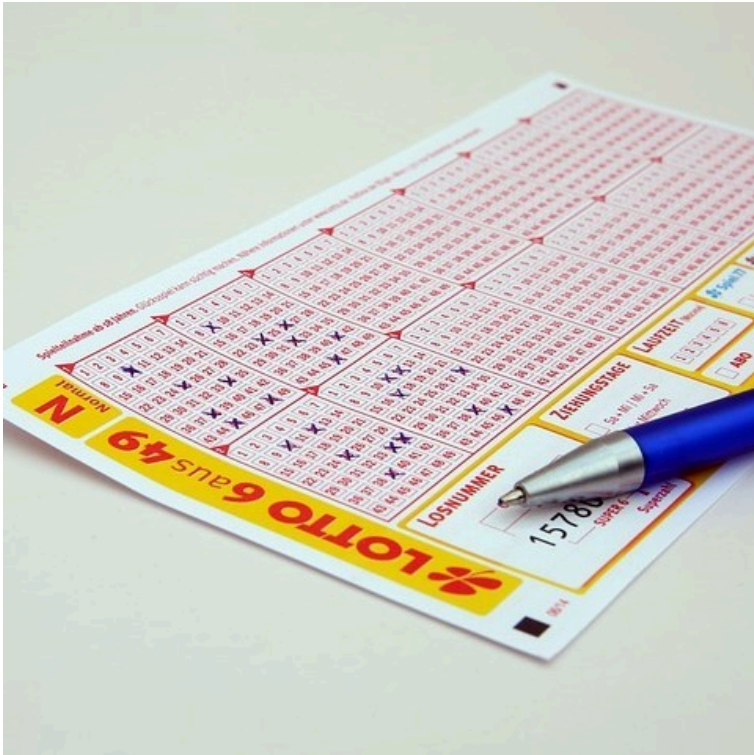


examine individuals' ability to accurately predict others' behaviors, as well as their own future thoughts, feelings, and behaviors, and how these predictions can impact their decisions.

## 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, <https://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/sIEPEv>, CC BY-NC 2.0, <https://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, <https://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, <https://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.

# 5. Cognitive Dissonance

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This chapter is from:

Charles Stangor's *Principles of Social Psychology*. Retrieved from <https://open.lib.umn.edu/socialpsychology/chapter/5-3-changing-attitudes-by-changing-behavior/>

## Introduction

Although it might not have surprised you to hear that we can often predict people's behaviors if we know their thoughts and their feelings about the attitude object, you might be more surprised to find that our actions also have an influence on our thoughts and feelings. It makes sense that if I like Cheerios, I'll buy them, because my thoughts and feelings about a product influence my behavior. But will my attitudes toward Frosted Flakes become more positive if I decide—for whatever reason—to buy them instead of Cheerios?

It turns out that if we engage in a behavior, and particularly one that we had not expected that we would have, our thoughts and feelings toward that behavior are likely to change. This might not seem intuitive, but it represents another example of how the principles of social psychology—in this case the principle of attitude consistency—lead us to make predictions that wouldn't otherwise be that obvious.

Imagine that one Tuesday evening in the middle of the semester you see your friend Joachim. He's just finished his dinner and tells you that he's planning to head home to study and work on a term paper. When you see him the next day, however, he seems a bit shaken. It turns out that instead of going home to study, Joachim spent the entire evening listening to music at a rock club in town.

He says that he had a great time, stayed up late to watch the last set, and didn't get home until the crack of dawn. And he woke up so late this morning that he missed his first two classes.

You might imagine that Joachim might be feeling some uncertainty and perhaps some regret about his unexpected behavior the night before. Although he knows that it is important to study and to get to his classes on time, he nevertheless realizes that, at least in this case, he neglected his schoolwork in favor of another activity. Joachim seems to be wondering why he, who knows how important school is, engaged in this behavior after he promised himself that he was going home to study. Let's see if we can use the principles of attitude consistency to help us understand how Joachim might respond to his unexpected behavior and how his attitudes toward listening to music and studying might follow from it.

## **Self-Perception Involves Inferring Our Beliefs From Our Behaviors**

People have an avid interest in understanding the causes of behavior, both theirs and others, and doing so helps us meet the important goals of other-concern and self-concern. If we can better understand how and why the other people around us act the way they do, then we will have a better chance of avoiding harm from others and a better chance of getting those other people to cooperate with and like us. And if we have a better idea of understanding the causes of our own behavior, we can better work to keep that behavior in line with our preferred plans and goals.

In some cases people may be somewhat unsure about their attitudes toward different attitude objects. For instance, perhaps Joachim is a bit unsure about his attitude toward schoolwork versus listening to music (and this uncertainty certainly seems to be increasing in light of his recent behavior). Might Joachim look at his



own behavior to help him determine his thoughts and feelings, just as he might look at the behavior of others to understand why they act the way that they do? Self-perception occurs *when we use our own behavior as a guide to help us determine our own thoughts and feelings* (Bem, 1972; Olson & Stone, 2005).

### *Research Focus*

#### Looking at Our Own Behavior to Determine Our Attitudes

Eliot Aronson and J. Merrill Carlsmith (1963) conducted an experiment to determine whether young children might look at their own behavior to help determine their attitudes toward toys. In their research, they first had the children rate the attractiveness of several toys. They then chose a toy that a child had just indicated he or she really wanted to play with and—this was rather mean—told that child he or she could not play with that toy. Furthermore, and according to random assignment to conditions, half of the children were threatened with mild punishment if they disobeyed and the other half were threatened with severe punishment. In the mild threat condition the experimenter said, “I don’t want you to play with the toy. If you played with it, I would be annoyed,” whereas in the harsh threat condition the experimenter said, “I don’t want you to play with the toy. If you played with it, I would be very angry. I would have to take all of my toys and go home and never come back again.” The experimenter then left the room for a few minutes to give the children the time and opportunity to play with the other toys and to resist the temptation of

playing with the forbidden toy, while watching the children through a one-way mirror.

It turned out that both the harsh and the mild threat were sufficient to prevent the children from playing with the forbidden toy—none of the children actually did so. Nevertheless, when the experimenter returned to the room and asked each child to again rate how much he or she liked the forbidden toy, the children who had received the harsh threat rated the toy significantly more positively than the children who had received the mild threat. Furthermore, the children who had only received the mild threat actually rated the forbidden toy less positively than they had at the beginning of the experiment. And this change was long lasting. Even when tested several weeks later, children still showed these changes (Freedman, 1965).

The results of this study indicate that the children's self-perceptions of their behaviors influenced their attitudes toward the toys. Assume for a moment that the children were a bit unsure about how much they liked the toy that they did not play with and that they needed some information to determine their beliefs. The children in the harsh threat condition had a strong external reason for not having played with the toy—they were going to get into really big trouble if they did. Because these children likely saw the social situation as the cause of their behavior, they found it easy to believe that they still liked the toy a lot. For the children in the mild threat condition, however, the external reasons for their behavior were not so apparent—they had only been asked not to play with the toy. These children were more likely to come to the conclusion that their behavior was caused by internal,

person factors—that they did not play with the toy simply because they did not like it that much.

We can use the principles of self-perception to help understand how Joachim is interpreting his behavior of staying out all night at the club rather than studying. When Joachim looks at this behavior, he may start to wonder why he engaged in it. One answer is that the social situation caused the behavior—he might decide that the band he heard last night was so fantastic that he simply had to go hear them and could not possibly have left the club early. Blaming the situation for the behavior allows him to avoid blaming himself for it and to avoid facing the fact that he found listening to music more important than his schoolwork. But the fact that Joachim is a bit worried about his unusual behavior suggests that he, at least in part, might be starting to wonder about his own motivations.

Perhaps you have experienced the effects of self-perception. Have you ever found yourself becoming more convinced about an argument you were making as you heard yourself making it? Or did you ever realize how thirsty you must have been as you quickly drank a big glass of water? Research has shown that self-perception occurs regularly and in many different domains. For instance, Gary Wells and Richard Petty (1980) found that people who were asked to shake their heads up and down rather than sideways while reading arguments favoring or opposing tuition increases at their school ended up agreeing with the arguments more, and Daryl Bem (1965) found that when people were told by the experimenter to say that certain cartoons were funny, they ended up actually finding those cartoons funnier. It appears in these cases that people looked at their own behavior: If they moved their head up and down or said that the cartoons were funny, they figured that they must agree with the arguments and like the cartoon.

## Creating Insufficient and Oversufficient Justification

You may recall that one common finding in social psychology is that people frequently do not realize the extent to which behavior is influenced by the social situation. Although this is particularly true for the behavior of others, in some cases it may apply to understanding our own behavior as well. This means that, at least in some cases, we may believe that we have chosen to engage in a behavior for personal reasons, even though external, situational factors have actually led us to it. Consider again the children who did not play with the forbidden toy in the Aronson and Carlsmith study, even though they were given only a mild reason for not doing so. Although these children were actually led to avoid the toy by the power of the situation (they certainly would have played with it if the experimenter hadn't told them not to), they frequently concluded that the decision was a personal choice and ended up believing that the toy was not that fun after all. *When the social situation actually causes our behavior, but we do not realize that the social situation was the cause, we call the phenomenon insufficient justification.* Insufficient justification occurs when the threat or reward is actually sufficient to get the person to engage in or to avoid a behavior, but the threat or reward is insufficient to allow the person to conclude that the situation caused the behavior.

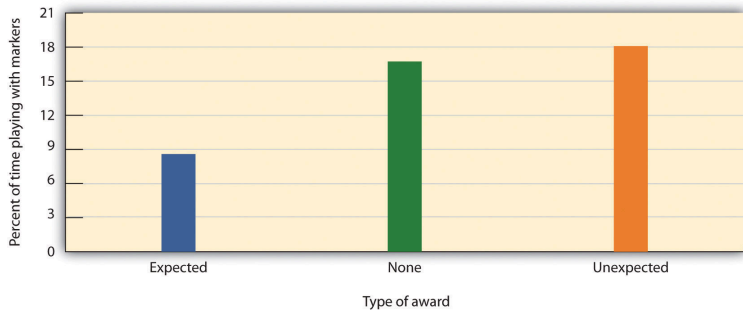
Although insufficient justification leads people to like something less because they (incorrectly) infer that they *did not* engage in a behavior due to *internal* reasons, it is also possible that the opposite may occur. People may in some cases come to like a task less when they perceive that they *did* engage in it for *external* reasons. Overjustification occurs when we view our behavior as caused by the situation, leading us to discount the extent to which our behavior was actually caused by our own interest in it (Deci, Koestner, & Ryan, 1999; Lepper & Greene, 1978).

Mark Lepper and his colleagues (Lepper, Greene, & Nisbett, 1973)

studied the overjustification phenomenon by leading some children to think that they engaged in an activity for a reward rather than because they simply enjoyed it. First, they placed some fun felt-tipped markers into the classroom of the children they were studying. The children loved the markers and played with them right away. Then, the markers were taken out of the classroom and the children were given a chance to play with the markers individually at an experimental session with the researcher. At the research session, the children were randomly assigned to one of three experimental groups. One group of children (the *expected reward condition*) was told that if they played with the markers they would receive a good drawing award. A second group (the *unexpected reward condition*) also played with the markers and got the award—but they were not told ahead of time that they would be receiving the award (it came as a surprise after the session). The third group (the *no reward condition*) played with the markers too but got no award.

Then, the researchers placed the markers back in the classroom and observed how much the children in each of the three groups played with them. The results are shown in [Figure 5.5 “Undermining Initial Interest in an Activity”](#). The fascinating result was that the children who had been led to expect a reward for playing with the markers during the experimental session played with the markers *less* at the second session than they had at the first session. Expecting to receive the award at the session had undermined their initial interest in the markers.

Figure 5.5 Undermining Initial Interest in an Activity



Children who had been expecting to receive a reward when they played with the fun markers played less with them in their free play period than did children who received no reward or an unexpected reward—their initial interest had been undermined by the expected reward. Data are from Lepper, Greene, and Nisbett (1973). [Image from: Charles Stangor’s *Principles of Social Psychology*. Retrieved from <https://open.lib.umn.edu/socialpsychology/chapter/5-3-changing-attitudes-by-changing-behavior/> CC BY-NC-SA <http://creativecommons.org/licenses/by-nc-sa/4.0/>]

Although this might not seem logical at first, it is exactly what is expected on the basis of the principle of overjustification. When the children had to choose whether or not to play with the markers when the markers reappeared in the classroom, they based their decision on their own prior behavior. The children in the no reward condition group and the children in the unexpected reward condition group realized that they played with the markers because they liked them. Children in the expected award condition group, however, remembered that they were promised a reward for the activity before they played with the markers the last time. These children were more likely to draw the inference that they play with the markers mostly for the external reward, and because they did not expect to get any reward for playing with the markers in the classroom they discounted the possibility that they enjoyed playing

the markers because they liked them. As a result, they played less frequently with the markers in comparison to the children in the other groups.

This research suggests that, although giving rewards may in many cases lead us to perform an activity more frequently or with more effort, reward may not always increase our *liking* for the activity. In some cases reward may actually make us like an activity less than we did before we were rewarded for it. And this outcome is particularly likely when the reward is perceived as an obvious attempt on the part of others to get us to do something. When children are given money by their parents to get good grades in school, they may improve their school performance to gain the reward. But at the same time their liking for school may decrease. On the other hand, rewards that are seen as more internal to the activity, such as rewards that praise us, remind us of our achievements in the domain, and make us feel good about ourselves as a result of our accomplishments, are more likely to be effective in increasing not only the performance of, but also the liking of, the activity (Deci & Ryan, 2002; Hulleman, Durik, Schweigert, & Harackiewicz, 2008).

In short, when we use harsh punishments we may prevent a behavior from occurring. However, because the person sees that it is the punishment that is controlling the behavior, the person's attitudes may not change. Parents who wish to encourage their children to share their toys or to practice the piano therefore would be wise to provide "just enough" external incentive. Perhaps a consistent reminder of the appropriateness of the activity would be enough to engage the activity, making a stronger reprimand or other punishment unnecessary. Similarly, when we use extremely positive rewards, we may increase the behavior but at the same time undermine the person's interest in the activity.

The problem, of course, is finding the right balance between reinforcement and overreinforcement. If we want our child to avoid playing in the street, and if we provide harsh punishment for disobeying, we may prevent the behavior but not change the attitude. The child may not play in the street while we are watching

but do so when we leave. Providing less punishment is more likely to lead the child to actually change his or her beliefs about the appropriateness of the behavior, but the punishment must be enough to prevent the undesired behavior in the first place. The moral is clear: If we want someone to develop a strong attitude, we should use the smallest reward or punishment that is effective in producing the desired behavior.

## The Experience of Cognitive Dissonance Can Create Attitude Change

Let's return once more to our friend Joachim and imagine that we now discover that over the next two weeks he has spent virtually every night at clubs listening to music rather than studying. And these behaviors are starting to have some severe consequences: He just found out that he's failed his biology midterm. How will he ever explain *that* to his parents? What were at first relatively small discrepancies between self-concept and behavior are starting to snowball, and they are starting to have more affective consequences. Joachim is realizing that he's in big trouble—the inconsistencies between his prior attitudes about the importance of schoolwork and his behavior are creating some significant threats to his positive self-esteem. *The discomfort that occurs when we behave in ways that we see as inappropriate, such as when we fail to live up to our own expectations*, is called cognitive dissonance (Cooper, 2007; Festinger, 1957; Harmon-Jones & Mills, 1999). The discomfort of cognitive dissonance is experienced as pain, showing up in a part of the brain that is particularly sensitive to pain—the anterior cingulate cortex (van Veen, Krug, Schooler, & Carter, 2009).

Leon Festinger and J. Merrill Carlsmith (1959) conducted an important study designed to demonstrate the extent to which behaviors that are discrepant from our initial beliefs can create cognitive dissonance and can influence attitudes. College students



participated in an experiment in which they were asked to work on a task that was incredibly boring and lasted for a full hour. After they had finished the task, the experimenter explained that the assistant who normally helped convince people to participate in the study was unavailable and that he could use some help persuading the next person that the task was going to be interesting and enjoyable. The experimenter explained that it would be much more convincing if a fellow student rather than the experimenter delivered this message and asked the participant if he would be willing to do it. Thus with his request the experimenter induced the participants to lie about the task to another student, and all the participants agreed to do so.

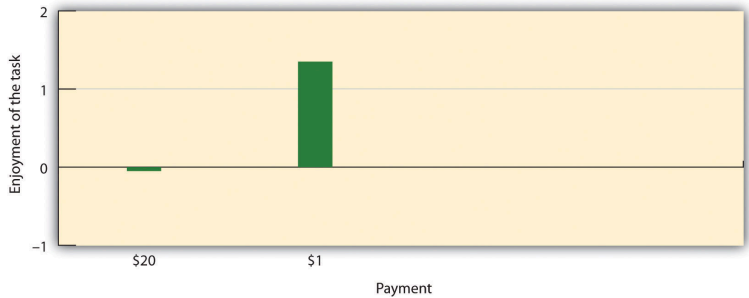
The experimental manipulation involved the amount of money the students were paid to tell the lie. Half of the students were offered a large payment (\$20) for telling the lie, whereas the other half were offered only a small payment (\$1) for telling the lie. After the participants had told the lie, an interviewer asked each of them how much they had enjoyed the task they had performed earlier in the experiment. As you can see in [Figure 5.6 “Festinger and Carlsmith”](#), Festinger and Carlsmith found that the students who had been paid \$20 for saying the tasks had been enjoyable rated the task as very boring, which indeed it was. In contrast, the students who were paid only \$1 for telling the lie changed their attitude toward the task and rated it as significantly more interesting.

Festinger explained the results of this study in terms of consistency and inconsistency among cognitions. He hypothesized that some thoughts might be *dissonant*, in the sense that they made us feel uncomfortable, while other thoughts were more *consonant*, in the sense that they made us feel good. He argued that people may feel an uncomfortable state (which he called *cognitive dissonance*) when they have many dissonant thoughts—for instance, between the idea that (a) they are smart and decent people and (b) they nevertheless told a lie to another student for only a small payment.

Festinger argued that the people in his experiment who had been induced to lie for only \$1 experienced more cognitive dissonance

than the people who were paid \$20 because the latter people had a strong external justification for having done it whereas the former did not. The people in the \$1 condition, Festinger argued, needed to convince themselves that that the task was actually interesting to reduce the dissonance they were experiencing.

Figure 5.6 Festinger and Carlsmith



Participants who had engaged in a boring task and then told another student it was interesting experienced cognitive dissonance, leading them to rate the task more positively in comparison to those who were paid \$20 to do the same. Data are from Festinger and Carlsmith (1959). [Image from: Charles Stangor's *Principles of Social Psychology*. Retrieved from <https://open.lib.umn.edu/socialpsychology/chapter/5-3-changing-attitudes-by-changing-behavior/> CC BY-NC-SA <http://creativecommons.org/licenses/by-nc-sa/4.0/>]

Although originally considered in terms of the inconsistency among different cognitions, Festinger's theory has also been applied to the negative feelings that we experience when there is inconsistency between our attitudes and our behavior, and particularly when the behavior threatens our perceptions of ourselves as good people (Aronson, 1969). Thus Joachim is likely feeling cognitive dissonance because he has acted against his better judgment and these

behaviors are having some real consequences for him. The dissonant thoughts involve (a) his perception of himself as a hardworking student, compared to (b) his recent behaviors that do not support that idea. Our expectation is that Joachim will not enjoy these negative feelings and will attempt to get rid of them.

## **We Reduce Dissonance by Decreasing Dissonant or by Increasing Consonant Cognitions**

Because Joachim's perception of himself as a hardworking student is now in jeopardy, he is feeling cognitive dissonance and will naturally try to reduce these negative emotions. He can do so in a number of ways. One possibility is that Joachim could simply change his behavior by starting to study more and go out less. If he is successful in doing this, his dissonance will clearly be reduced and he can again feel good about himself. But it seems that he has not been very successful in this regard—over the past weeks he has continually put off studying for listening to music. A second option is to attempt to reduce his dissonant cognitions—those that threaten his self-esteem. Perhaps he might try to convince himself that he has only failed one test and that he didn't expect to do very well in biology anyway. If he can make the negative behaviors seem less important, dissonance will be reduced.

One of Festinger's most powerful insights into social psychology was that, even if Joachim cannot change his behavior and even if he knows that what he's doing has negative consequences, he still has a third option: He can create new consonant cognitions to counteract the dissonant cognitions. For instance, Joachim might try to convince himself that he is going to become an important record producer some day and that it is therefore essential that he attend many concerts. When Joachim takes this route he changes his beliefs to be more in line with his behavior, and the outcome is that he has now restored attitude consistency. His behaviors no

longer seem as discrepant from his attitudes as they were before, and when consistency is restored, dissonance is reduced. What the principles of cognitive dissonance suggest, then, is that we may frequently spend more energy convincing ourselves that we are good people than we do thinking of ourselves accurately. Of course we do this because viewing ourselves negatively is painful.

## Cognitive Dissonance in Everyday Life

Cognitive dissonance is an important social psychological principle that can explain how attitudes follow behavior in many domains of our everyday life. For instance, people who try but fail to quit smoking cigarettes naturally suffer lowered self-esteem (Gibbons, Eggleston, & Benthin, 1997). But rather than accepting this negative feeling, they frequently attempt to engage in behaviors that reduce dissonance. They may try to convince themselves that smoking is not that bad: “My grandmother smoked but lived to be 93 years old!” “I’m going to quit next year!” Or they may try to add new consonant cognitions: “Smoking is fun; it relaxes me.” You can see that these processes, although making us feel better about ourselves at least in the short run, may nevertheless have some long-term negative outcomes.

Elliot Aronson and Judson Mills (1959) studied whether the cognitive dissonance created by an initiation process could explain how much commitment students felt to a group they were part of. In their experiment, female college students volunteered to join a group that would be meeting regularly to discuss various aspects of the psychology of sex. According to random assignment, some of the women were told that they would be required to perform an embarrassing procedure (they were asked to read some obscene words and some sexually oriented passages from a novel in public) before they could join the group, whereas other women did not have to go through this initiation. Then all the women got a chance

to listen to the group's conversation, which turned out to be very boring.

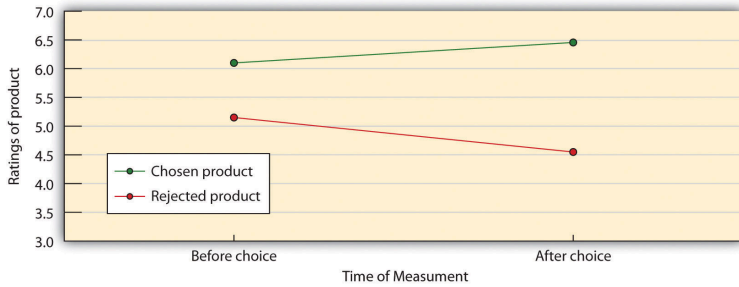
Aronson and Mills found that the women who had gone through the embarrassing experience subsequently reported more liking for the group than those who had not, and Gerard and Matthewson (1966) found that having to take some electrical shocks as part of an initiation process had the same effect. Aronson and Mills argued that the more effort an individual expends to become a member of the group (for instance, a severe initiation), the more he will become committed to the group in order to justify the effort he has put in during the initiation. The idea is that the effort creates dissonant cognitions ("I did all this work to join the group"), which are then justified by creating more consonant ones ("OK, this group is really pretty fun"). The women who spent little effort to get into the group were able to see the group as the dull and boring conversation that it was. The women who went through the more severe initiation, however, succeeded in convincing themselves that the same discussion was a worthwhile experience. When we put in effort for something—an initiation, a big purchase price, or even some of our precious time—we will likely end up liking the activity more than we would have if the effort had been less. Even the effort of having to fill out a purchase agreement for a product, rather than having the salesperson do it for you, creates commitment to the purchase and a greater likelihood of staying in the deal (Cialdini, 1988).

Another time you may have experienced the negative affective state of cognitive dissonance is after you have made an important and irrevocable decision. Imagine that you are about to buy a new car and you have narrowed your search to a small new car and a larger (but much cheaper) used car. The problem is that you can see advantages and disadvantages to each. For instance, the smaller car would get better gas mileage, but the larger car—because it is used—is cheaper. Imagine, however, that you finally decide to buy the larger car because you feel that you really don't have enough money for the new car.

That night, you're lying in bed and wondering about your decision. Although you've enjoyed driving the big car that you have just purchased, you're worried about rising gas costs, the negative impact of the big car on the environment, and the possibility that the car might need a lot of repairs. Have you made the right decision? This "buyer's remorse" can be interpreted in terms of postdecisional dissonance—*the feeling of regret that may occur after we make an important decision* (Brehm, 1956). However, the principles of dissonance predict that once you make the decision—and regardless of which car you choose—you will convince yourself that you made the right choice. I would predict that since you have chosen the larger car you will begin to think more about the positive aspects of the choice that you have made (what you are going to be able to do with the money you saved, rather than how much more it is going to cost to fill up the gas tank) and at the same time you will likely downplay the values of the smaller car.

Jack Brehm (1956) posed as a representative of a consumer testing service and asked women to rate the attractiveness and desirability of several kinds of appliances, such as toasters and electric coffee makers. Each woman was told that as a reward for having participated in the survey, she could have one of the appliances as a gift. She was given a choice between two of the products she had rated as being about equally attractive. After she made her decision, her appliance was wrapped up and given to her. Then, 20 minutes later, each woman was asked to rerate all the products. As you can see in [Figure 5.7 "Postdecisional Dissonance"](#), Brehm found that the women rated the appliance that they had chosen and been given as a gift higher than they had the first time. And the women also lowered their rating of the appliance they might have chosen but decided to reject. These results are of course consistent with the principles of cognitive dissonance—post-decisional dissonance is reduced by focusing on the positive aspects of the chosen product and the negative aspects of the rejected product.

Figure 5.7 Postdecisional Dissonance



As predicted by the desire to reduce postdecisional dissonance, participants increased the perceived desirability of a product they had chosen and decreased the perceived desirability of a product they did not choose. Data are from Brehm (1956). [Image from: Charles Stangor's *Principles of Social Psychology*. Retrieved from <https://open.lib.umn.edu/socialpsychology/chapter/5-3-changing-attitudes-by-changing-behavior/> CC BY-NC-SA <http://creativecommons.org/licenses/by-nc-sa/4.0/>]

What research on cognitive dissonance suggests, then, is that people who are experiencing dissonance will generally try to reduce it. If we fail to lose the weight we wanted to lose, we decide that we look good anyway. If we cheat on an exam, we decide that cheating is OK. If we hurt someone else's feelings, we may even decide that they are bad people who deserve our negative behavior. To escape from feeling poorly about ourselves, people will engage in quite extraordinary rationalizing. No wonder that most of us believe that "If I had it all to do over again, I would not change anything important."

Of course, the tendency to justify our past behavior has positive outcomes for our affect. If we are able to convince ourselves that we can do no wrong, we will be happier—at least for today. But the desire to create positive self-esteem can lead to a succession of self-justifications that ultimately result in a chain of irrational

actions. The irony is that to avoid thinking of ourselves as bad or immoral, we may set ourselves up for more immoral acts. Once Joachim has convinced himself that his schoolwork is not important, it may be hard to pick it up again. Once a smoker has decided it is OK to smoke, she may just keep smoking. If we spend too much time thinking positively about ourselves we will not learn from our mistakes, nor grow or change. In order to learn from our behavior, it would be helpful to learn to tolerate dissonance long enough to examine the situation critically and dispassionately. We then stand a chance of breaking out of the cycle of action followed by justification, followed by more action.

There is still another potential negative outcome of dissonance: When we have to make choices we may feel that we have made poor ones. Barry Schwartz (2004) has argued that having too many choices can create dissonance and thus the opportunity for regret. When we go to the store and have to pick only one out of 30 different types of chocolates, we have more opportunities for postdecisional dissonance. Although it seems like being allowed to choose would be a good thing, people report being happier when they are given a free gift than when they are given a choice between two similar gifts and have to reject one of them (Hsee & Hastie, 2006).

## Positive Self-Esteem Reduces Dissonance

We have seen that the experience of cognitive dissonance can influence our thoughts and feelings about an attitude object by making us feel uncomfortable about our own behaviors. The discrepant behavior causes our sense of self-worth to be lowered, which then causes us to change our attitudes to feel better about ourselves.



discrepant behavior → lowered self-worth → changes in thoughts and feelings

Imagine that immediately after you did something dishonest, but before you had a chance to try to reduce the dissonance you were experiencing, you were able to remind yourself of the fact that you had recently done something else very positive—perhaps you had recently spent some time volunteering at a homeless shelter or gotten a really high score on an important exam. Would the possibility of boosting your self-esteem in this other, but unrelated, domain make it unnecessary for you to engage in dissonance reduction? Could you not say, “Well, it’s true that I cheated, but I’m really a fine, intelligent, and generous person.” Research has demonstrated that this is the case. If we can affirm our self-worth, even on dimensions that are not related to the source of the original dissonance, the negative feelings we experience are reduced and so is the tendency to justify our attitudes (Steele, 1988).

Just as finding ways to affirm our self-esteem should reduce cognitive dissonance, threats to our self-esteem should increase it. Because cognitive dissonance poses a threat to one’s self-esteem, people who are more motivated by self-concern should show bigger changes in their thoughts and feelings after they engage in a discrepant behavior than should those who are less motivated by self-concern.

Following the research of Brehm, Steve Heine and Darren Lehman (1997) conducted an experiment to determine if threats to self-esteem would increase the magnitude of the dissonance-reduction effect, and if dissonance reduction would also occur for Japanese students as they had previously been found in students from Western samples. They expected that there would be less need for dissonance reduction in the Japanese than in Western students because the Japanese (and other Easterners) were less motivated overall to maintain a positive self-image.

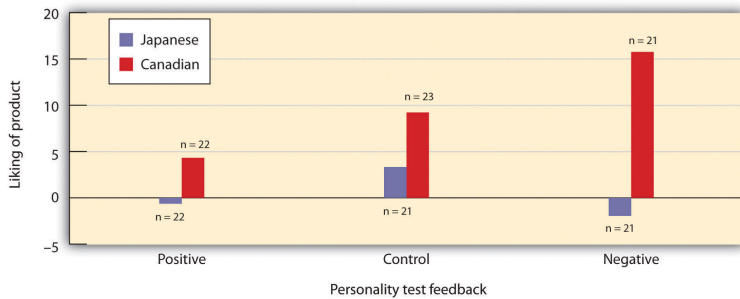
In their study, 71 Canadian and 71 Japanese participants were first asked to take a personality test. According to random assignment to conditions, one third of the sample in each country were led to

believe that they had scored much higher on the test than did the other participants and thus that they had “positive” personalities (the *positive feedback* condition). Another third of the sample (the *negative feedback* condition) were led to believe that they had scored more poorly on the test than average, and a final third (the *control condition*) were not given any feedback on their personality test scores.

Then all participants rated the desirability of 10 compact discs (the discs were known to be popular in both Canada and Japan) and were asked to choose between their fifth and sixth rated CDs as compensation for their participation. Finally, after choosing one of the CDs, the participants were asked to again rate their liking for the CDs. The change in the ratings from before choice to after choice, which would have occurred if the participants increased their liking of the CD they had chosen or decreased their liking of the CD they had rejected, was the dependent measure in the study.

As you can see in [Figure 5.8 “Spread of Alternatives by Culture and Feedback Condition”](#), the researchers found a significant interaction between culture and personality feedback. The pattern of means showed that the feedback mattered for the Canadian participants—the difference in the ratings of the chosen versus the rejected CD (the “spread of alternatives”) increased from the positive to the control to the negative feedback conditions. However, there was no significant simple effect of feedback for the Japanese students, nor did they show a significant spread of alternatives in any feedback condition.

Figure 5.8 Spread of Alternatives by Culture and Feedback Condition



The Canadian participants showed a greater spread of alternatives when their self-esteem was threatened, but Japanese participants did not. Data are from Heine and Lehman (1997). [Image from: Charles Stangor's *Principles of Social Psychology*. Retrieved from <https://open.lib.umn.edu/socialpsychology/chapter/5-3-changing-attitudes-by-changing-behavior/> CC BY-NC-SA <http://creativecommons.org/licenses/by-nc-sa/4.0/>]

However, other researchers have found that individuals from collectivist cultures do show dissonance effects when they are focused on their relationships with others. For instance, Kitayama, Snibbe, Markus, and Suzuki (2004) found that East Asian participants experienced dissonance particularly when they were asked to think about a close friend who had made a dissonance-creating decision. Such a result would be expected because behaviors that involve more other-oriented, collectivistic outcomes should be more important for these people. Indeed, research has found that advertisements that are framed in terms of personal benefits (“Use this breath mint!”) are more persuasive in individualistic cultures, whereas ads that emphasize family or ingroup benefits (“Share this breath mint with your friends!”) are more persuasive in collectivistic cultures (Han & Shavitt, 1994).

Although dissonance is most likely when our behavior violates our positive self-concept, attitude change can occur whenever our

thoughts and behaviors are inconsistent, even if the self-concept is not involved. For instance, Harmon-Jones and his colleagues (Harmon-Jones, Brehm, Greenberg, Simon, & Nelson, 1996) had people drink an unpleasant-tasting beverage (Kool-Aid made with vinegar instead of sugar) and then write down on a small slip of paper, which they then immediately crumpled up and threw away, a statement saying that they really liked the drink. Harmon-Jones and his colleagues found that even though the lie could not possibly harm anyone, the act of lying nevertheless made the participants express more positive attitudes toward the drink. It appears that even lying to oneself about something relatively unimportant can produce dissonance and change attitudes (Prislin & Pool, 1996; Stone, 1999).

# 6. Self and Identity

DAN P. MCADAMS

This chapter is from:

McAdams, D. P. (2021). Self and identity. In R. Biswas-Diener & E. Diener (Eds), *Noba textbook series: Psychology*. Champaign, IL: DEF publishers. Retrieved from <http://noba.to/3gsuardw>

## Introduction

In the Temple of Apollo at Delphi, the ancient Greeks inscribed the words: “Know thyself.” 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, <https://goo.gl/VnKlK8>]

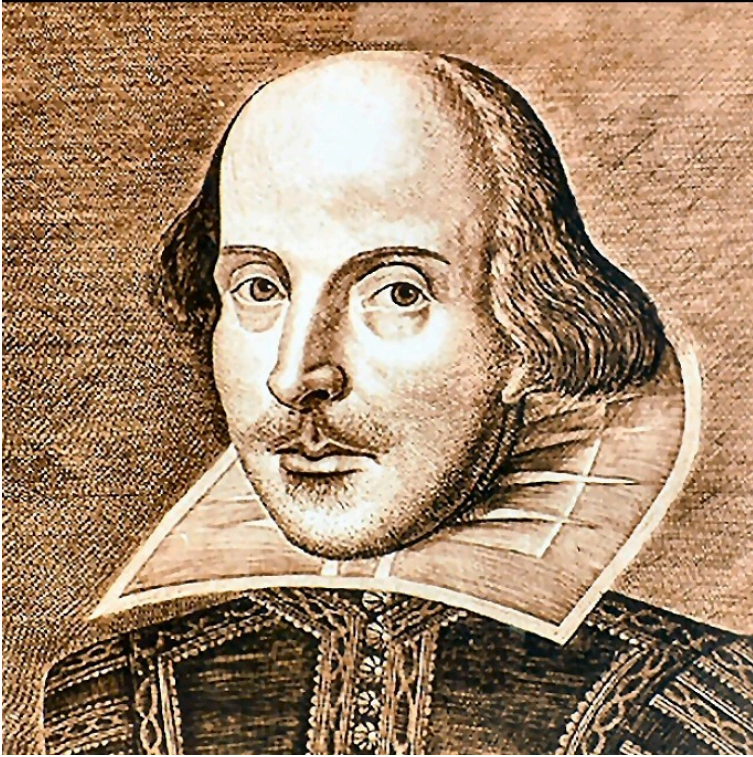
The ancient Greeks seemed to realize that the self is inherently [reflexive](#)—it reflects back on itself. In the disarmingly simple idea made famous by the great psychologist William James ([1892/1963](#)), the self is what happens when “I” reflects back upon “Me.” The self is both the I and the Me—it 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 argues, 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 yourself. 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



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, <https://goo.gl/i4GXf5>]

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*.

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



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

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*.

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, <https://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.

# 7. Attribution

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This chapter is from:

Charles Stangor's *Principles of Social Psychology*. Retrieved from <https://open.lib.umn.edu/socialpsychology/chapter/6-2-inferring-dispositions-using-causal-attribution/>

## Introduction

We have seen that we use personality traits to help us understand and communicate about the people we know. But how do we know what traits people have? People don't walk around with labels saying "I am generous" or "I am aggressive" on their foreheads. In some cases, we may learn about a person indirectly, for instance, through the comments that other people make about that person. We also use the techniques of person perception to help us learn about people and their traits by observing them and interpreting their behaviors. If Frank hits Joe, we might conclude that Frank is aggressive. If Leslie leaves a big tip for the waitress, we might conclude that Leslie is generous. It seems natural and reasonable to make such inferences because we can assume (often, but not always, correctly) that behavior is caused by personality. It is Frank's aggressiveness that causes him to hit, and it is Leslie's generosity that led to her big tip.

Although we can sometimes infer personality by observing behavior, this is not always the case. Remember that behavior is influenced by both our personal characteristics and the social context in which we find ourselves. What this means is that the behavior we observe other people engaging in might not always be that reflective of their personality—the behavior might have been

caused by the situation rather than by underlying person characteristics. Perhaps Frank hit Joe not because he is really an aggressive person but because Joe insulted or provoked him first. And perhaps Leslie left a big tip in order to impress her friends rather than because she is truly generous.

Because behavior is determined by both the person and the situation, we must attempt to determine which of these two causes actually determined the behavior. *The process of trying to determine the causes of people's behavior is known as causal attribution* (Heider, 1958). Because we cannot see personality, we must work to infer it. When a couple we know breaks up, despite what seemed to be a match made in heaven, we are naturally curious. What could have caused the breakup? Was it something one of them said or did? Or perhaps stress from financial hardship was the culprit?

Making a causal attribution is a bit like conducting a social psychology experiment. We carefully observe the people we are interested in, and we note how they behave in different social situations. After we have made our observations, we draw our conclusions. We make a personal (or internal or dispositional) attribution when we decide that the behavior was caused primarily by the person. A personal attribution might be something like "I think they broke up because Sarah was not committed to the relationship." At other times, we may determine that the behavior was caused primarily by the situation—we call this making a situational (or external) attribution. A situational attribution might be something like "I think they broke up because they were under such financial stress." At yet other times, we may decide that the behavior was caused by both the person and the situation.

## Making Inferences About Personality

It is easier to make personal attributions in some cases than in

others. When a behavior is unusual or unexpected, we can more easily make a personal attribution for it. Imagine that you go to a party and you are introduced to Tess. Tess shakes your hand and says, “Nice to meet you!” Can you readily conclude, on the basis of this behavior, that Tess is a friendly person? Probably not. Because the social context demands that people act in a friendly way (by shaking your hand and saying “Nice to meet you”), it is difficult to know whether Tess acted friendly because of the situation or because she is really friendly. Imagine, however, that instead of shaking your hand, Tess sticks her tongue out at you and walks away. I think you would agree that it is easier in this case to infer that Tess is unfriendly because her behavior is so contrary to what one would expect.

To test this idea, Edward Jones and his colleagues (Jones, Davis, & Gergen, 1961) conducted an experiment in which participants viewed one of four different videotapes of a man who was applying for a job. For half the participants, the video they viewed indicated that the man was interviewing for a job as a submariner, a position that required close contact with many people over a long period of time. It was clear to the man being interviewed, as well as to the research participants, that to be a good submariner you should be extroverted (i.e., you should enjoy being around others). The other half of the participants saw a video in which the man was interviewing for a job as an astronaut, which involved (remember, this study was conducted in 1961) being in a small capsule, alone, for days on end. In this case, it was clear to everyone that in order to be good astronaut, you should have an introverted personality.

During the videotape of the interview, a second variable was also manipulated. One half of the participants saw the man indicate that he was actually an introvert (he said things such as “I like to work on my own,” “I don’t go out much”), and the other half saw the man say that he was actually an extrovert (he said things such as “I would like to be a salesman,” “I always get ideas from others”). After viewing one of the four videotapes, participants were asked to indicate how introverted or extroverted they thought the applicant really was.



As you can see in [Table 6.2 “Attributions to Expected and Unexpected Behaviors”](#), when the applicant gave responses that better matched what was required by the job (i.e., for the submariner job, the applicant said he was an extrovert, and for the astronaut job, he said he was an introvert), the participants did not think his statements were as indicative of his underlying personality as they did when the applicant said the opposite of what was expected by the job (i.e., when the job required that he be extroverted but he said he was introverted, or vice versa).

Table 6.2 Attributions to Expected and Unexpected Behaviors

The Job Applied For	Extraverted	Introverted
Astronaut	91	71
Submariner	71	45

**We are more likely to draw personal attributions when a behavior is unexpected. The numbers represent the percentage of extraverted responses that participants believed the job applicant would actually endorse if he were telling the complete truth. Participants were more likely to believe that the applicant was more extraverted (91%) and more introverted (45%) when he said that he did not have the personality traits required by the job than when he said that he did have the personality traits required by the job. Data are from Jones, Davis, and Gerger (1961).**

The idea here is that the statements that were unusual or unexpected (on the basis of the job requirements) just seemed like they could not possibly have been caused by the situation, so the participants really thought that the interviewee was telling the truth. On the other hand, when the interviewees made statements that were consistent with what was required by the situation, it was more difficult to be sure that he was telling the truth (perhaps he was just saying these things because he wanted to get the job), and the participants made weaker personal attributions for his behavior.

We can also make personal attributions more easily when we know that the person had a choice in the behavior. If a person chooses to be friendly, even in situations in which he might not be, this probably means that he is friendly. But if we can determine that

he's been forced to be friendly, it's more difficult to know. I'm sure you would agree that if you saw a man pointing a gun at another person, and then you saw that person give his watch and wallet to the gunman, you would not infer that the person was generous!

Jones and Harris (1967) had student participants in a study read essays that had been written by other students. Half of the participants thought that the students had chosen the essay topics, whereas the other half thought that the students had been assigned the topics by their professor. The participants were more likely to make a personal attribution that the students really believed in the essay they were writing when they had chosen the topics rather than been assigned topics.

Sometimes a person may try to lead others to make personal attributions for their behavior to make themselves seem more believable to those others. For example, when a politician makes statements supporting a cause in front of an audience that does not agree with her position, the politician will be seen as more committed to her beliefs, and may be more persuasive, than if she gave the same argument in front of an audience known to support her views. Again, the idea is based on principles of attribution—if there is an obvious situational reason for making a statement (the audience supports the politician's views), then the personal attribution (that the politician really believes what she is saying) is harder to make.

## **Detecting the Covariation Between Personality and Behavior**

So far, we have considered how we make personal attributions when we have only limited information, that is, behavior observed at only a single point in time—a woman leaving a big tip at a restaurant, a man answering questions at a job interview, or a politician giving a speech. But the process of making attributions also occurs when we

are able to observe a person's behavior in more than one situation. Certainly, we can learn more about Leslie's generosity if she gives a big tip in many different restaurants with many different people, and we can learn more about a politician's beliefs by observing the kinds of speeches she gives to different audiences over time.

When people have multiple sources of information about the behavior of a person, they can make attributions by assessing the relationship between a person's behavior and the social context in which it occurs. One way of doing so is to use the covariation principle, which states that a given behavior is more likely to have been caused by the situation if that behavior covaries (or changes) across situations. Our job, then, is to study the patterns of a person's behavior across different situations in order to help us to draw inferences about the causes of that behavior (Jones et al., 1987; Kelley, 1967).

Research has found that people focus on three kinds of covariation information when they are observing the behavior of others (Cheng & Novick, 1990).

- **Consistency information.** A situation seems to be the cause of a behavior if the situation *always produces the behavior*. For instance, if I always start to cry at weddings, then it seems as if the wedding is the cause of my crying.
- **Distinctiveness information.** A situation seems to be the cause of a behavior if the behavior *occurs when the situation is present but not when it is not present*. For instance, if I only cry at weddings but not at any other time, then it seems as if the wedding is the cause of my crying.
- **Consensus information.** A situation seems to be the cause of a behavior if the situation *creates the same behavior in most people*. For instance, if many people cry at weddings, then it seems as if the wedding is the cause of my (and the other people's) crying.

Imagine that your friend Jane likes to go out with a lot of different

guys, and you have observed her behavior with each of these guys over time. One night she goes to a party with Jimmy, where you observe something unusual. Although Jane has come to the party with Jimmy, she completely ignores him all night. She dances with some other guys, and in the end she leaves the party with someone else. This is the kind of situation that might make you wonder about the cause of Jane's behavior (is she a rude person, or is this behavior caused more by Jimmy?) and for which you might use the covariation principle to attempt to draw some conclusions.

According to the covariation principle, you should be able to determine the cause of Jane's behavior by considering the three types of covariation information: consistency, distinctiveness, and consensus. One question you might ask is whether Jane always treats Jimmy this way when she goes out with him. If the answer is yes, then you have some consistency information—the situation (Jimmy's presence) always produces the same behavior in Jane. If you have noticed that Jane ignores Jimmy more than she ignores the other men she dates, then you also have distinctiveness information—the behavior is occurring only (or at least more often or more strongly) when the social situation (Jimmy) is present. Finally, you might look for consensus information too—if the other women Jimmy goes out with also treat him this way, then it seems, again, as if it's Jimmy who is causing the behavior.

Consider one more example. Imagine that a friend of yours tells you that he has just seen a new movie and that it is the greatest movie he's ever seen. As you wonder whether you should make an attribution to the situation (the movie), you will naturally ask about consensus—do other people like the movie too? If they do, then you have positive consensus information about how good the movie is. But you probably also have some information about your friend's experiences with movies over time. If you are like me, you probably have friends who love every movie they see; if this is the case for this friend, you probably won't yet be that convinced that it's a great movie—in this case, your friend's reactions would not be distinctive. On the other hand, if your friend does not like most movies he

sees but loves this one, then distinctiveness is strong (the behavior is occurring only in this particular situation). If this is the case, then you can be more certain it's something about the movie that has caused your friend's enthusiasm. Your next thought may be, "I'm going to see that movie tonight." You can see still another example of the use of covariation information in [Table 6.3 "Using Covariation Information"](#).

Table 6.3 Using Covariation Information

Attribution	Consensus	Distinctiveness	Consistency
An <i>external attribution</i> (to the situation, in this case the TV show) is more likely if...	All my friends laugh at this TV show	Bill laughs more at this TV show	Bill always laughs more at this TV show than other TV shows
An <i>internal attribution</i> (to the person, in this case Bill) is more likely if...	Very few of my friends laugh at this TV show	Bill laughs at this TV show as much as he laughs at other TV shows	Bill only sometimes laughs at this TV show

**According to the covariation principle, we use three sources of information to help us determine whether we should make an attribution to the situation or to the person. In this example, the attribution is either personal (to my friend Bill) or situational (to a TV show we are watching).**

## Attributions for Success and Failure

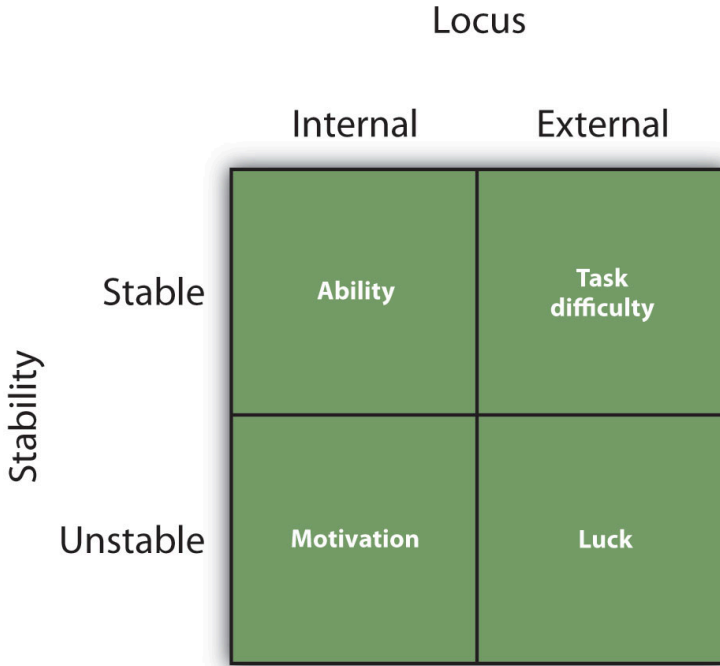
Still another time when we may use our powers of causal attribution to help us determine the causes of events is when we attempt to determine why we or others have succeeded or failed at a task. Think back for a moment to a test that you took, or perhaps about another task that you performed, and consider why you did either well or poorly on it. Then see if your thoughts reflect what Bernard Weiner (1985) considered to be the important factors in this regard.

Weiner was interested in how we determine the causes of success

or failure because he felt that this information was particularly important for us: Accurately determining why we have succeeded or failed will help us see which tasks we are at good at already and which we need to work on in order to improve. Weiner also proposed that we make these determinations by engaging in causal attribution and that the outcomes of our decision-making process were made either to the person (“I succeeded/failed because of my own person characteristics”) or to the situation (“I succeeded/failed because of something about the situation”).

Weiner’s analysis is shown in [Figure 6.5 “Attributions for Success and Failure”](#). According to Weiner, success or failure can be seen as coming from personal causes (ability or motivation) or from situational causes (luck or task difficulty). However, he also argued that those personal and situational causes could be either stable (less likely to change over time) or unstable (more likely to change over time).

Figure 6.5 Attributions for Success and Failure



This figure shows the potential attributions that we can make for our, or for other people's, success or failure. *Locus* considers whether the attributions are to the person or to the situation, and *stability* considers whether or not the situation is likely to remain the same over time. [Image from: Charles Stangor's *Principles of Social Psychology*. Retrieved from <https://open.lib.umn.edu/socialpsychology/chapter/6-2-inferring-dispositions-using-causal-attribution/> CC BY-NC-SA <http://creativecommons.org/licenses/by-nc-sa/4.0/>]

If you did well on a test because you are really smart, then this is a personal and stable attribution of *ability*. It's clearly something that is caused by you personally, and it is also a stable cause—you are smart today, and you'll probably be smart in the future. However,

if you succeeded more because you studied hard, then this is a success due to *motivation*. It is again personal (you studied), but it is also unstable (although you studied really hard for this test, you might not work so hard for the next one). Weiner considered *task difficulty* to be a situational cause—you may have succeeded on the test because it was easy, and he assumed that the next test would probably be easy for you too (i.e., that the task, whatever it is, is always either hard or easy). Finally, Weiner considered success due to *luck* (you just guessed a lot of the answers correctly) to be a situational cause, but one that was more unstable than task difficulty.

It turns out that although Weiner's attributions do not always fit perfectly (e.g., task difficulty may sometimes change over time and thus be at least somewhat unstable), the four types of information pretty well capture the types of attributions that people make for success and failure.

## Are Our Attributions Accurate?

We have seen that person perception is useful in helping us successfully interact with others. If we can figure out why our roommate is angry at us, we can respond appropriately to resolve the problem; and if we can determine why we did so poorly on the last psychology test, we can try to prepare differently so we do better on the next test. Because successful navigation of the social world is based on being accurate, we can expect that our attributional skills will be pretty good. However, although people are reasonably accurate in their attributions—we could say, perhaps, that they are “good enough” (Fiske, 2003)—they are far from perfect. In fact (and I doubt this is going to surprise you), causal attributions are subject to the same types of biases that any other types of social judgments are. Let's consider some of the ways that our attributions may go awry.



## Overemphasizing the Role of the Person

One way that our attributions are biased is that we are often too quick to attribute the behavior of other people to something personal about them rather than to something about their situation. This is a classic example of the general human tendency of underestimating how important the social situation really is in determining behavior. This bias occurs in two ways. First, we are too likely to make strong personal attributions to account for the behavior that we observe others engaging in. That is, we are more likely to say “Leslie left a big tip, so she must be generous” than “Leslie left a big tip, but perhaps that was because she was trying to impress her friends.” Second, we also tend to make more personal attributions about the behavior of others (we tend to say “Leslie is a generous person”) than we do for ourselves (we tend to say “I am generous in some situations but not in others”). Let’s consider each of these biases (the *fundamental attribution error* and the *actor-observer difference*) in turn.

When we explain the behavior of others, *we tend to overestimate the role of person factors and overlook the impact of situations*. In fact, the tendency to do so is so common that it is known as the **fundamental attribution error (correspondence bias)**.

In one demonstration of the fundamental attribution error, Linda Skitka and her colleagues (Skitka, Mullen, Griffin, Hutchinson, & Chamberlin, 2002) had participants read a brief story about a professor who had selected two student volunteers to come up in front of a class to participate in a trivia game. The students were described as having been randomly assigned to the role of a quizmaster or of a contestant by drawing straws. The quizmaster was asked to generate five questions from his idiosyncratic knowledge, with the stipulation that he knew the correct answer to all five questions.

Joe (the quizmaster) subsequently posed his questions to the other student (Stan, the contestant). For example, Joe asked, “What

cowboy movie actor's sidekick is Smiley Burnette?" Stan looked puzzled and finally replied, "I really don't know. The only movie cowboy that pops to mind for me is John Wayne." Joe asked four additional questions, and Stan was described as answering only one of the five questions correctly. After reading the story, the students were asked to indicate their impression of both Stan's and Joe's intelligence.

If you think about the setup here, you'll notice that the professor has created a situation that can have a big influence on the outcomes. Joe, the quizmaster, has a huge advantage because he got to choose the questions. As a result, the questions are hard for the contestant to answer. But did the participants realize that the situation was the cause of the outcomes? They did not. Rather, the students rated Joe as significantly more intelligent than Stan. You can imagine that Joe just seemed to be really smart to the students; after all, he knew all the answers, whereas Stan knew only one of the five. But of course this is a mistake. The difference was not at all due to person factors but completely to the situation—Joe got to use his own personal store of esoteric knowledge to create the most difficult questions he could think of. The observers committed the fundamental attribution error and did not sufficiently take the quizmaster's situational advantage into account.

The fundamental attribution error involves a bias in how easily and frequently we make personal versus situational attributions to others. Another, similar way that we overemphasize the power of the person is that *we tend to make more personal attributions for the behavior of others than we do for ourselves and to make more situational attributions for our own behavior than for the behavior of others*. This is known as the actor-observer difference (Nisbett, Caputo, Legant, & Marecek, 1973; Pronin, Lin, & Ross, 2002). When we are asked about the behavior of other people, we tend to quickly make trait attributions ("Oh, Sarah, she's really shy"). On the other hand, when we think of ourselves, we are more likely to take the situation into account—we tend to say, "Well, I'm shy in my psychology discussion class, but with my baseball friends I'm not

at all shy.” When our friend behaves in a helpful way, we naturally believe that she is a friendly person; when we behave in the same way, on the other hand, we realize that there may be a lot of other reasons why we did what we did.

You might be able to get a feel for the actor-observer difference by taking the following short quiz. First, think about a person you know—your mom, your roommate, or someone from one of your classes. Then, for each row, circle which of the three choices best describes his or her personality (for instance, is the person’s personality more energetic, relaxed, or does it depend on the situation?). Then answer the questions again, but this time about yourself.

---

1. Energetic	Relaxed	Depends on the situation
2. Skeptical	Trusting	Depends on the situation
3. Quiet	Talkative	Depends on the situation
4. Intense	Calm	Depends on the situation

---

Richard Nisbett and his colleagues (Nisbett, Caputo, Legant, & Marecek, 1973) had college students complete exactly this task—they did it for themselves, for their best friend, for their father, and for the newscaster Walter Cronkite. As you can see in [Table 6.4 “The Actor-Observer Difference”](#), the participants checked one of the two trait terms more often for other people than they did for themselves and checked off “depends on the situation” more frequently for themselves than they did for the other person—this is the actor-observer difference.

Table 6.4 The Actor-Observer Difference

	Trait Term	Depends on the Situation
Self	11.92	8.08
Best Friend	14.21	5.79
Father	13.42	6.58
Walter Cronkite	15.08	4.92

**This table shows the average number of times (out of 20) that participants checked off a trait term (such as “energetic” or “talkative”) rather than “depends on the situation” when asked to describe the personalities of themselves and various other people. You can see the actor-observer difference. Participants were significantly more likely to check off “depends on the situation” for themselves than for others. Data are from Nisbett, Caputo, Legant, and Marecek (1973).**

Like the fundamental attribution error, the actor-observer difference reflects our tendency to overweight the personal explanations of the behavior of other people. However, a recent meta-analysis (Malle, 2006) has suggested that the actor-observer difference might not be as strong as the fundamental attribution error is and may only be likely to occur for some people.

The tendency to overemphasize personal attributions seems to occur for several reasons. One reason is simply because other people are so salient in our social environments. When I look at you, I see you as my focus, and so I am likely to make personal attributions about you. It’s just easy because I am looking right at you. When I look at Leslie giving that big tip, I see her—and so I decide that it is she who caused the action. When I think of my own behavior, however, I do not see myself but am instead more focused on my situation. I realize that it is not only me but also the different situations that I am in that determine my behavior. I can remember the other times that I didn’t give a big tip, and so I conclude that my behavior is caused more by the situation than by my underlying personality. In fact, research has shown that we tend to make more personal attributions for the people we are directly observing in our environments than for other people who are part of the situation but who we are not directly watching (Taylor & Fiske, 1975).

A second reason for the tendency to make so many personal

attributions is that they are simply easier to make than situational attributions. In fact, personal attributions seem to be made spontaneously, without any effort on our part, and even on the basis of only very limited behavior (Newman & Uleman, 1989; Uleman, Blader, & Todorov, 2005). Personal attributions just pop into mind before situational attributions do.

Third, personal attributions also dominate because we need to make them in order to understand a situation. That is, we cannot make either a personal attribution (e.g., “Leslie is generous”) or a situational attribution (“Leslie is trying to impress her friends”) until we have first identified the behavior as being a generous behavior (“Leaving that big tip was a generous thing to do”). So we end up starting with the personal attribution (“generous”) and only later try to correct or adjust our judgment (“Oh,” we think, “perhaps it really was the situation that caused her to do that”).

Adjusting our judgments generally takes more effort than making the original judgment does, and the adjustment is frequently not sufficient. We are more likely to commit the fundamental attribution error—quickly jumping to the conclusion that behavior is caused by underlying personality—when we are tired, distracted, or busy doing other things (Geeraert, Yzerbyt, Corneille, & Wigboldus, 2004; Gilbert, 1989; Trope & Alfieri, 1997).

I hope you might have noticed that there is an important moral about perceiving others that applies here: *We should not be too quick to judge other people!* It is easy to think that poor people are lazy, that people who harm someone else are mean, and that people who say something harsh are rude or unfriendly. But these attributions may frequently overemphasize the role of the person. This can sometimes result in overly harsh evaluations of people who don't really deserve them—we tend to *blame the victim*, even for events that they can't really control (Lerner, 1980). Sometimes people are lazy, mean, or rude, but they may also be the victims of situations. When you find yourself making strong personal attribution for the behaviors of others, your experience as a social psychologist should lead you to stop and think more carefully: Would you want other

people to make personal attributions for your behavior in the same situation, or would you prefer that they more fully consider the situation surrounding your behavior? Are you perhaps making the fundamental attribution error?

## Self-Serving Attributions

You may recall that the process of making causal attributions is supposed to proceed in a careful, rational, and even scientific manner. But this assumption turns out to be, at least in part, untrue. Our attributions are sometimes biased by affect—particularly the fundamental desire to enhance the self. Although we would like to think that we are always rational and accurate in our attributions, we often tend to distort them to make us feel better. Self-serving attributions are attributions that help us meet our desires to see ourselves positively (Mezulis, Abramson, Hyde, & Hankin, 2004).

I have noticed that I sometimes make self-enhancing attributions. If my students do well on one of my exams, I make a personal attribution for their successes (“I am, after all, a great teacher!”). On the other hand, when my students do poorly on an exam, I tend to make a situational attribution—I blame them for their failure (“Why didn’t you guys study harder?”). You can see that this process is clearly not the type of scientific, rational, and careful process that attribution theory suggests I should be following. It’s unfair, although it does make me feel better about myself. If I were really acting like a scientist, however, I would determine ahead of time what causes good or poor exam scores and make the appropriate attribution regardless of the outcome.

You might have noticed yourself making self-serving attributions too. Perhaps you have blamed another driver for an accident that you were in or blamed your partner rather than yourself for a breakup. Or perhaps you have taken credit (internal) for your successes but blamed your failures on external causes. If these

judgments were somewhat less than accurate, even though they did benefit you, then they are indeed self-serving.

# 8. Judgment and Decision Making

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This chapter is from:

Bazerman, M. H. (2021). Judgment and decision making. In R. Biswas-Diener & E. Diener (Eds), *Noba textbook series: Psychology*. Champaign, IL: DEF publishers. Retrieved from <http://noba.to/9xjyvc3a>

## Introduction

Every day you have the opportunity to make countless decisions: should you eat dessert, cheat on a test, or attend a sports event with your friends. If you reflect on your own history of choices you will realize that they vary in quality; some are rational and some are not. This module provides an overview of decision making and includes discussion of many of the common biases involved in this process.

In his Nobel Prize-winning work, psychologist Herbert Simon (1957; March & Simon, 1958) argued that our decisions are bounded in their rationality. According to the [bounded rationality](#) framework, human beings try to make rational decisions (such as weighing the costs and benefits of a choice) but our cognitive limitations prevent us from being fully rational. Time and cost constraints limit the quantity and quality of the information that is available to us. Moreover, we only retain a relatively small amount of information in our usable memory. And limitations on intelligence and perceptions constrain the ability of even very bright decision makers to



accurately make the best choice based on the information that is available.

About 15 years after the publication of Simon's seminal work, Tversky and Kahneman ([1973](#), [1974](#); [Kahneman & Tversky, 1979](#)) produced their own Nobel Prize-winning research, which provided critical information about specific systematic and predictable [biases](#), or mistakes, that influence judgment (Kahneman received the prize after Tversky's death). The work of Simon, Tversky, and Kahneman paved the way to our modern understanding of judgment and decision making. And their two Nobel prizes signaled the broad acceptance of the field of behavioral decision research as a mature area of intellectual study.

## What Would a Rational Decision Look Like?



People often have to use incomplete information and intuition to make even the most important of decisions. A fully rational decision requires a careful, systematic process. [Image: CC0 Public Domain, <https://goo.gl/m25gce>]

Imagine that during your senior year in college, you apply to a number of doctoral programs, law schools, or business schools (or another set of programs in whatever field most interests you). The good news is that you receive many acceptance letters. So, how should you decide where to go? Bazerman and Moore (2013) outline the following six steps that you should take to make a rational decision: (1) define the problem (i.e., selecting the right graduate program), (2) identify the criteria necessary to judge the multiple options (location, prestige, faculty, etc.), (3) weight the criteria (rank them in terms of importance to you), (4) generate alternatives (the schools that admitted you), (5) rate each alternative on each criterion (rate each school on each criteria that you identified, and (6) compute the optimal decision. Acting rationally would require that you follow these six steps in a fully rational manner.

I strongly advise people to think through important decisions such as this in a manner similar to this process. Unfortunately, we often don't. Many of us rely on our intuitions far more than we should. And when we do try to think systematically, the way we enter data into such formal decision-making processes is often biased.

Fortunately, psychologists have learned a great deal about the biases that affect our thinking. This knowledge about the systematic and predictable mistakes that even the best and the brightest make can help you identify flaws in your thought processes and reach better decisions.

# Biases in Our Decision Process

Simon's concept of bounded rationality taught us that judgment deviates from rationality, but it did not tell us *how* judgment is biased. Tversky and Kahneman's (1974) research helped to diagnose the specific systematic, directional biases that affect human judgment. These biases are created by the tendency to short-circuit a rational decision process by relying on a number of simplifying strategies, or rules of thumb, known as [heuristics](#). Heuristics allow us to cope with the complex environment surrounding our decisions. Unfortunately, they also lead to systematic and predictable biases.

To highlight some of these biases please answer the following three quiz items:

## Problem 1 (adapted from Alpert & Raiffa, 1969):

Listed below are 10 uncertain quantities. Do not look up any information on these items. For each, write down your best estimate of the quantity. Next, put a lower and upper bound around your estimate, such that you are 98 percent confident that your range surrounds the actual quantity. Respond to each of these items even if you admit to knowing very little about these quantities.

1. The first year the Nobel Peace Prize was awarded
2. The date the French celebrate "Bastille Day"
3. The distance from the Earth to the Moon
4. The height of the Leaning Tower of Pisa
5. Number of students attending Oxford University (as of 2014)
6. Number of people who have traveled to space (as of 2013)
7. 2012-2013 annual budget for the University of Pennsylvania
8. Average life expectancy in Bangladesh (as of 2012)

9. World record for pull-ups in a 24-hour period
10. Number of colleges and universities in the Boston metropolitan area

### **Problem 2 (adapted from Joyce & Biddle, 1981):**

We know that executive fraud occurs and that it has been associated with many recent financial scandals. And, we know that many cases of management fraud go undetected even when annual audits are performed. Do you think that the incidence of significant executive-level management fraud is more than 10 in 1,000 firms (that is, 1 percent) audited by Big Four accounting firms?

1. Yes, more than 10 in 1,000 Big Four clients have significant executive-level management fraud.
2. No, fewer than 10 in 1,000 Big Four clients have significant executive-level management fraud.

What is your estimate of the number of Big Four clients per 1,000 that have significant executive-level management fraud? (Fill in the blank below with the appropriate number.)

\_\_\_\_\_ in 1,000 Big Four clients have significant executive-level management fraud.

### **Problem 3 (adapted from Tversky & Kahneman, 1981):**

Imagine that the United States is preparing for the outbreak of an unusual avian disease that is expected to kill 600 people. Two alternative programs to combat the disease have been proposed.

Assume that the exact scientific estimates of the consequences of the programs are as follows.

1. Program A: If Program A is adopted, 200 people will be saved.
2. Program B: If Program B is adopted, there is a one-third probability that 600 people will be saved and a two-thirds probability that no people will be saved.

Which of the two programs would you favor?

## Overconfidence

On the first problem, if you set your ranges so that you were justifiably 98 percent confident, you should expect that approximately 9.8, or nine to 10, of your ranges would include the actual value. So, let's look at the correct answers:



Overconfidence is a natural part of most people’s decision-making process and this can get us into trouble. Is it possible to overcome our faulty thinking? Perhaps. See the “Fixing Our Decisions” section below. [Image: Barn Images, <https://goo.gl/IYzbDV>, CC BY 2.0, <https://goo.gl/BRvSA7>]

1. 1901
2. 14th of July
3. 384,403 km (238,857 mi)
4. 56.67 m (183 ft)
5. 22,384 (as of 2014)
6. 536 people (as of 2013)
7. \$6.007 billion
8. 70.3 years (as of 2012)
9. 4,321

Count the number of your 98% ranges that actually surrounded the true quantities. If you surrounded nine to 10, you were appropriately confident in your judgments. But most readers surround only between three (30%) and seven (70%) of the correct answers, despite claiming 98% confidence that each range would surround the true value. As this problem shows, humans tend to be [overconfident](#) in their judgments.

## Anchoring

Regarding the second problem, people vary a great deal in their final assessment of the level of executive-level management fraud, but most think that 10 out of 1,000 is too low. When I run this exercise in class, half of the students respond to the question that I asked you to answer. The other half receive a similar problem, but instead are asked whether the correct answer is higher or lower than 200 rather than 10. Most people think that 200 is high. But, again, most people claim that this “[anchor](#)” does not affect their final estimate. Yet, on average, people who are presented with the question that focuses on the number 10 (out of 1,000) give answers that are about one-half the size of the estimates of those facing questions that use an anchor of 200. When we are making decisions, any initial anchor that we face is likely to influence our judgments, even if the anchor is arbitrary. That is, we insufficiently adjust our judgments away from the anchor.

## Framing

Turning to Problem 3, most people choose Program A, which saves

200 lives for sure, over Program B. But, again, if I was in front of a classroom, only half of my students would receive this problem. The other half would have received the same set-up, but with the following two options:

1. Program C: If Program C is adopted, 400 people will die.
2. Program D: If Program D is adopted, there is a one-third probability that no one will die and a two-thirds probability that 600 people will die.

Which of the two programs would you favor?

Careful review of the two versions of this problem clarifies that they are objectively the same. Saving 200 people (Program A) means losing 400 people (Program C), and Programs B and D are also objectively identical. Yet, in one of the most famous problems in judgment and decision making, most individuals choose Program A in the first set and Program D in the second set (Tversky & Kahneman, 1981). People respond very differently to saving versus losing lives—even when the difference is based just on the “[framing](#)” of the choices.

The problem that I asked you to respond to was framed in terms of saving lives, and the implied reference point was the worst outcome of 600 deaths. Most of us, when we make decisions that concern gains, are risk averse; as a consequence, we lock in the possibility of saving 200 lives for sure. In the alternative version, the problem is framed in terms of losses. Now the implicit reference point is the best outcome of no deaths due to the avian disease. And in this case, most people are risk seeking when making decisions regarding losses.

These are just three of the many biases that affect even the smartest among us. Other research shows that we are biased in favor of information that is easy for our minds to retrieve, are insensitive to the importance of base rates and sample sizes when we are making inferences, assume that random events will always look random, search for information that confirms our expectations



even when disconfirming information would be more informative, claim a priori knowledge that didn't exist due to the hindsight bias, and are subject to a host of other effects that continue to be developed in the literature ([Bazerman & Moore, 2013](#)).

## Contemporary Developments



The concept of bounded willpower may explain why many of us are better shoppers than savers. [Image: CC0 Public Domain, <https://goo.gl/m25gce>]

Bounded rationality served as the integrating concept of the field

of behavioral decision research for 40 years. Then, in 2000, Thaler (2000) suggested that decision making is bounded in two ways not precisely captured by the concept of bounded rationality. First, he argued that our [willpower is bounded](#) and that, as a consequence, we give greater weight to present concerns than to future concerns. Our immediate motivations are often inconsistent with our long-term interests in a variety of ways, such as the common failure to save adequately for retirement or the difficulty many people have staying on a diet. Second, Thaler suggested that our [self-interest is bounded](#) such that we care about the outcomes of others. Sometimes we positively value the outcomes of others—giving them more of a commodity than is necessary out of a desire to be fair, for example. And, in unfortunate contexts, we sometimes are willing to forgo our own benefits out of a desire to harm others.

My colleagues and I have recently added two other important bounds to the list. Chugh, Banaji, and Bazerman (2005) and Banaji and Bhaskar (2000) introduced the concept of [bounded ethicality](#), which refers to the notion that our ethics are limited in ways we are not even aware of ourselves. Second, Chugh and Bazerman (2007) developed the concept of [bounded awareness](#) to refer to the broad array of focusing failures that affect our judgment, specifically the many ways in which we fail to notice obvious and important information that is available to us.

A final development is the application of judgment and decision-making research to the areas of behavioral economics, behavioral finance, and behavioral marketing, among others. In each case, these fields have been transformed by applying and extending research from the judgment and decision-making literature.

## Fixing Our Decisions

Ample evidence documents that even smart people are routinely impaired by biases. Early research demonstrated, unfortunately,

that awareness of these problems does little to reduce bias ([Fischhoff, 1982](#)). The good news is that more recent research documents interventions that do help us overcome our faulty thinking ([Bazerman & Moore, 2013](#)).

One critical path to fixing our biases is provided in Stanovich and West's (2000) distinction between [System 1](#) and [System 2](#) decision making. System 1 processing is our intuitive system, which is typically fast, automatic, effortless, implicit, and emotional. System 2 refers to decision making that is slower, conscious, effortful, explicit, and logical. The six logical steps of decision making outlined earlier describe a System 2 process.

Clearly, a complete System 2 process is not required for every decision we make. In most situations, our System 1 thinking is quite sufficient; it would be impractical, for example, to logically reason through every choice we make while shopping for groceries. But, preferably, System 2 logic should influence our most important decisions. Nonetheless, we use our System 1 processes for most decisions in life, relying on it even when making important decisions.

The key to reducing the effects of bias and improving our decisions is to transition from trusting our intuitive System 1 thinking toward engaging more in deliberative System 2 thought. Unfortunately, the busier and more rushed people are, the more they have on their minds, and the more likely they are to rely on System 1 thinking ([Chugh, 2004](#)). The frantic pace of professional life suggests that executives often rely on System 1 thinking ([Chugh, 2004](#)).

Fortunately, it is possible to identify conditions where we rely on intuition at our peril and substitute more deliberative thought. One fascinating example of this substitution comes from journalist Michael Lewis' (2003) account of how Billy Beane, the general manager of the Oakland Athletics, improved the outcomes of the failing baseball team after recognizing that the intuition of baseball executives was limited and systematically biased and that their intuitions had been incorporated into important decisions in ways

that created enormous mistakes. Lewis (2003) documents that baseball professionals tend to overgeneralize from their personal experiences, be overly influenced by players' very recent performances, and overweigh what they see with their own eyes, despite the fact that players' multiyear records provide far better data. By substituting valid predictors of future performance (System 2 thinking), the Athletics were able to outperform expectations given their very limited payroll.



Nudges can be used to help people make better decisions about saving for retirement. [Image: Tax Credits, <https://goo.gl/YLuyth>, CC BY 2.0, <https://goo.gl/BRvSA7>]

Another important direction for improving decisions comes from Thaler and Sunstein's (2008) book *Nudge: Improving Decisions about Health, Wealth, and Happiness*. Rather than setting out to debias

human judgment, Thaler and Sunstein outline a strategy for how “decision architects” can change environments in ways that account for human bias and trigger better decisions as a result. For example, Beshears, Choi, Laibson, and Madrian (2008) have shown that simple changes to defaults can dramatically improve people’s decisions. They tackle the failure of many people to save for retirement and show that a simple change can significantly influence enrollment in 401(k) programs. In most companies, when you start your job, you need to proactively sign up to join the company’s retirement savings plan. Many people take years before getting around to doing so. When, instead, companies automatically enroll their employees in 401(k) programs and give them the opportunity to “opt out,” the net enrollment rate rises significantly. By changing defaults, we can counteract the human tendency to live with the status quo.

Similarly, Johnson and Goldstein’s (2003) cross-European organ donation study reveals that countries that have opt-in organ donation policies, where the default is not to harvest people’s organs without their prior consent, sacrifice thousands of lives in comparison to opt-out policies, where the default is to harvest organs. The United States and too many other countries require that citizens opt in to organ donation through a proactive effort; as a consequence, consent rates range between 4.25%–44% across these countries. In contrast, changing the decision architecture to an opt-out policy improves consent rates to 85.9% to 99.98%. Designing the donation system with knowledge of the power of defaults can dramatically change donation rates without changing the options available to citizens. In contrast, a more intuitive strategy, such as the one in place in the United States, inspires defaults that result in many unnecessary deaths.

## Concluding Thoughts

Our days are filled with decisions ranging from the small (what

should I wear today?) to the important (should we get married?). Many have real world consequences on our health, finances and relationships. Simon, Kahneman, and Tversky created a field that highlights the surprising and predictable deficiencies of the human mind when making decisions. As we understand more about our own biases and thinking shortcomings we can begin to take them into account or to avoid them. Only now have we reached the frontier of using this knowledge to help people make better decisions.

# 9. Persuasion

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This chapter is from:

Levine, R. V. (2021). Persuasion: so easily fooled. In R. Biswas-Diener & E. Diener (Eds), *Noba textbook series: Psychology*. Champaign, IL: DEF publishers. Retrieved from <http://noba.to/y73u6ta8>

## 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, <https://goo.gl/VnKIK8>]

## 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 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, <https://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

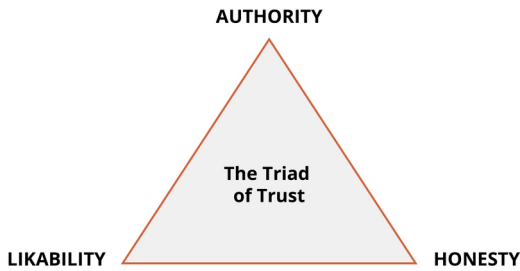
its food-for-the-homeless program) the numbers held steady at 14 out of 30. When a fictional good cause was used instead (the make believe “Levine House”) still 11 out of 30 potential customers made purchases and not one asked about the purpose or nature of the cause. The phrase “for a good cause” was 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](#)).

## Likability



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, <https://goo.gl/TocOZF>]

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, <https://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](#)).

## Scarcity and Psychological Reactance



People may be more attracted to an opportunity when supplies or time is limited. [Image: Peter Rukavina, <https://goo.gl/KQ2LmT>, CC BY-NC-SA 2.0, <https://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.

# 10. Conformity and Obedience

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This chapter is from:

Burger, J. M. (2021). Conformity and obedience. In R. Biswas-Diener & E. Diener (Eds), *Noba textbook series: Psychology*. Champaign, IL: DEF publishers. Retrieved from <http://noba.to/hkray8fs>

## 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, <https://goo.gl/0roq35>, CC BY-NC-SA 2.0, <https://goo.gl/Toc0ZF>]

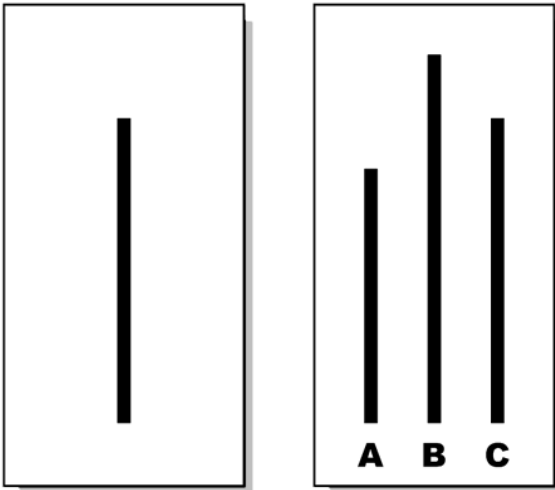
## Conformity

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, <https://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, <https://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, <https://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.”

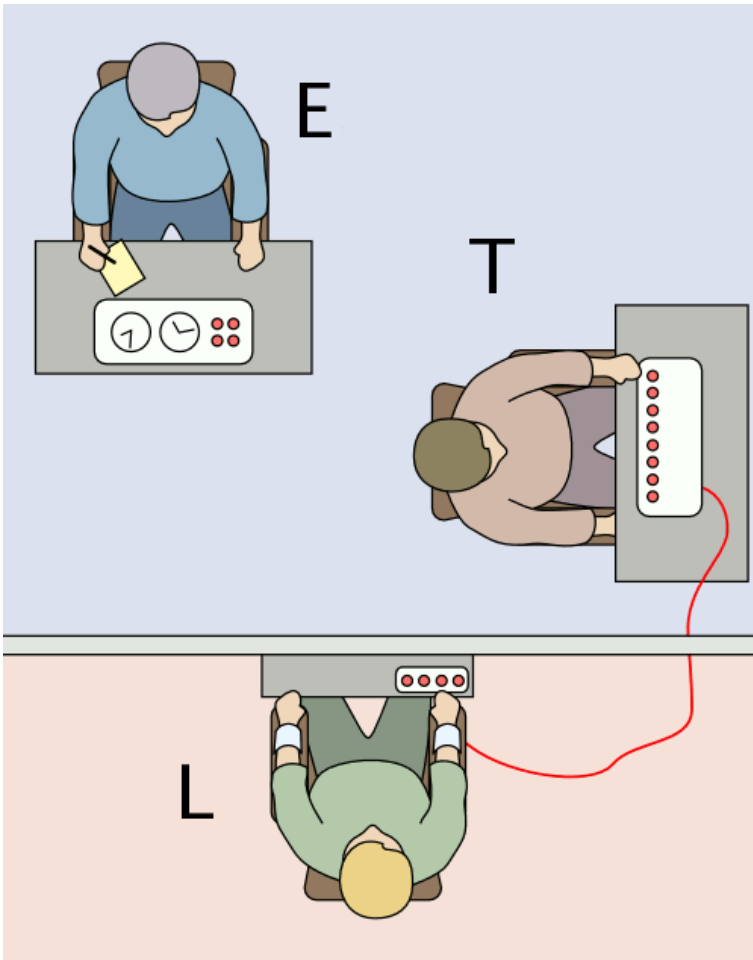


Diagram of the Milgram Experiment in which the “teacher” (T) was asked to deliver a (supposedly) painful electric shock to the “learner” (L). Would this experiment be approved by a review board today? [Image: Fred the Oyster, <https://goo.gl/ZIbQz1>, CC BY-SA 4.0, <https://goo.gl/X3i0tqj>]

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.

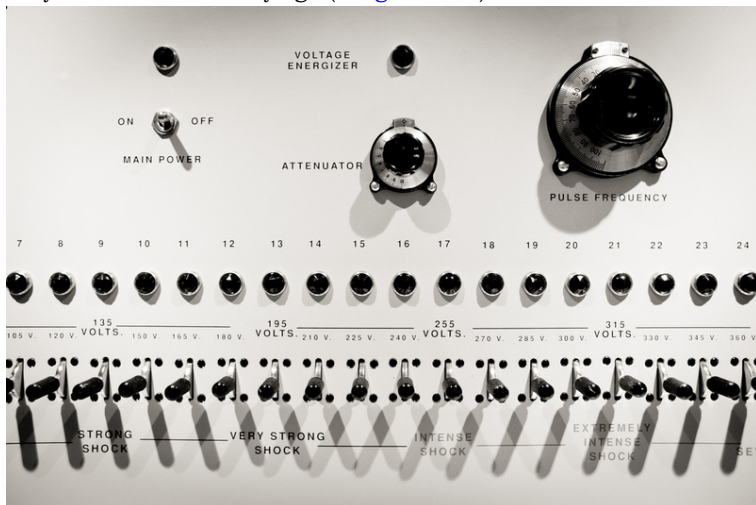
If you had been a participant in this research, what would you have done? Virtually everyone says he or she would have stopped early in the process. And most people predict that very few if any participants would keep pressing all the way to 450 volts. Yet in the basic procedure described here, 65 percent 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, <https://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.

Finally, it is also worth noting that although a number of factors appear to lead to obedience, there are also those who would not obey. In one conceptual replication of the Milgram studies, conducted with a small sample in Italy, the researchers explored the moment that approximately two-thirds of the sample refused to cooperate ([Bocchiaro & Zimbardo, 2010](#)). The investigators identified compassion, ethics, and recognition of the situation as problematic as major influences on refusal. Thus, just as there are pressures to obey there are also instances in which people can stand up to authority.

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.

# II. Helping and Prosocial Behavior

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This chapter is from:

Poepsel, D. L. & Schroeder, D. A. (2021). Helping and prosocial behavior. In R. Biswas-Diener & E. Diener (Eds), *Noba textbook series: Psychology*. Champaign, IL: DEF publishers. Retrieved from <http://noba.to/tbuw7afg>

# 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, <https://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 are interested in answering this question because it is apparent that people vary in their tendency to help others. In 2010 for instance, 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, <https://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 someone who is bullying your friend 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, <https://goo.gl/Rn7yL0>, CC BY 2.0, <https://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 ([Diekmann & 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 roots for prosocial behavior



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, <https://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. 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, <https://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, <https://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](#)].)

# 12. Aggression and Violence

BRAD J. BUSHMAN

This chapter is from:

Bushman, B. J. (2021). Aggression and violence. In R. Biswas-Diener & E. Diener (Eds), *Noba textbook series: Psychology*. Champaign, IL: DEF publishers. Retrieved from <http://noba.to/63vj7ykn>

## 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, <https://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.

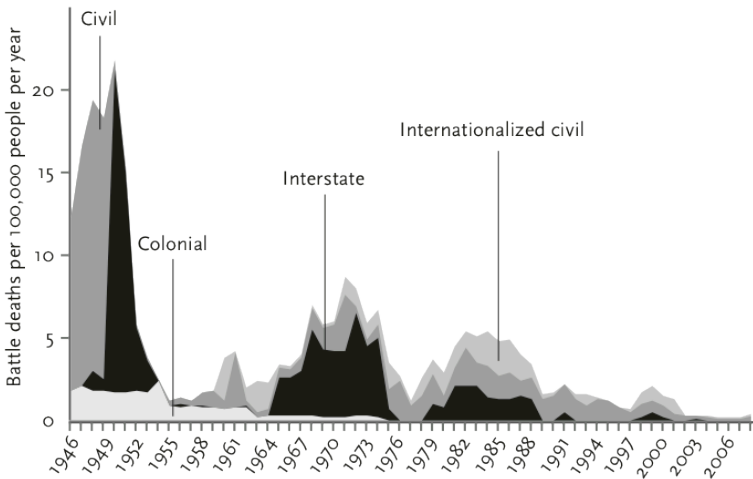


Figure 1. Rate of battle deaths in state-based armed conflicts, 1946-2008. Civilian and military battle deaths in state-based armed conflicts, divided by world population. Sources: UCDP/PRIO Armed Conflict Dataset; see Human Security Report Project (2007), based on data from Lacina and Gleditsch (2005), 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 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, <https://goo.gl/klf5Pg>, CC BY-SA 4.0, <https://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

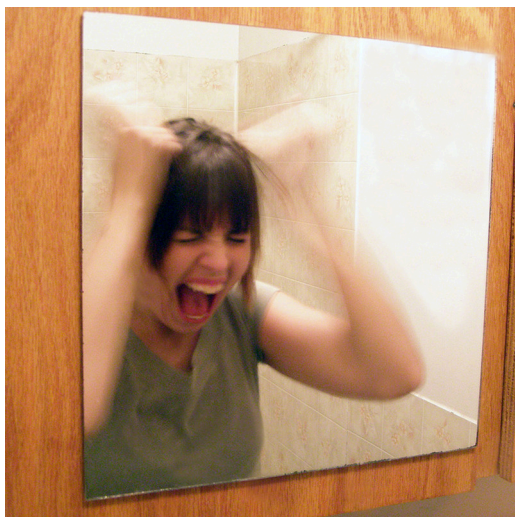
image reflected in the water. Narcissists have inflated egos, and they lash out aggressively against others when their inflated egos are threatened (e.g., [Bushman & Baumeister, 1998](#)). It is a common myth that aggressive people have low self-esteem ([Bushman et al., 2009](#)). Psychopaths are callous 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

### Frustration and Other Unpleasant Events



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, <https://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.

## 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](#)).





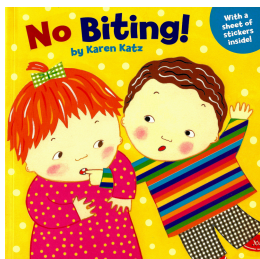
Catharsis is one of the ways to appropriately deal with aggression because it makes anger impossible to sustain. [Image: Peter Conlan <https://unsplash.com/photos/LEgwEaBVGMo> <https://unsplash.com/license>]

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, <https://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 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.

# 13. Love

DEBI BRANNAN AND CYNTHIA D. MOHR

This chapter is from:

Brannan, D. & Mohr, C. D. (2021). Love, friendship, and social support. In R. Biswas-Diener & E. Diener (Eds), *Noba textbook series: Psychology*. Champaign, IL: DEF publishers. Retrieved from <http://noba.to/s54tmp7k>

## Introduction



Interpersonal relationships are vital to our physiological and psychological health. [CC0 Public Domain, <https://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 (Brisette, 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, <https://goo.gl/crCc0Q>, CC BY-SA 2.0, <https://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; *similarity* 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](#)).

# Friendship



Having best friends make us feel better about ourselves and buffers us from stress. [Image: CC0 Public Domain, <https://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, <https://goo.gl/m25gce>]

Is all love the same? Are there different types of love? Examining these questions more closely, Robert Sternberg's (2004; 2007) work has focused on the notion that all types of love are comprised of three distinct areas: intimacy, passion, and commitment. Intimacy includes caring, closeness, and emotional support. The passion component of love is comprised of physiological and emotional arousal; these can include physical attraction, emotional responses that promote physiological changes, and sexual arousal. Lastly,

commitment refers to the cognitive process and decision to commit to love another person and the willingness to work to keep that love over the course of your life. The elements involved in intimacy (caring, closeness, and emotional support) are generally found in all types of close relationships—for example, a mother’s love for a child or the love that friends share. Interestingly, this is not true for passion. Passion is unique to romantic love, differentiating friends from lovers. In sum, depending on the type of love and the stage of the relationship (i.e., newly in love), different combinations of these elements are present.

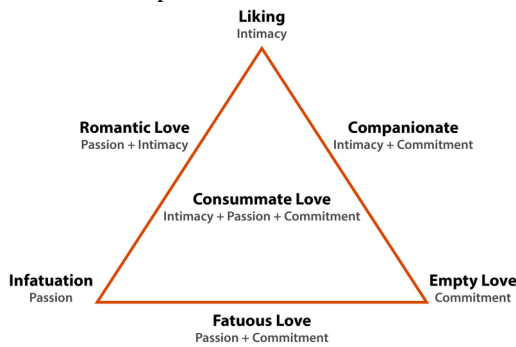


Figure 1: Triangular Theory of Love. Adapted from Wikipedia Creative Commons, 2013

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

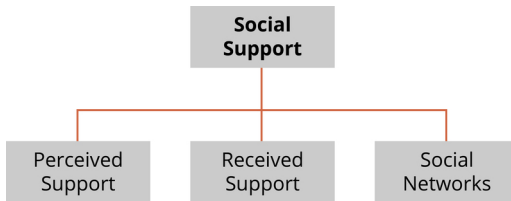
The ways people are finding love has changed with the advent of the Internet. In a poll, 49% of all American adults reported that either themselves or someone they knew had dated a person they met online ([Madden & Lenhart, 2006](#)). As Finkel and colleagues ([2007](#)) found, social networking sites, 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 lives 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/9flc9N>, CC BY-NC 2.0, <https://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.”

# 14. Sexuality

DON LUCAS AND JENNIFER FOX

This chapter is from:

Lucas, D. & Fox, J. (2021). The psychology of human sexuality. In R. Biswas-Diener & E. Diener (Eds), *Noba textbook series: Psychology*. Champaign, IL: DEF publishers. Retrieved from <http://noba.to/9gsqhd6v>

## Introduction

Sex makes the world go around: It makes babies bond, children giggle, adolescents flirt, and adults have babies. It is addressed in the holy books of the world's great religions, and it infiltrates every part of society. It influences the way we dress, joke, and talk. In many ways, sex defines who we are. It is so important, the eminent neuropsychologist Karl Pribram (1958) described sex as one of four basic human drive states. Drive states motivate us to accomplish goals. They are linked to our survival. According to Pribram, feeding, fighting, fleeing, and sex are the four drives behind every thought, feeling, and behavior. Since these drives are so closely associated with our psychological and physical health, you might assume people would study, understand, and discuss them openly. Your assumption would be generally correct for three of the four drives (Malacane & Beckmeyer, 2016). Can you guess which drive is the least understood and openly discussed?

This module presents an opportunity for you to think openly and objectively about sex. Without shame or taboo, using science as a lens, we examine fundamental aspects of human

sexuality—including gender, sexual orientation, fantasies, behaviors, paraphilias, and sexual consent.

## The History of Scientific Investigations of Sex



An image on an ancient Greek drinking cup of two lovers kissing. ca. 480 BC [Image: Marie-Lan Nguyen, <https://goo.gl/uCPpNy>, Public Domain]

The history of human sexuality is as long as human history itself—200,000+ years and counting ([Antón & Swisher, 2004](#)). For almost as long as we have been having sex, we have been creating art, writing, and talking about it. Some of the earliest recovered artifacts from ancient cultures are thought to be fertility totems. The Hindu *Kama Sutra* (400 BCE to 200 CE)—an ancient text discussing love, desire, and pleasure—includes a how-to manual for having sexual intercourse. Rules, advice, and stories about sex are

also contained in the Muslim *Qur'an*, Jewish *Torah*, and Christian *Bible*.

By contrast, people have been scientifically investigating sex for only about 125 years. The first scientific investigations of sex employed the [case study](#) method of research. Using this method, the English physician Henry Havelock Ellis (1859-1939) examined diverse topics within sexuality, including arousal and masturbation. From 1897 to 1923, his findings were published in a seven-volume set of books titled *Studies in the Psychology of Sex*. Among his most noteworthy findings is that transgender people are distinct from homosexual people. Ellis's studies led him to be an advocate of equal rights for women and comprehensive human sexuality education in public schools.

Using case studies, the Austrian neurologist Sigmund Freud (1856-1939) is credited with being the first scientist to link sex to healthy development and to recognize humans as being sexual throughout their lifespans, including childhood ([Freud, 1905](#)). Freud ([1923](#)) argued that people progress through [five stages of psychosexual development](#): oral, anal, phallic, latent, and genital. According to Freud, each of these stages could be passed through in a healthy or unhealthy manner. In unhealthy manners, people might develop psychological problems, such as frigidity, impotence, or anal-retentiveness.

The American biologist Alfred Kinsey (1894-1956) is commonly referred to as the father of human sexuality research. Kinsey was a world-renowned expert on wasps but later changed his focus to the study of humans. This shift happened because he wanted to teach a course on marriage but found data on human sexual behavior lacking. He believed that sexual knowledge was the product of guesswork and had never really been studied systematically or in an unbiased way. He decided to collect information himself using the [survey method](#), and set a goal of interviewing 100 thousand people about their sexual histories. Although he fell short of his goal, he still managed to collect 18 thousand interviews! Many “behind

closed doors” behaviors investigated by contemporary scientists are based on Kinsey’s seminal work.

Today, a broad range of scientific research on sexuality continues. It’s a topic that spans various disciplines, including anthropology, biology, neurology, psychology, and sociology.

## **Sex, Gender, and Sexual Orientation: Three Different Parts of You**

Applying for a credit card or filling out a job application requires your name, address, and birth-date. Additionally, applications usually ask for your sex or gender. It’s common for us to use the terms “sex” and “gender” interchangeably. However, in modern usage, these terms are distinct from one another.





Cartoon depicting a traditional gender role of a woman as a housewife, working in the kitchen. [Image:

JosephineRN28, <https://goo.gl/4x6cvg>, CC BY-SA 4.0, <https://goo.gl/FxkLZS>]

**Sex** describes means of biological reproduction. Sex includes sexual organs, such as ovaries—defining what it is to be a female—or testes—defining what it is to be a male. Interestingly, biological sex is not as easily defined or determined as you might expect (see the section on variations in sex, below). By contrast, the term **gender** describes psychological (**gender identity**) and sociological (**gender role**) representations of biological sex. At an early age, we begin learning cultural norms for what is considered masculine and feminine. For example, children may associate long hair or dresses with femininity. Later in life, as adults, we often

conform to these norms by behaving in gender-specific ways: as men, we build houses; as women, we bake cookies ([Marshall, 1989](#); [Money et al., 1955](#); [Weinraub et al., 1984](#)).

Because cultures change over time, so too do ideas about gender. For example, European and American cultures today associate pink with femininity and blue with masculinity. However, less than a century ago, these same cultures were swaddling baby boys in pink, because of its masculine associations with “blood and war,” and dressing little girls in blue, because of its feminine associations with the Virgin Mary ([Kimmel, 1996](#)).

Sex and gender are important aspects of a person’s identity. However, they do not tell us about a person’s sexual orientation ([Rule & Ambady, 2008](#)). [Sexual orientation](#) refers to a person’s sexual attraction to others. Within the context of sexual orientation, [sexual attraction](#) refers to a person’s capacity to arouse the sexual interest of another, or, conversely, the sexual interest one person feels toward another.

While some argue that sexual attraction is primarily driven by reproduction (e.g., [Geary, 1998](#)), empirical studies point to pleasure as the primary force behind our sex drive. For example, in a survey of college students who were asked, “Why do people have sex?” respondents gave more than 230 unique responses, most of which were related to pleasure rather than reproduction ([Meston & Buss, 2007](#)). Here’s a thought-experiment to further demonstrate how reproduction has relatively little to do with driving sexual attraction: Add the number of times you’ve had and hope to have sex during your lifetime. With this number in mind, consider how many times the goal was (or will be) for reproduction versus how many it was (or will be) for pleasure. Which number is greater?

Although a person’s intimate behavior may have [sexual fluidity](#)—changing due to circumstances ([Diamond, 2009](#))—sexual orientations are relatively stable over one’s lifespan, and are genetically rooted ([Frankowski, 2004](#)). One method of measuring these genetic roots is the *sexual orientation concordance rate* (SOCR). An SOCR is the probability that a pair of individuals has

the same sexual orientation. SOCRs are calculated and compared between people who share the same genetics ([monozygotic twins](#), 99%); some of the same genetics ([dizygotic twins](#), 50%); siblings (50%); and non-related people, randomly selected from the population. Researchers find SOCRs are highest for monozygotic twins; and SOCRs for dizygotic twins, siblings, and randomly-selected pairs do not significantly differ from one another ([Bailey et al. 2016](#); [Kendler et al., 2000](#)). Because sexual orientation is a hotly debated issue, an appreciation of the genetic aspects of attraction can be an important piece of this dialogue.

## On Being Normal: Variations in Sex, Gender, and Sexual Orientation

*“Only the human mind invents categories and tries to force facts into separated pigeon-holes. The living world is a continuum in each and every one of its aspects. The sooner we learn this concerning human sexual behavior, the sooner we shall reach a sound understanding of the realities of sex.”* ([Kinsey, Pomeroy, & Martin, 1948](#), pp. 638–639)

We live in an era when sex, gender, and sexual orientation are controversial religious and political issues. Some nations have laws against homosexuality, while others have laws protecting same-sex marriages. At a time when there seems to be little agreement among religious and political groups, it makes sense to wonder, “What is normal?” and, “Who decides?”



Left: An intersexual two-spotted bumble bee (*Bombus bimaculatus*) and, Right: Two mallard (*Anas platyrhynchos*) ducks—one of

hundreds of species having homosexual or bisexual orientations. [Image left: USGS Bee Inventory, <https://goo.gl/fE3EUj>, Public Domain][Image right: Norbert Nagel, <https://goo.gl/vep4y3>, CC BY-SA 3.0, <https://goo.gl/HXJGvT>]

The international scientific and medical communities (e.g., World Health Organization, World Medical Association, World Psychiatric Association, Association for Psychological Science) view variations of sex, gender, and sexual orientation as normal. Furthermore, variations of sex, gender, and sexual orientation occur naturally throughout the animal kingdom. More than 500 animal species have homosexual or bisexual orientations (Lehrer, 2006). More than 65,000 animal species are [intersex](#)—born with either an absence or some combination of male and female reproductive organs, sex hormones, or sex chromosomes (Jarne & Auld, 2006). In humans, intersex individuals make up about two percent—more than 150 million people—of the world’s population (Blackless et al., 2000). There are dozens of intersex conditions, such as Androgen Insensitivity Syndrome and Turner’s Syndrome (Lee et al., 2006). The term “syndrome” can be misleading; although intersex individuals may have physical limitations (e.g., about a third of Turner’s individuals have heart defects; Matura et al., 2007), they otherwise lead relatively normal intellectual, personal, and social lives. In any case, intersex individuals demonstrate the diverse variations of biological sex.

Just as biological sex varies more widely than is commonly thought, so too does gender. [Cisgender](#) individuals’ gender identities correspond with their birth sexes, whereas [transgender](#) individuals’ gender identities do not correspond with their birth sexes. Because gender is so deeply ingrained culturally, rates of transgender individuals vary widely around the world (see Table 1).

Nation	Transgender people per 100,000
Sweden	.17
Poland	.26
Ireland	1.4
Japan	1.4
India	167
Thailand	333
United States	476
Malaysia	1,333

Table 1: Nations vary in the number of transgender people found in their populations ([De Gascun et al., 2006](#); [Dulko & Imielinska, 2004](#); [Landen et al., 1996](#); [Okabe et al., 2008](#), [Conron et al., 2012](#); [Winter, 2009](#)).

Although incidence rates of transgender individuals differ significantly between cultures, [transgender females \(TGFs\)](#)—whose birth sex was male—are by far the most frequent type of transgender individuals in any culture. Of the 18 countries studied by Meier and Labuski ([2013](#)), 16 of them had higher rates of TGFs than [transgender males \(TGMs\)](#)—whose birth sex was female— and the 18 country TGF to TGM ratio was 3 to 1. TGFs have diverse levels of [androgyny](#)—having both feminine and masculine characteristics. For example, five percent of the Samoan population are TGFs referred to as *fa'afafine*, who range in androgyny from mostly masculine to mostly feminine ([Tan, 2016](#)); in Pakistan, India, Nepal, and Bangladesh, TGFs are referred to as *hijras*, recognized by their governments as a third gender, and range in androgyny from only having a few masculine characteristics to being entirely feminine ([Pasquesoone, 2014](#)); and as many as six percent of biological males living in Oaxaca, Mexico are TGFs referred to as *muxes*, who range in androgyny from mostly masculine to mostly feminine ([Stephen, 2002](#)).



Figure 2: Hijra Dancer in Nepal. [Image: Adam Jones, <https://goo.gl/TCxrVY>, CC BY-SA 2.0, <https://goo.gl/eEDNLy>]

Sexual orientation is as diverse as gender identity. Instead of thinking of sexual orientation as being two categories—homosexual and heterosexual—Kinsey argued that it's a continuum (Kinsey, Pomeroy, & Martin, 1948). He measured orientation on a continuum, using a 7-point Likert scale called the Heterosexual-Homosexual Rating Scale, in which 0 is exclusively heterosexual, 3 is bisexual, and 6 is exclusively homosexual. Later researchers using this method have found 18% to 39% of Europeans and Americans identifying as somewhere between heterosexual and homosexual (Lucas et al., 2017; YouGov.com, 2015). These percentages drop dramatically (0.5% to 1.9%) when researchers force individuals to

respond using only two categories ([Copen, Chandra, & Febo-Vazquez, 2016](#); [Gates, 2011](#)).

## What Are You Doing? A Brief Guide to Sexual Behavior

Just as we may wonder what characterizes particular gender or sexual orientations as “normal,” we might have similar questions about sexual behaviors. What is considered sexually normal depends on culture. Some cultures are sexually-restrictive—such as one extreme example off the coast of Ireland, studied in the mid-20th century, known as the island of *Inis Beag*. The inhabitants of *Inis Beag* detested nudity and viewed sex as a necessary evil for the sole purpose of reproduction. They wore clothes when they bathed and even while having sex. Further, sex education was nonexistent, as was breast feeding ([Messenger, 1989](#)). By contrast, *Mangaians*, of the South Pacific island of A’ua’u, are an example of a highly sexually-permissive culture. Young *Mangaian* boys are encouraged to masturbate. By age 13, they’re instructed by older males on how to sexually perform and maximize orgasms for themselves and their partners. When the boys are a bit older, this formal instruction is replaced with hands-on coaching by older females. Young girls are also expected to explore their sexuality and develop a breadth of sexual knowledge before marriage ([Marshall & Suggs, 1971](#)). These cultures make clear that what are considered sexually normal behaviors depends on time and place.

Sexual behaviors are linked to, but distinct from, fantasies. Leitenberg and Henning ([1995](#)) define sexual fantasies as “any mental imagery that is sexually arousing.” One of the more common fantasies is the [replacement fantasy](#)—fantasizing about someone other than one’s current partner ([Hicks & Leitenberg, 2001](#)). In



addition, more than 50% of people have forced-sex fantasies (Critelli & Bivona, 2008). However, this does not mean most of us want to be cheating on our partners or be involved in sexual assault. Sexual fantasies are not equal to sexual behaviors.

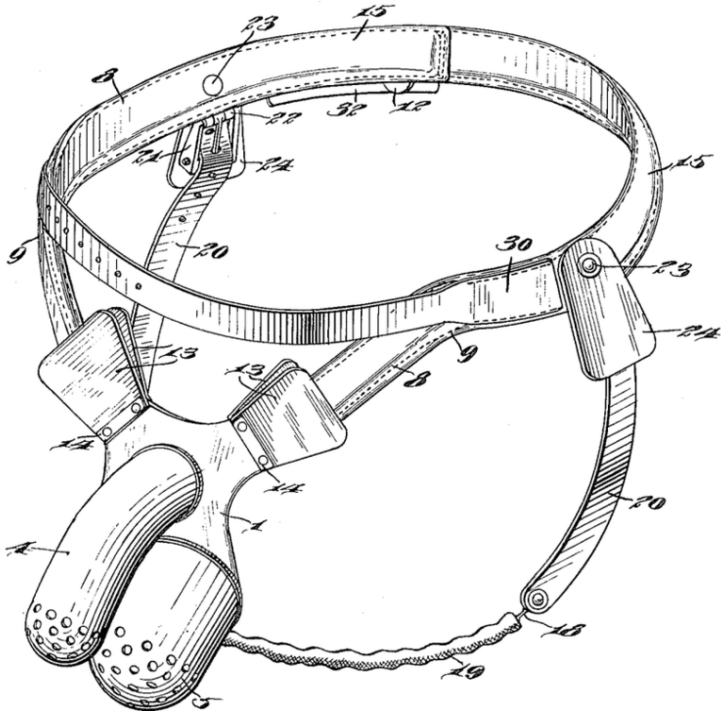


Figure 3: A United States patent drawing of an early 20th century anti-masturbation chastity belt. [Image: unknown, <https://goo.gl/D15Lnw>, Public Domain]

Sexual fantasies are often a context for the sexual behavior of [masturbation](#)—tactile (physical) stimulation of the body for sexual pleasure. Historically, masturbation has earned a bad reputation; it’s been described as “self-abuse,” and falsely associated with causing adverse side effects, such as hairy palms, acne, blindness, insanity, and even death (Kellogg, 1888). However, empirical evidence links masturbation to increased levels of sexual and marital satisfaction, and physical and psychological health (Hurlburt & Whitaker,



1991; Levin, 2007). There is even evidence that masturbation significantly decreases the risk of developing prostate cancer among males over the age of 50 (Dimitropoulou et al., 2009). Masturbation is common among males and females in the U.S. Robbins et al. (2011) found that 74% of males and 48% of females reported masturbating. However, frequency of masturbation is affected by culture. An Australian study found that only 58% of males and 42% of females reported masturbating (Smith, Rosenthal, & Reichler, 1996). Further, rates of reported masturbation by males and females in India are even lower, at 46% and 13%, respectively (Ramadugu et al., 2011).

**Coital sex** is the term for vaginal-penile intercourse, which occurs for about 3 to 13 minutes on average—though its duration and frequency decrease with age (Corty & Guardiani, 2008; Smith et al., 2012). Traditionally, people are known as “virgins” before they engage in coital sex, and have “lost” their virginity afterwards. Durex (2005) found the average age of first coital experiences across 41 different countries to be 17 years, with a low of 16 (Iceland), and a high of 20 (India). There is tremendous variation regarding frequency of coital sex. For example, the average number of times per year a person in Greece (138) or France (120) engages in coital sex is between 1.6 and 3 times greater than in India (75) or Japan (45; Durex, 2005).

**Oral sex** includes **cunnilingus**—oral stimulation of the female’s external sex organs, and **fellatio**—oral stimulation of the male’s external sex organs. The prevalence of oral sex widely differs between cultures—with Western cultures, such as the U.S., Canada, and Austria, reporting higher rates (greater than 75%); and Eastern and African cultures, such as Japan and Nigeria, reporting lower rates (less than 10%; Copen, Chandra, & Febo-Vazquez, 2016; Malacad & Hess, 2010; Wylie, 2009). Not only are there differences between cultures regarding how many people engage in oral sex, there are differences in its very definition. For example, most college students in the U.S. do not believe cunnilingus or fellatio are sexual behaviors—and more than a third of college

students believe oral sex is a form of abstinence ([Barnett et al., 2017](#); [Horan, Phillips, & Hagan, 1998](#); [Sanders & Reinisch, 1999](#)).

**Anal sex** refers to penetration of the anus by an object. Anal sex is not exclusively a “homosexual behavior.” The anus has extensive sensory-nerve innervation and is often experienced as an erogenous zone, no matter where a person is on the Heterosexual-Homosexual Rating Scale ([Cordeau et al., 2014](#)). When heterosexual people are asked about their sexual behaviors, more than a third (about 40%) of both males and females report having had anal sex at some time during their life ([Chandra, Mosher, & Copen, 2011](#); [Copen, Chandra, & Febo-Vazquez, 2016](#)). Comparatively, when homosexual men are asked about their most recent sexual behaviors, more than a third (37%) report having had anal sex ([Rosenberger et al., 2011](#)). Like heterosexual people, homosexual people engage in a variety of sexual behaviors, the most frequent being masturbation, romantic kissing, and oral sex ([Rosenberger et al., 2011](#)). The prevalence of anal sex widely differs between cultures. For example, people in Greece and Italy report high rates of anal sex (greater than 50%), whereas people in China and India report low rates of anal sex (less than 15%; [Durex, 2005](#)).

In contrast to “more common” sexual behaviors, there is a vast array of alternative sexual behaviors. Some of these behaviors, such as *voyeurism*, *exhibitionism*, and *pedophilia* are classified in the DSM as [paraphilic disorders](#)—behaviors that victimize and cause harm to others or one’s self ([American Psychiatric Association, 2013](#)). [Sadism](#)—inflicting pain upon another person to experience pleasure for one’s self—and [masochism](#)—receiving pain from another person to experience pleasure for one’s self—are also classified in the DSM as paraphilic disorders. However, if an individual consensually engages in these behaviors, the term “disorder” is replaced with the term “interest.” Janus and Janus ([1993](#)) found that 14% of males and 11% of females have engaged in some form of sadism and/or masochism.

# Sexual Consent

**ASK YOURSELF SOME QUESTIONS**  
**Want to talk about it?**  
*Resources on the back can help you out.*

<b>CONSENT</b>	<b>POWER</b>
<p><b>Consent is not just a lack of no. You need a <i>real</i> YES!</b></p>	<p><b>Just because your relationship is legal, <i>doesn't</i> mean it's equal.</b></p>
<p>Ask for it! Consent is Respect. Say what you want to do, ask what they want to do. Respect the answer <i>no matter what</i>.</p> <p>Consent means each person actively wants to participate in whatever physical or sexual act is happening.</p> <p>People who are drunk, high, or asleep cannot give consent.</p> <p>Always ask before you touch someone. It's easy and respectful.</p>	<p>Do you &amp; your partner trust each other equally?</p> <p>Do you each have autonomy - separate friends and activities?</p> <p>Does your partner pressure you to do things you don't want to?</p> <p>Does your partner tell you that no-one else would ever love you?</p> <p>Does your partner ever scare you with the things they do or say?</p>

[Image: King County Sexual Assault Resource Center, <https://goo.gl/W4Vvmn>]

Clearly, people engage in a multitude of behaviors whose variety is limited only by our own imaginations. Further, our standards for what's normal differs substantially from culture to culture. However, there is one aspect of sexual behavior that is universally acceptable—indeed, fundamental and necessary. At the heart of what qualifies as sexually “normal” is the concept of consent. [Sexual consent](#) refers to the voluntary, conscious, and *empathic* participation in a sexual act, which can be withdrawn at any time ([Jozkowski & Peterson, 2013](#)). Sexual consent is the baseline for what are considered *normal*—acceptable and healthy—behaviors; whereas, nonconsensual sex—i.e., forced,

pressured or unconscious participation—is unacceptable and unhealthy. When engaging in sexual behaviors with a partner, a clear and explicit understanding of your boundaries, as well as your partner’s boundaries, is essential. We recommend [safer-sex practices](#), such as condoms, honesty, and communication, whenever you engage in a sexual act. Discussing likes, dislikes, and limits *prior* to sexual exploration reduces the likelihood of miscommunication and misjudging nonverbal cues. In the heat of the moment, things are not always what they seem. For example, Kristen Jozkowski and her colleagues (2014) found that females tend to use verbal strategies of consent, whereas males tend to rely on nonverbal indications of consent. Awareness of this basic mismatch between heterosexual couples’ exchanges of consent may proactively reduce miscommunication and unwanted sexual advances.

The universal principles of pleasure, sexual behaviors, and consent are intertwined. Consent is the foundation on which sexual activity needs to be built. Understanding and practicing *empathic* consent requires [sexual literacy](#) and an ability to effectively communicate desires and limits, as well as to respect others’ parameters.

## Conclusion

Considering the amount of attention people give to the topic of sex, it’s surprising how little most actually know about it. Historically, people’s beliefs about sexuality have emerged as having absolute moral, physical, and psychological boundaries. The truth is, sex is less concrete than most people assume. Gender and sexual orientation, for example, are not either/or categories. Instead, they are continuums. Similarly, sexual fantasies and behaviors vary greatly by individual and culture. Ultimately, open discussions about

sexual identity and sexual practices will help people better understand themselves, others, and the world around them.

# 15. Emotions

CHARLES STANGOR

This chapter is from:

Charles Stangor's *Principles of Social Psychology*. Retrieved from <https://open.lib.umn.edu/socialpsychology/chapter/3-1-moods-and-emotions-in-our-social-lives/>

## Introduction

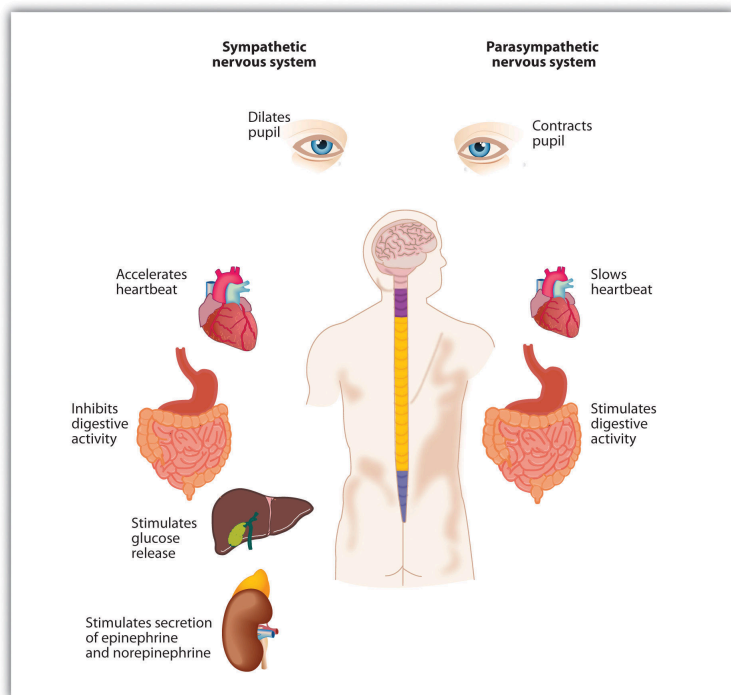
Although affect can be harmful if it is unregulated or unchecked, our moods and emotions normally help us function efficiently and in a way that increases our chances of survival (Bless, Bohner, Schwarz, & Strack, 1990; Schwarz et al., 1991). The experience of disgust helps us stay healthy by helping us avoid situations that are likely to carry disease (Oaten, Stevenson, & Case, 2009), and the experience of embarrassment helps us respond appropriately to situations in which we may have violated social norms.

Affect signals either that things are going OK (e.g., because we are in a good mood or are experiencing joy or serenity) or that things are not going so well (we are in a bad mood, anxious, upset, or angry). When we are happy, we may seek out and socialize with others; when we are angry, we may attack; and when we are fearful, we are more likely to turn to safety. In short, our emotions help us to determine whether our interactions with others are appropriate, to predict how others are going to respond to us, and to regulate our behavior toward others.

## The Physiology of Affect

Our emotions are determined in part by responses of the sympathetic nervous system (SNS)—the division of the autonomic nervous system that is involved in preparing the body to respond to threats by activating the organs and the glands in the endocrine system. The SNS works in opposition to the parasympathetic nervous system (PNS), the division of the autonomic nervous system that is involved in resting, digesting, relaxing, and recovering. When it is activated, the SNS provides us with energy to respond to our environment. The liver puts extra sugar into the bloodstream, the heart pumps more blood, our pupils dilate to help us see better, respiration increases, and we begin to perspire to cool the body. The sympathetic nervous system also acts to release stress hormones including *epinephrine* and *norepinephrine*. At the same time, the action of the PNS is decreased.

We experience the activation of the SNS as arousal—changes in bodily sensations, including increased blood pressure, heart rate, perspiration, and respiration. Arousal is the feeling that accompanies strong emotions. I'm sure you can remember a time when you were in love, angry, afraid, or very sad and experienced the arousal that accompanied the emotion. Perhaps you remember feeling flushed, feeling your heart pounding, feeling sick to your stomach, or having trouble breathing.

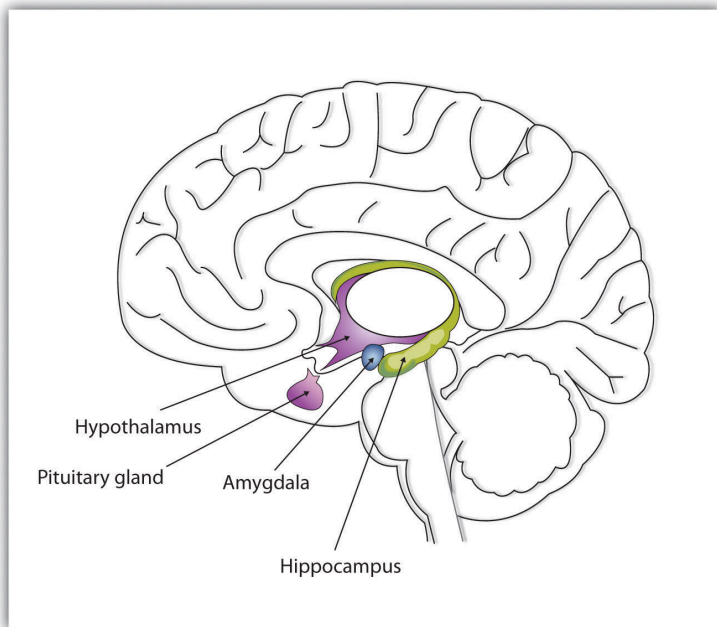


The arousal that we experience as part of our emotional experience is caused by the activation of the sympathetic nervous system. [Image from: Charles Stangor's *Principles of Social Psychology*. Retrieved from <https://open.lib.umn.edu/socialpsychology/chapter/3-1-moods-and-emotions-in-our-social-lives/> CC BY-NC-SA <http://creativecommons.org/licenses/by-nc-sa/4.0/>]

The experience of emotion is also controlled in part by one of the evolutionarily oldest parts of our brain—the part known as the *limbic system*—which includes several brain structures that help us experience emotion. Particularly important is the *amygdala*, the region in the limbic system that is primarily responsible for regulating



our perceptions of, and reactions to, aggression and fear. The amygdala has connections to other bodily systems related to emotions, including the facial muscles, which perceive and express emotions, and it also regulates the release of neurotransmitters related to stress and aggression (Best, 2009). When we experience events that are dangerous, the amygdala stimulates the brain to remember the details of the situation so that we learn to avoid it in the future (Sigurdsson, Doyère, Cain, & LeDoux, 2007; Whalen et al., 2001).



The limbic system is a part of the brain that includes the amygdala. The amygdala is an important regulator of emotions. [Image from: Charles Stangor's *Principles of Social Psychology*. Retrieved from <https://open.lib.umn.edu/socialpsychology/chapter/3-1-moods->

## Basic and Secondary Emotions

The basic emotions (anger, contempt, disgust, fear, happiness, sadness, and surprise) are *emotions that are based primarily on the arousal produced by the SNS and that do not require much cognitive processing*. These emotions happen quickly, without the need for a lot of thought or interpretation. Imagine, for instance, your fearful reaction to the sight of a car unexpectedly pulling out in front of you while you are driving, or your happiness in unexpectedly learning that you won an important prize. You immediately experience arousal, and in the case of negative emotions, the arousal may signal that quick action is needed.

### Video Clip 1

The Basic Emotions

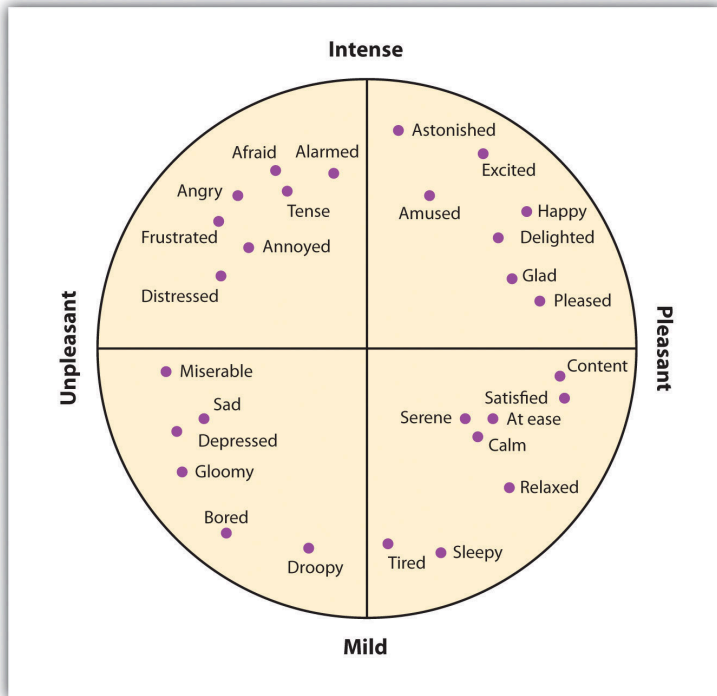
[\(click to see video\)](#)

Paul Ekman and his colleagues (Ekman, 1992; 2003) studied the expression and interpretation of the basic emotions in a variety of cultures, including those that had had almost no outside contact (such as Papua New Guinea). In his research, he showed people stimuli that would create a given emotion (such as a dead pig on the ground to create disgust) and videotaped the people as they expressed the emotion they would feel in that circumstance.

Ekman then asked people in other cultures to identify the emotions from the videotapes. He found that the basic emotions were cross-cultural in the sense that they are expressed and experienced consistently across many different cultures. A recent

meta-analysis examined the perception of the basic emotions in 162 samples, with pictures and raters from many countries, including New Guinea, Malaysia, Germany, and Ethiopia. The analysis found that in only 3% of these samples was even a single basic emotion recognized at rates below chance (Elfenbein & Ambady, 2002).

Figure 3.1



The secondary emotions are derived from the basic emotions but are more cognitive in orientation (Russell, 1980). [Image from: Charles Stangor's *Principles of Social Psychology*. Retrieved from <https://open.lib.umn.edu/socialpsychology/chapter/3-1-moods->

In comparison to the basic emotions, other emotions, such as guilt, shame, and embarrassment, are accompanied by relatively lower levels of arousal and relatively higher levels of cognitive activity. When a close friend of yours wins a prize that you thought you had deserved, you might well feel depressed, angry, resentful, and ashamed. You might mull over the event for weeks or even months, experiencing these negative emotions each time you think about it (Martin & Tesser, 1996). In this case, although there is at least some arousal, your emotions are more highly determined by your persistent, and negative, thoughts. As you can see in [Figure 3.1](#), there are a large number of these secondary emotions—emotions that provide us with more complex feelings about our social worlds and that are more cognitively based.

## Cultural and Gender Differences in Emotional Responses

Although there are many similarities across cultures in how we experience emotions, there are also some differences (Marsh, Efenbein, & Ambady, 2003). In Japan, there is a tendency to hide emotions in public, which makes them harder for others to perceive (Markus & Kitayama, 1991; Triandis, 1994). And as we would expect on the basis of cultural differences between individualism and collectivism, emotions are more focused on other-concern in Eastern cultures, such as Japan and Turkey, but relatively more focused on self-concern in Western cultures (Kitayama, Mesquita, & Karasawa, 2006; Uchida, Kitayama, Mesquita, Reyes, & Morling, 2008). Ishii, Reyes, and Kitayama (2003) found that Japanese students paid more attention to the emotional tone of voice of other speakers than did American students, suggesting that the Japanese

students were particularly interested in determining the emotions of others. Self-enhancing emotions such as pride and anger are more culturally appropriate emotions to express in Western cultures, whereas other-oriented emotions such as friendliness and shame are seen as more culturally appropriate in Eastern cultures. Similarly, Easterners experience more positive emotions when they are with others, whereas Westerners are more likely to experience positive emotions when they are alone and as a result of their personal accomplishments (Kitayama, Karasawa, & Mesquita, 2004; Masuda & Kitayama, 2004).

There are also gender differences in emotional experiences. Women report that they are more open to feelings overall (Costa, Terracciano, & McCrae, 2001), are more likely to express their emotions in public (Kring & Gordon, 1998), and are more accurate and articulate in reporting the feelings of others (Barrett, Lane, Sechrest, & Schwartz, 2000). These differences show up particularly in terms of emotions that involve social relationships. Kring and Gordon (1998) had male and female students watch film clips that portrayed sadness, happiness, or fear and found that the women reacted more visibly to each film. Coats and Feldman (1996) found that it is easier to read the emotions that women express. Some of these observed gender differences in emotional experiences and expression are biological in orientation, but they are also socialized through experience.

## **Moods Provide Information About Our Social Worlds**

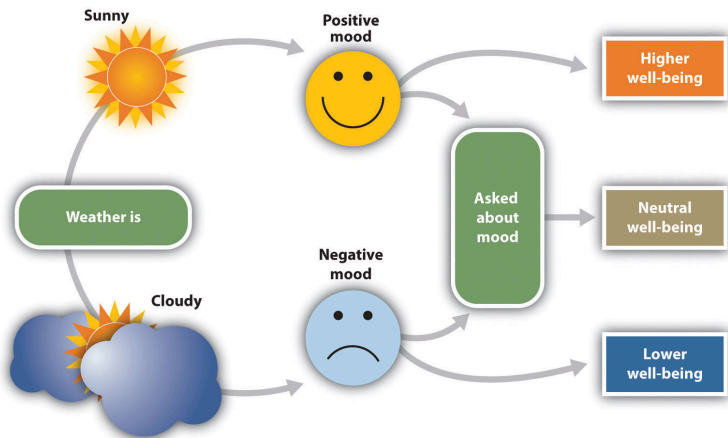
One function of mood is to help us determine how we should evaluate our current situation. Positive moods will likely lead us to maintain our current activities, which seem to be successful, whereas negative moods suggest that we may wish to attempt to change things to improve our situation. And moods have other

influences on our cognition and behavior: Positive moods may lead us to think more creatively and to be more flexible in how we respond to opinions that are inconsistent with cultural norms (Ashton-James, Maddux, Galinsky, & Chartrand, 2009). Ito, Chiao, Devine, Lorig, and Cacioppo (2006) found that people who were smiling were also less prejudiced.

Mood states are also powerful determinants of our current well-being. To study how people use mood states as information to help them determine their current well-being, Norbert Schwarz and Gerald Clore (1983) called participants on the telephone, pretending that they were researchers from a different city conducting a survey. Furthermore, they varied the day on which they made the calls, such that some of the participants were interviewed on sunny days and some were interviewed on rainy days. During the course of the interview, the participants were asked to report on their current mood states and also on their general well-being. Schwarz and Clore found that the participants reported better moods and greater well-being on sunny days than they did on rainy days.

Schwarz and Clore wondered whether people were using their current mood (“I feel good today”) to determine how they felt about their life overall. To test this idea, they simply asked half of their respondents about the local weather conditions at the beginning of the interview. The idea was to subtly focus these participants on the fact that the weather might be influencing their mood states. And they found that as soon as they did this, although mood states were still influenced by the weather, the weather no longer influenced perceptions of well-being (Figure 3.2 “Mood as Information”). When the participants were aware that their moods might have been influenced by the weather, they realized that the moods were not informative about their overall well-being, and so they no longer used this information. Similar effects have been found for mood that is induced by music or other sources (Keltner, Locke, & Audrain, 1993; Savitsky, Medvec, Charlton, & Gilovich, 1998).

Figure 3.2 Mood as Information

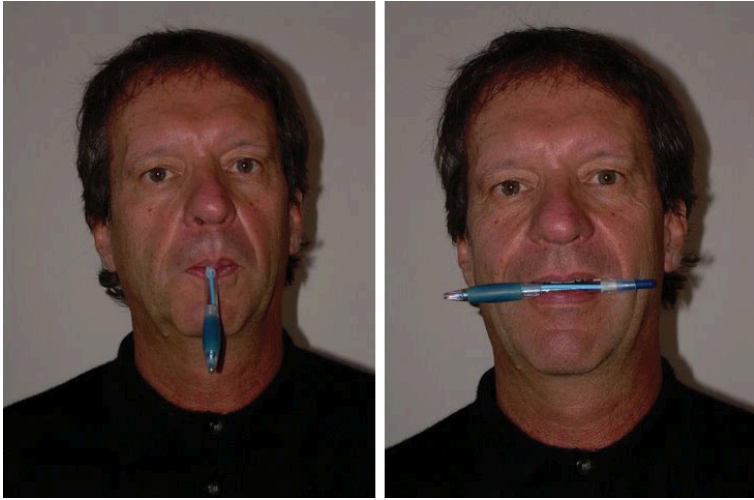


The current weather influences people's judgments of their well being, but only when they are not aware that it might be doing so. After Schwarz and Clore (1983). [Image from: Charles Stangor's *Principles of Social Psychology*. Retrieved from <https://open.lib.umn.edu/socialpsychology/chapter/3-1-moods-and-emotions-in-our-social-lives/> CC BY-NC-SA <http://creativecommons.org/licenses/by-nc-sa/4.0/>]

Even moods that are created very subtly can have effects on perceptions. Fritz Strack and his colleagues (Strack, Martin, & Stepper, 1988) had participants rate how funny cartoons were while holding a writing pen in their mouth such that it forced them either to use muscles that are associated with smiling or to use muscles that are associated with frowning (Figure 3.3). They found that participants rated the cartoons as funnier when the pen created muscle contractions that are normally used for smiling rather than frowning. And Stepper and Strack (1993) found that people interpreted events more positively when they were sitting in an upright position rather than a slumped position. Even finding a coin in a pay phone or being offered some milk and cookies is enough to

put people in good moods and to make them rate their surroundings more positively (Clark & Isen, 1982; Isen & Levin, 1972; Isen, Shalker, Clark, & Karp, 1978).

Figure 3.3



The position of our mouth muscles can influence our mood states (Strack, Martin, & Stepper, 1988).[Image from: Charles Stangor's *Principles of Social Psychology*. Retrieved from <https://open.lib.umn.edu/socialpsychology/chapter/3-1-moods-and-emotions-in-our-social-lives/> CC BY-NC-SA <http://creativecommons.org/licenses/by-nc-sa/4.0/>]

These results show that our body positions, especially our facial expressions, influence our affect. We may smile because we are happy, but we are also happy because we are smiling. And we may stand up straight because we are feeling proud, but we also feel proud because we are standing up straight (Stepper, & Strack, 1993).



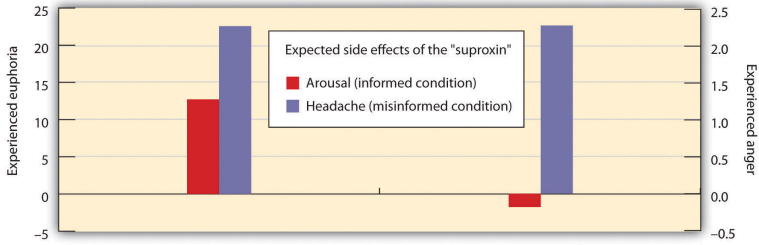
## Misattributing Arousal

Although arousal is necessary for emotion, it is not sufficient. Arousal becomes emotion only when it is accompanied by a label or by an explanation for the arousal (Schachter & Singer, 1962). Thus, although emotions are usually considered to be affective in nature, they really represent an excellent example of the joint influence of affect and cognition. We can say, then, that emotions have *two factors*—an arousal factor and a cognitive factor (James, 1890; Schachter & Singer, 1962).

Emotion = arousal + cognition

In some cases, it may be difficult for people who are experiencing a high level of arousal to accurately determine which emotion they are experiencing. That is, they may be certain that they are feeling arousal, but the meaning of the arousal (the cognitive factor) may be less clear. Some romantic relationships, for instance, are characterized by high levels of arousal, and the partners alternately experience extreme highs and lows in the relationship. One day they are madly in love with each other, and the next they are having a huge fight. In situations that are accompanied by high arousal, people may be unsure what emotion they are experiencing. In the high-arousal relationship, for instance, the partners may be uncertain whether the emotion they are feeling is love, hate, or both at the same time. Misattribution of arousal occurs *when people incorrectly label the source of the arousal that they are experiencing.*

Figure 3.4 Misattributing Emotion



The results of an experiment by Schachter and Singer (1962) supported the two-factor theory of emotion. The participants who did not have a clear label for their arousal were more likely to take on the emotion of the confederate. [Image from: Charles Stangor's *Principles of Social Psychology*. Retrieved from <https://open.lib.umn.edu/socialpsychology/chapter/3-1-moods-and-emotions-in-our-social-lives/> CC BY-NC-SA <http://creativecommons.org/licenses/by-nc-sa/4.0/>]

# 16. Happiness

EDWARD DIENER

This chapter is from:

Diener, E. (2021). Happiness: the science of subjective well-being. In R. Biswas-Diener & E. Diener (Eds), *Noba textbook series: Psychology*. Champaign, IL: DEF publishers. Retrieved from <http://noba.to/qnw7g32t>

# Introduction



If you had only one gift to give your child, what would it be? Happiness? [Image: mynameisharsha, <https://goo.gl/216PFr>, CC BY-SA 3.0, <https://goo.gl/eLCn2O>]

When people describe what they most want out of life, happiness is almost always on the list, and very frequently it is at the top of the list. When people describe what they want in life for their children, they frequently mention health and wealth, occasionally they mention fame or success—but they almost always mention happiness. People will claim that whether their kids are wealthy and work in some prestigious occupation or not, “I just want my kids to be happy.” Happiness appears to be one of the most important goals

for people, if not the most important. But what is it, and how do people get it?

In this module I describe “[happiness](#)” or subjective well-being (SWB) as a process—it results from certain [internal](#) and [external causes](#), and in turn it influences the way people behave, as well as their physiological states. Thus, high SWB is not just a pleasant outcome but is an important factor in our future success. Because scientists have developed valid ways of measuring “happiness,” they have come in the past decades to know much about its causes and consequences.

## Types of Happiness

Philosophers debated the nature of happiness for thousands of years, but scientists have recently discovered that happiness means different things. Three major types of happiness are high [life satisfaction](#), frequent [positive feelings](#), and infrequent [negative feelings](#) (Diener, 1984). “[Subjective well-being](#)” is the label given by scientists to the various forms of happiness taken together. Although there are additional forms of SWB, the three in the table below have been studied extensively. The table also shows that the causes of the different types of happiness can be somewhat different.

Three Types of Happiness	Examples	Causes
Life Satisfaction	<ul style="list-style-type: none"><li>• I think my life is great</li><li>• I am satisfied with my job</li></ul>	<ul style="list-style-type: none"><li>• A good income</li><li>• Achieving one's goals</li><li>• High self-esteem</li></ul>
Positive Feelings	<ul style="list-style-type: none"><li>• Enjoying life</li><li>• Loving others</li></ul>	<ul style="list-style-type: none"><li>• Supportive friends</li><li>• Interesting work</li><li>• Extroverted personality</li></ul>
Low Negative Feelings	<ul style="list-style-type: none"><li>• Few chronic worries</li><li>• Rarely sad or angry</li></ul>	<ul style="list-style-type: none"><li>• Low neuroticism</li><li>• One's goals are in harmony</li><li>• A positive outlook</li></ul>

Table 1: Three Types of Subjective Well-Being

You can see in the table that there are different causes of happiness, and that these causes are not identical for the various types of

SWB. Therefore, there is no single key, no magic wand—high SWB is achieved by combining several different important elements ([Diener & Biswas-Diener, 2008](#)). Thus, people who promise to know *the* key to happiness are oversimplifying.

Some people experience all three elements of happiness—they are very satisfied, enjoy life, and have only a few worries or other unpleasant emotions. Other unfortunate people are missing all three. Most of us also know individuals who have one type of happiness but not another. For example, imagine an elderly person who is completely satisfied with her life—she has done most everything she ever wanted—but is not currently enjoying life that much because of the infirmities of age. There are others who show a different pattern, for example, who really enjoy life but also experience a lot of stress, anger, and worry. And there are those who are having fun, but who are dissatisfied and believe they are wasting their lives. Because there are several components to happiness, each with somewhat different causes, there is no magic single cure—all that creates all forms of SWB. This means that to be happy, individuals must acquire each of the different elements that cause it.

## Causes of Subjective Well-Being

There are external influences on people's happiness—the circumstances in which they live. It is possible for some to be happy living in poverty with ill health, or with a child who has a serious disease, but this is difficult. In contrast, it is easier to be happy if one has supportive family and friends, ample resources to meet one's needs, and good health. But even here there are exceptions—people who are depressed and unhappy while living in excellent circumstances. Thus, people can be happy or unhappy because of their personalities and the way they think about the world or because of the external circumstances in which they live. People

vary in their propensity to happiness—in their personalities and outlook—and this means that knowing their living conditions is not enough to predict happiness.

In the table below are shown internal and external circumstances that influence happiness. There are individual differences in what makes people happy, but the causes in the table are important for most people ([Diener, Suh, Lucas, & Smith, 1999](#); [Lyubomirsky, 2013](#); [Myers, 1992](#)).

Internal Causes (Top-down influences)	Description
Inborn temperament	Studies of monozygotic (identical) twins raised apart indicate that our genes influence our happiness. Even when raised apart, identical twins tend to be similar in their levels of subjective well-being.
Personality and temperament	Personality is partly inborn and partly learned, and it influences our happiness. For example: Extroverts tend to have more positive feelings. Neurotics tend to have more negative feelings.
Outlook	People can develop habits of noticing the good things in life and interpreting ambiguous events in positive ways. Other people develop negative mental habits, leading to more unhappiness. One's culture also can influence whether we take an optimistic or pessimistic view of life.
Resilience	Happy individuals tend to bounce back more quickly after losses and negative events.
External Causes (Bottom-up influences)	Description
Sufficient material resources	People have enough money to meet their basic needs and fulfill their major goals.
Sufficient social resources	People differ in their need for social contact, but everyone needs some supportive and trusted others: family, a friend, or a partner, or sometimes all three. We need other people to lead a fulfilled life.
Desirable society	Our own efforts and circumstances influence our happiness, but so does the society in which we live. A society of hunger, war, conflict, and corruption is much less happy than one with material resources, high levels of trust and cooperation, and people who want to help each other.

Table 2: Internal and External Causes of Subjective Well-Being

## Societal Influences on Happiness

When people consider their own happiness, they tend to think of their relationships, successes and failures, and other personal factors. But a very important influence on how happy people are is the society in which they live. It is easy to forget how important societies and neighborhoods are to people's happiness or unhappiness. In Figure 1, I present life satisfaction around the world. You can see that some nations, those with the darkest shading on

the map, are high in life satisfaction. Others, the lightest shaded areas, are very low. The grey areas in the map are places we could not collect happiness data—they were just too dangerous or inaccessible.

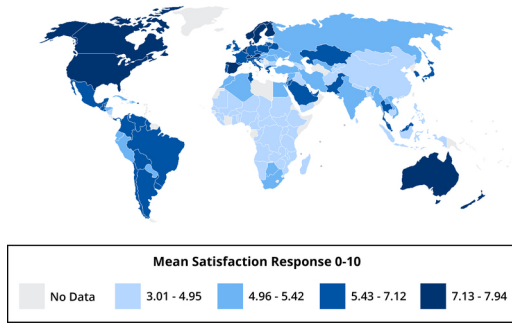


Figure 1

Can you guess what might make some societies happier than others? Much of North America and Europe have relatively high life satisfaction, and much of Africa is low in life satisfaction. For life satisfaction living in an economically developed nation is helpful because when people must struggle to obtain food, shelter, and other basic necessities, they tend to be dissatisfied with lives. However, other factors, such as trusting and being able to count on others, are also crucial to the happiness within nations. Indeed, for enjoying life our relationships with others seem more important than living in a wealthy society. One factor that predicts unhappiness is conflict—individuals in nations with high internal conflict or conflict with neighboring nations tend to experience low SWB.

## Money and Happiness

Will money make you happy? A certain level of income is needed to meet our needs, and very poor people are frequently dissatisfied with life ([Diener & Seligman, 2004](#)). However, having more and more



money has diminishing returns—higher and higher incomes make less and less difference to happiness. Wealthy nations tend to have higher average life satisfaction than poor nations, but the United States has not experienced a rise in life satisfaction over the past decades, even as income has doubled. The goal is to find a level of income that you can live with and earn. Don't let your aspirations continue to rise so that you always feel poor, no matter how much money you have. Research shows that materialistic people often tend to be less happy, and putting your emphasis on relationships and other areas of life besides just money is a wise strategy. Money can help life satisfaction, but when too many other valuable things are sacrificed to earn a lot of money—such as relationships or taking a less enjoyable job—the pursuit of money can harm happiness.

There are stories of wealthy people who are unhappy and of janitors who are very happy. For instance, a number of extremely wealthy people in South Korea have committed suicide recently, apparently brought down by stress and other negative feelings. On the other hand, there is the hospital janitor who loved her life because she felt that her work in keeping the hospital clean was so important for the patients and nurses. Some millionaires are dissatisfied because they want to be billionaires. Conversely, some people with ordinary incomes are quite happy because they have learned to live within their means and enjoy the less expensive things in life.

It is important to always keep in mind that high materialism seems to lower life satisfaction—valuing money over other things such as relationships can make us dissatisfied. When people think money is more important than everything else, they seem to have a harder time being happy. And unless they make a great deal of money, they are not on average as happy as others. Perhaps in seeking money they sacrifice other important things too much, such as relationships, spirituality, or following their interests. Or it may be that materialists just can never get enough money to fulfill their dreams—they always want more.

To sum up what makes for a happy life, let's take the example

of Monoj, a rickshaw driver in Calcutta. He enjoys life, despite the hardships, and is reasonably satisfied with life. How could he be relatively happy despite his very low income, sometimes even insufficient to buy enough food for his family? The things that make Monoj happy are his family and friends, his religion, and his work, which he finds meaningful. His low income does lower his life satisfaction to some degree, but he finds his children to be very rewarding, and he gets along well with his neighbors. I also suspect that Monoj's positive temperament and his enjoyment of social relationships help to some degree to overcome his poverty and earn him a place among the happy. However, Monoj would also likely be even more satisfied with life if he had a higher income that allowed more food, better housing, and better medical care for his family.



Manoj, a happy rickshaw driver in Calcutta.

Besides the internal and external factors that influence happiness, there are psychological influences as well—such as our aspirations, social comparisons, and adaptation. People's aspirations are what

they want in life, including income, occupation, marriage, and so forth. If people's aspirations are high, they will often strive harder, but there is also a risk of them falling short of their aspirations and being dissatisfied. The goal is to have challenging aspirations but also to be able to adapt to what actually happens in life.

One's outlook and resilience are also always very important to happiness. Every person will have disappointments in life, fail at times, and have problems. Thus, happiness comes not to people who never have problems—there are no such individuals—but to people who are able to bounce back from failures and adapt to disappointments. This is why happiness is never caused just by what happens to us but always includes our outlook on life.

## Adaptation to Circumstances

The process of [adaptation](#) is important in understanding happiness. When good and bad events occur, people often react strongly at first, but then their reactions adapt over time and they return to their former levels of happiness. For instance, many people are euphoric when they first marry, but over time they grow accustomed to the marriage and are no longer ecstatic. The marriage becomes commonplace and they return to their former level of happiness. Few of us think this will happen to us, but the truth is that it usually does. Some people will be a bit happier even years after marriage, but nobody carries that initial “high” through the years.

People also adapt over time to bad events. However, people take a long time to adapt to certain negative events such as unemployment. People become unhappy when they lose their work, but over time they recover to some extent. But even after a number of years, unemployed individuals sometimes have lower life satisfaction, indicating that they have not completely habituated to the experience. However, there are strong individual differences in

adaptation, too. Some people are resilient and bounce back quickly after a bad event, and others are fragile and do not ever fully adapt to the bad event. Do you adapt quickly to bad events and bounce back, or do you continue to dwell on a bad event and let it keep you down?

An example of adaptation to circumstances is shown in Figure 3, which shows the daily moods of “Harry,” a college student who had Hodgkin’s lymphoma (a form of cancer). As can be seen, over the 6-week period when I studied Harry’s moods, they went up and down. A few times his moods dropped into the negative zone below the horizontal blue line. Most of the time Harry’s moods were in the positive zone above the line. But about halfway through the study Harry was told that his cancer was in remission—effectively cured—and his moods on that day spiked way up. But notice that he quickly adapted—the effects of the good news wore off, and Harry adapted back toward where he was before. So even the very best news one can imagine—recovering from cancer—was not enough to give Harry a permanent “high.” Notice too, however, that Harry’s moods averaged a bit higher after cancer remission. Thus, the typical pattern is a strong response to the event, and then a dampening of this joy over time. However, even in the long run, the person might be a bit happier or unhappier than before.

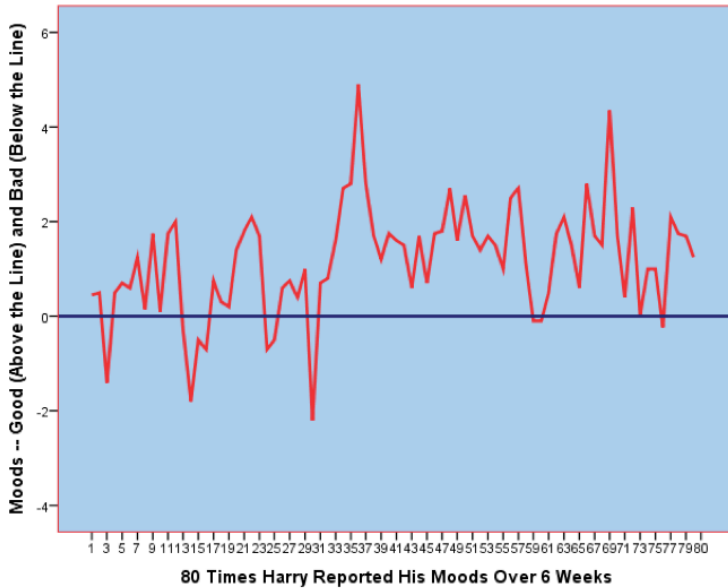


Figure 3. Harry’s Daily Moods

## Outcomes of High Subjective Well-Being

Is the state of happiness truly a good thing? Is happiness simply a feel-good state that leaves us unmotivated and ignorant of the world’s problems? Should people strive to be happy, or are they better off to be grumpy but “realistic”? Some have argued that happiness is actually a bad thing, leaving us superficial and uncaring. Most of the evidence so far suggests that happy people are healthier, more sociable, more productive, and better citizens ([Diener & Tay, 2012](#); [Lyubomirsky, King, & Diener, 2005](#)). Research shows that the happiest individuals are usually very sociable. The table below summarizes some of the major findings.

Positive Outcomes	Description of Some of the Benefits
Health and Longevity	Happy and optimistic people have stronger immune systems and fewer cardiovascular diseases. Happy people are more likely to perform healthy behaviors, such as wearing seat belts and adhere to medical regimens. They also seem on average to live longer.
Social Relationships	Happy people are more popular, and their relationships are more stable and rewarding. For example, they get divorced less and are fired from work less. They support others more, and receive more support from others in return.
Productivity	Organizations in which people are positive and satisfied seem to be more successful. Work units with greater subjective well-being are more productive, and companies with happy workers tend to earn more money and develop higher stock prices.
Citizenship	Happy people are more likely to donate their time and money to charitable causes and to help others at work.

Table 3: Benefits of Happiness

Although it is beneficial generally to be happy, this does not mean that people should be constantly euphoric. In fact, it is appropriate and helpful sometimes to be sad or to worry. At times a bit of worry mixed with positive feelings makes people more creative. Most successful people in the workplace seem to be those who are mostly positive but sometimes a bit negative. Thus, people need not be a superstar in happiness to be a superstar in life. What is not helpful is to be chronically unhappy. The important question is whether people are satisfied with how happy they are. If you feel mostly positive and satisfied, and yet occasionally worry and feel stressed, this is probably fine as long as you feel comfortable with this level of happiness. If you are a person who is chronically unhappy much of the time, changes are needed, and perhaps professional intervention would help as well.

## Measuring Happiness

SWB researchers have relied primarily on [self-report scales](#) to assess happiness—how people rate their own happiness levels on self-report surveys. People respond to numbered scales to indicate their levels of satisfaction, positive feelings, and lack of negative feelings. You can see where you stand on these scales by going

to <http://internal.psychology.illinois.edu/~ediener/scales.html> or by filling out the Flourishing Scale below. These measures will give you an idea of what popular scales of happiness are like.



## The Flourishing Scale

The self-report scales have proved to be relatively valid ([Diener, Inglehart, & Tay, 2012](#)), although people can lie, or fool themselves, or be influenced by their current moods or situational factors. Because the scales are imperfect, well-being scientists also sometimes use biological measures of happiness (e.g., the strength of a person's immune system, or measuring various brain areas that are associated with greater happiness). Scientists also use reports by family, coworkers, and friends—these people reporting how happy they believe the target person is. Other measures are used as well to help overcome some of the shortcomings of the self-report scales, but most of the field is based on people telling us how happy they are using numbered scales.

There are scales to measure life satisfaction ([Pavot & Diener, 2008](#)), positive and negative feelings, and whether a person is psychologically flourishing ([Diener et al., 2009](#)). Flourishing has to do with whether a person feels meaning in life, has close relationships, and feels a sense of mastery over important life activities. You can take the well-being scales created in the Diener laboratory, and let others take them too, because they are free and open for use.

# Some Ways to Be Happier

Most people are fairly happy, but many of them also wish they could be a bit more satisfied and enjoy life more. Prescriptions about how to achieve more happiness are often oversimplified because happiness has different components and prescriptions need to be aimed at where each individual needs improvement—one size does not fit all. A person might be strong in one area and deficient in other areas. People with prolonged serious unhappiness might need help from a professional. Thus, recommendations for how to achieve happiness are often appropriate for one person but not for others. With this in mind, I list in Table 4 below some general recommendations for you to be happier (see also [Lyubomirsky, 2013](#)):

<b>Self-Questions for Becoming Happier</b>
Are there controllable things in your life that could be changed to make your life more meaningful and happy? What are the avenues to change and why haven't you taken them?
Do you generally see the bright side of things - the part of the glass that is half full, or do you always see the dark side of things? Can you change this outlook on life by working to break the empty-glass view of life? Can you develop more positive mental habits, such as being grateful to others for all of the things they do for you?
Are there people around you who make you feel good about yourself and who make your life more enjoyable? How can you reduce the number of "downers" who might surround you?
In your relationships, seek to make others happy and help others, not just receive support from others. The happiest and healthiest people are often those who help others and the world. Beyond actually helping others, express gratefulness to them and be a person who gives lots of compliments.
Find work that you will love and be good at, while being realistic about your chances of finding certain jobs. Don't over-weigh the importance of money or status in selecting an occupation. Find a job that interests you and plays to your strengths. If you find a job you love, this can be a big boost to happiness.

Table 4: Self-Examination



# 17. Groups

DONELSON R. FORSYTH

This chapter is from:

Forsyth, D. R. (2021). The psychology of groups. In R. Biswas-Diener & E. Diener (Eds), *Noba textbook series: Psychology*. Champaign, IL: DEF publishers. Retrieved from <http://noba.to/trfxbkkm>

## 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, <https://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, <https://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-approration 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 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](#)).

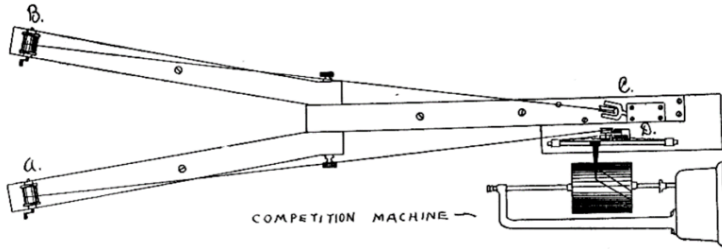


Figure 1: The “competition machine” Triplett used to study the impact of competition on performance. Triplett’s study was one of the first laboratory studies conducted in the field of social psychology. Triplett, N. (1898)

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 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).

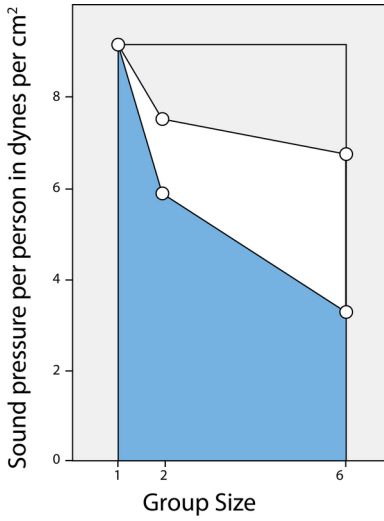


Figure 2: Sound pressure per person as a function of group or pseudo group size. Latane, B. (1981)

## Teamwork



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, <https://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 3). Cohesive groups also can be spectacularly unproductive if the group's norms stress low productivity rather than high productivity (Seashore, 1954).

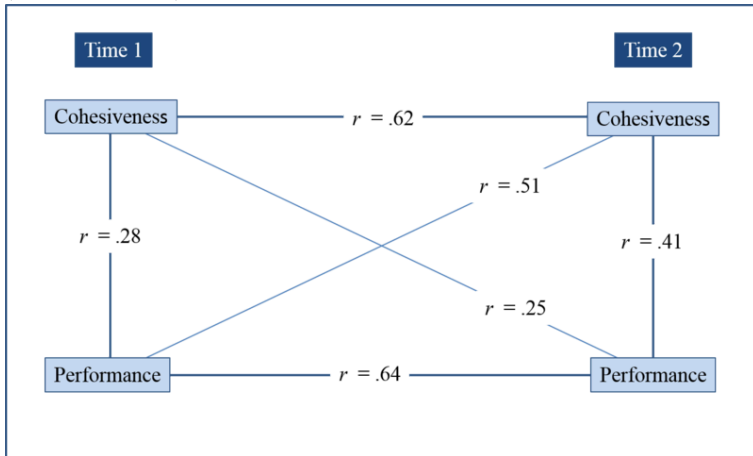


Figure 3: The relationship between group cohesion and performance over time. Groups that are cohesive do tend to perform well on tasks now (Time1) and in the future (Time 2). Notice, though, that the relationship between Performance at Time 1 and Cohesiveness at Time 2 is greater ( $r=.51$ ) than the 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, <https://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, <https://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.

# 18. Prejudice and Discrimination

SUSAN T. FISKE

This chapter is from:

Fiske, S. T. (2021). Prejudice, discrimination, and stereotyping. In R. Biswas-Diener & E. Diener (Eds), *Noba textbook series: Psychology*. Champaign, IL: DEF publishers. Retrieved from <http://noba.to/jfkx7nrd>



# 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, <https://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, <https://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

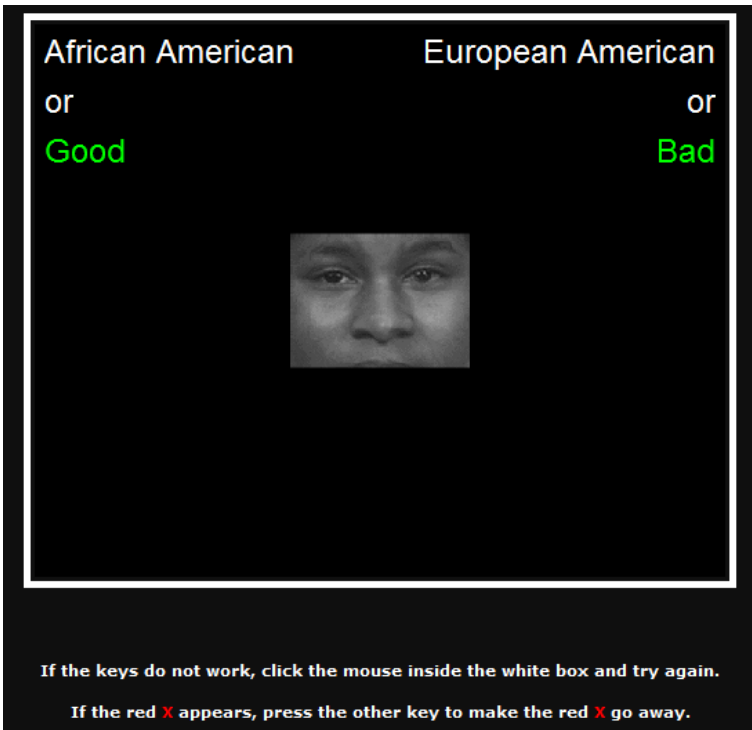
[Right-wing authoritarianism](#) (RWA) focuses on value conflicts, whereas SDO focuses on the economic ones. That is, RWA endorses respect for obedience and authority in the service of group conformity (Altemeyer, 1988). Returning to an example from earlier, the homeowner who's high in SDO may dislike 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, <https://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.

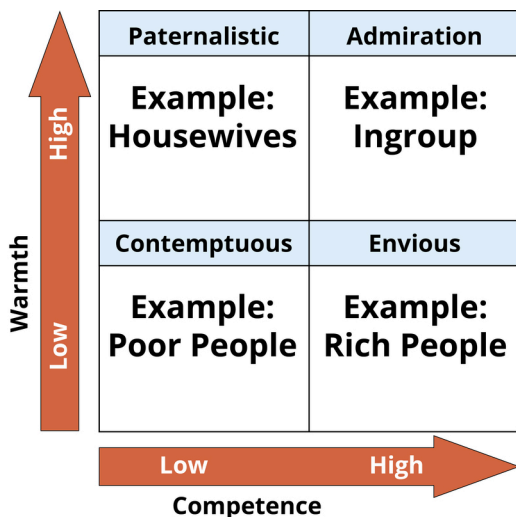


Figure 1: Stereotype Content Model – 4 kinds of stereotypes that form from perceptions of competence and warmth

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.

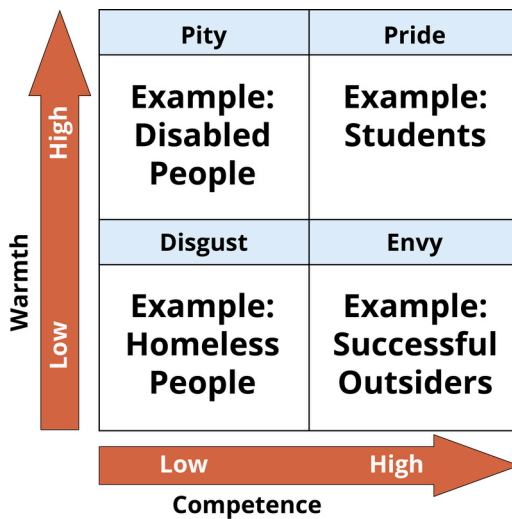


Figure 2: Combinations of perceived warmth and confidence and the associated behaviors/emotional prejudices.

## 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.

# 19. Gender

CHRISTIA SPEARS BROWN, JENNIFER A. JEWELL, AND MICHELLE J. TAM

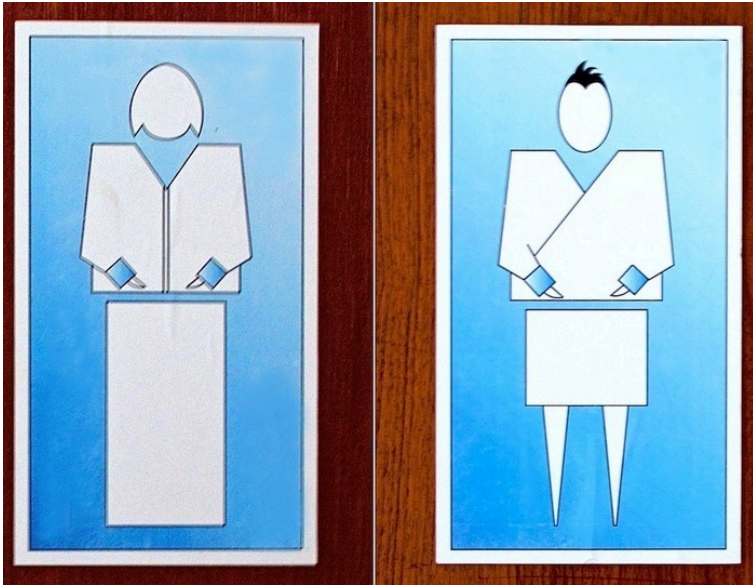
This chapter is from:

Brown, C. S., Jewell, J. A., & Tam, M. J. (2021). Gender. In R. Biswas-Diener & E. Diener (Eds), *Noba textbook series: Psychology*. Champaign, IL: DEF publishers. Retrieved from <http://noba.to/ge5fdhba>

## Introduction

Before we discuss gender in detail, it is important to understand what gender actually is. The terms sex and gender are frequently used interchangeably, though they have different meanings. In this context, [sex](#) refers to the biological category of male or female, as defined by physical differences in genetic composition and in reproductive anatomy and function. On the other hand, [gender](#) refers to the cultural, social, and psychological meanings that are associated with masculinity and femininity ([Wood & Eagly, 2002](#)). You can think of “male” and “female” as distinct categories of sex (a person is typically born a male or a female), but “masculine” and “feminine” as continuums associated with gender (everyone has a certain degree of masculine and feminine traits and qualities).





Gender refers to the cultural, social, and psychological meanings that are associated with masculinity and femininity. [Photo: Michael Foley Photography, <https://goo.gl/B46jym>, CC BY-NC-ND 2.0, <https://goo.gl/aAX82f>]

Beyond sex and gender, there are a number of related terms that are also often misunderstood. **Gender roles** are the behaviors, attitudes, and personality traits that are designated as either masculine or feminine in a given culture. It is common to think of gender roles in terms of **gender stereotypes**, or the beliefs and expectations people hold about the typical characteristics, preferences, and behaviors of men and women. A person's **gender identity** refers to their psychological sense of being male or female. In contrast, a person's **sexual orientation** is the direction of their emotional and erotic attraction toward members of the opposite sex, the same sex, or both sexes. These are important distinctions, and though we will not discuss each of these terms in detail, it is important to recognize that sex, gender, gender identity, and sexual orientation do not always correspond with one another. A person can be biologically

male but have a female gender identity while being attracted to women, or any other combination of identities and orientations.

## Defining Gender

Historically, the terms gender and sex have been used interchangeably. Because of this, gender is often viewed as a [binary](#) – a person is either male or female – and it is assumed that a person’s gender matches their biological sex. This is not always the case, however, and more recent research has separated these two terms. While the majority of people do identify with the gender that matches their biological sex ([cisgender](#)), an estimated 0.6% of the population identify with a gender that does not match their biological sex ([transgender](#); [Flores, Herman, Gates, & Brown, 2016](#)). For example, an individual who is biologically male may identify as female, or vice versa.

In addition to separating gender and sex, recent research has also begun to conceptualize gender in ways beyond the gender binary. [Genderqueer or gender nonbinary](#) are umbrella terms used to describe a wide range of individuals who do not identify with and/or conform to the gender binary. These terms encompass a variety of more specific labels individuals may use to describe themselves. Some common labels are [genderfluid](#), [agender](#), and [bigender](#). An individual who is genderfluid may identify as male, female, both, or neither at different times and in different circumstances. An individual who is agender may have no gender or describe themselves as having a neutral gender, while bigender individuals identify as two genders.

It is important to remember that sex and gender do not always match and that gender is not always binary; however, a large majority of prior research examining gender has not made these distinctions. As such, the following sections will discuss gender as a binary.

### The (Trans)Gender-Bathroom Debate

In recent years, there has been much cultural and political debate over the right of transgender individuals to use the public bathroom of their choosing. This debate made major headlines in 2016 when North Carolina passed the Public Facilities Privacy & Security Act (commonly called House Bill 2 or HB2). This law required individuals to use the restroom that corresponded with their birth sex, meaning that transgender individuals could not use the bathroom that matched their gender identity. This law and the similar “bathroom bills” proposed by other states were met with widespread controversy, with opponents arguing that they were discriminatory and perpetuated inequality (Barnett, Nesbit, & Sorrentino, 2018). HB2 has since been repealed, but many states still do not protect the rights of transgender individuals to use their restrooms of choice.

### [Text Box 1](#)

## Gender Differences

Differences between males and females can be based on (a) actual gender differences (i.e., men and women are actually different in some abilities), (b) gender roles (i.e., differences in how men and women are supposed to act), or (c) gender stereotypes (i.e., differences in how we *think* men and women are). Sometimes gender stereotypes and gender roles reflect actual gender differences, but sometimes they do not.

What are actual gender differences? In terms of language and language skills, girls develop language skills earlier and know more words than boys; this does not, however, translate into long-term differences. Girls are also more likely than boys to offer praise, to agree with the person they're talking to, and to elaborate on the other person's comments; boys, in contrast, are more likely than girls to assert their opinion and offer criticisms ([Leaper & Smith, 2004](#)). In terms of temperament, boys are slightly less able to suppress inappropriate responses and slightly more likely to blurt things out than girls ([Else-Quest, Hyde, Goldsmith, & Van Hulle, 2006](#)).



Boys exhibit higher rates of unprovoked physical aggression than girls and are more likely to play organized rough-and-tumble games. [Image: Aislinn Ritchie, <https://goo.gl/cVQ0Ab>, CC BY-SA 2.0, <https://goo.gl/jSSrcO>]

With respect to aggression, boys exhibit higher rates of unprovoked physical aggression than girls, but no difference in provoked aggression (Hyde, 2005). Some of the biggest differences involve the play styles of children. Boys frequently play organized rough-and-tumble games in large groups, while girls often play less physical activities in much smaller groups (Maccoby, 1998). There are also differences in the rates of depression, with girls much more likely than boys to be depressed after puberty. After puberty, girls are also more likely to be unhappy with their bodies than boys.

However, there is considerable variability between individual

males and individual females. Also, even when there are mean level differences, the actual size of most of these differences is quite small. This means, knowing someone's gender does not help much in predicting his or her actual traits. For example, in terms of activity level, boys are considered more active than girls. However, 42% of girls are more active than the average boy (but so are 50% of boys; see Figure 1 for a depiction of this phenomenon in a comparison of male and female self-esteem). Furthermore, many gender differences do not reflect innate differences, but instead reflect differences in specific experiences and socialization. For example, one presumed gender difference is that boys show better spatial abilities than girls. However, Tzuriel and Egozi (2010) gave girls the chance to practice their spatial skills (by imagining a line drawing was different shapes) and discovered that, with practice, this gender difference completely disappeared.

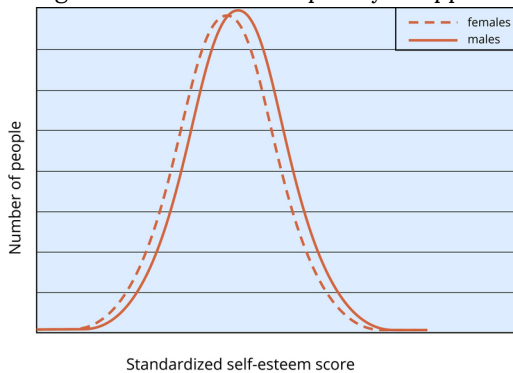


Figure 1. While our gender stereotypes paint males and females as drastically different from each other, even when a difference exists, there is considerable overlap in the presence of that trait between genders. This graph shows the average difference in self-esteem between boys and girls. Boys have a higher average self-esteem than girls, but the average scores are much more similar than different. Taken from Hyde (2005).

Many domains we assume differ across genders are really based on gender stereotypes and not actual differences. Based on large meta-

analyses, the analyses of thousands of studies across more than one million people, research has shown: Girls are not more fearful, shy, or scared of new things than boys; boys are not more angry than girls and girls are not more emotional than boys; boys do not perform better at math than girls; and girls are not more talkative than boys ([Hyde, 2005](#)).

In the following sections, we'll investigate gender roles, the part they play in creating these stereotypes, and how they can affect the development of real gender differences.

## Gender Roles

As mentioned earlier, gender roles are well-established social constructions that may change from culture to culture and over time. In American culture, we commonly think of gender roles in terms of [gender stereotypes](#), or the beliefs and expectations people hold about the typical characteristics, preferences, and behaviors of men and women.

By the time we are adults, our gender roles are a stable part of our personalities, and we usually hold many gender stereotypes. When do children start to learn about gender? Very early. By their first birthday, children can distinguish faces by gender. By their second birthday, they can label others' gender and even sort objects into gender-typed categories. By the third birthday, children can consistently identify their own gender (see [Martin, Ruble, & Szkrybalo, 2002](#), for a review). At this age, children believe sex is determined by external attributes, not biological attributes. Between 3 and 6 years of age, children learn that gender is constant and can't change simply by changing external attributes, having developed [gender constancy](#). During this period, children also develop strong and rigid gender stereotypes. Stereotypes can refer to play (e.g., boys play with trucks, and girls play with dolls), traits (e.g., boys are strong, and girls like to cry), and occupations (e.g.,

men are doctors and women are nurses). These stereotypes stay rigid until children reach about age 8 or 9. Then they develop cognitive abilities that allow them to be more flexible in their thinking about others.

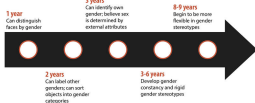


Figure 2: Children develop the ability to classify gender very early in life.

How do our gender roles and gender stereotypes develop and become so strong? Many of our gender stereotypes are so strong because we emphasize gender so much in culture ([Bigler & Liben, 2007](#)). For example, males and females are treated differently before they are even born. When someone learns of a new pregnancy, the first question asked is “Is it a boy or a girl?” Immediately upon hearing the answer, judgments are made about the child: Boys will be rough and like blue, while girls will be delicate and like pink. [Developmental intergroup theory](#) postulates that adults’ heavy focus on gender leads children to pay attention to gender as a key source of information about themselves and others, to seek out any possible gender differences, and to form rigid stereotypes based on gender that are subsequently difficult to change.





People are more likely to remember schema-consistent behaviors and attributes than schema-inconsistent behaviors and attributes. For example, people are more likely to remember men, and forget women, who are firefighters. [Photo: Billy V, <https://goo.gl/Kb2MuL>, CC BY-NC-SA 2.0, <https://goo.gl/Toc0ZF>]

There are also psychological theories that partially explain how children form their own gender roles after they learn to differentiate based on gender. The first of these theories is [gender schema theory](#). Gender schema theory argues that children are active learners who essentially socialize themselves. In this case, children actively organize others' behavior, activities, and attributes into gender categories, which are known as [schemas](#). These schemas then affect what children notice and remember later. People of all ages are more likely to remember schema-consistent



behaviors and attributes than schema-inconsistent behaviors and attributes. So, people are more likely to remember men, and forget women, who are firefighters. They also misremember schema-inconsistent information. If research participants are shown pictures of someone standing at the stove, they are more likely to remember the person to be cooking if depicted as a woman, and the person to be repairing the stove if depicted as a man. By only remembering schema-consistent information, gender schemas strengthen more and more over time.

A second theory that attempts to explain the formation of gender roles in children is [social learning theory](#). Social learning theory argues that gender roles are learned through reinforcement, punishment, and modeling. Children are rewarded and reinforced for behaving in concordance with gender roles and punished for breaking gender roles. In addition, social learning theory argues that children learn many of their gender roles by modeling the behavior of adults and older children and, in doing so, develop ideas about what behaviors are appropriate for each gender. Social learning theory has less support than gender schema theory—research shows that parents do reinforce gender-appropriate play, but for the most part treat their male and female children similarly ([Lytton & Romney, 1991](#)).

## Gender Sexism and Socialization

Treating boys and girls, and men and women, differently is both a *consequence* of gender differences and a *cause* of gender differences. Differential treatment on the basis of gender is also referred to [gender discrimination](#) and is an inevitable consequence of gender stereotypes. When it is based on unwanted treatment related to sexual behaviors or appearance, it is called [sexual harassment](#). By the time boys and girls reach the end of high school, most have experienced some form of sexual harassment, most

commonly in the form of unwanted touching or comments, being the target of jokes, having their body parts rated, or being called names related to sexual orientation.

Different treatment by gender begins with parents. A meta-analysis of research from the United States and Canada found that parents most frequently treated sons and daughters differently by encouraging gender-stereotypical activities ([Lytton & Romney, 1991](#)). Fathers, more than mothers, are particularly likely to encourage gender-stereotypical play, especially in sons. Parents also talk to their children differently based on stereotypes. For example, parents talk about numbers and counting twice as often with sons than daughters ([Chang, Sandhofer, & Brown, 2011](#)) and talk to sons in more detail about science than with daughters. Parents are also much more likely to discuss emotions with their daughters than their sons.

Children do a large degree of socializing themselves. By age 3, children play in gender-segregated play groups and expect a high degree of conformity. Children who are perceived as gender atypical (i.e., do not conform to gender stereotypes) are more likely to be bullied and rejected than their more gender-conforming peers.

Gender stereotypes typically maintain gender inequalities in society. The concept of [ambivalent sexism](#) recognizes the complex nature of gender attitudes, in which women are often associated with positive and negative qualities ([Glick & Fiske, 2001](#)). It has two components. First, [hostile sexism](#) refers to the negative attitudes of women as inferior and incompetent relative to men. Second, [benevolent sexism](#) refers to the perception that women need to be protected, supported, and adored by men. There has been considerable empirical support for benevolent sexism, possibly because it is seen as more socially acceptable than hostile sexism. Gender stereotypes are found not just in American culture. Across cultures, males tend to be associated with stronger and more active characteristics than females ([Best, 2001](#)).

In recent years, gender and related concepts have become a common focus of social change and social debate. Many societies,

including American society, have seen a rapid change in perceptions of gender roles, media portrayals of gender, and legal trends relating to gender. For example, there has been an increase in children's toys attempting to cater to both genders (such as Legos marketed to girls), rather than catering to traditional stereotypes. Nationwide, the drastic surge in acceptance of homosexuality and gender questioning has resulted in a rapid push for legal change to keep up with social change. Laws such as "Don't Ask, Don't Tell" and the Defense of Marriage Act (DOMA), both of which were enacted in the 1990s, have met severe resistance on the grounds of being discriminatory toward sexual minority groups and have been accused of unconstitutionality less than 20 years after their implementation. Change in perceptions of gender is also evident in social issues such as sexual harassment, a term that only entered the mainstream mindset in the 1991 Clarence Thomas/Anita Hill scandal. As society's gender roles and gender restrictions continue to fluctuate, the legal system and the structure of American society will continue to change and adjust.

# 20. Attraction

ROBERT G. FRANKLIN AND LESLIE ZEBROWITZ

This is from:

Franklin, R. G. & Zebrowitz, L. (2021). Attraction and beauty. In R. Biswas-Diener & E. Diener (Eds), *Noba textbook series: Psychology*. Champaign, IL: DEF publishers. Retrieved from <http://noba.to/pwnj6da4>

## Introduction

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, <https://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](#)).

<b>Advantages of High Attractiveness</b>
First Impressions
Mating Prospects
Parent and Peer Favoritism
Education and Employment
Electoral Success
Judicial Outcomes

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 1. A Kayan (Padaung) woman in Thailand displaying her neck rings.

[Image: Steve Evans, <http://www.flickr.com/photos/babasteve/351227116/>, Creative Commons Attribution 2.0 Generic License <https://creativecommons.org/licenses/by/2.0/deed.en>]

For example, the long neck on the woman shown in Figure 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 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).

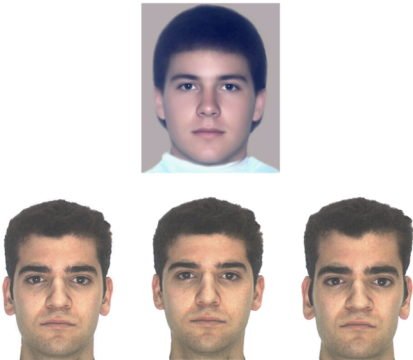


Figure 2. Top. An averaged face created from 32 individual faces. Bottom left. Original face from Martinez & Benevente (1998). Bottom middle. Original face morphed toward the average face.

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.

<b>Origins of High Attractiveness</b>
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, <https://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, <https://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.

# 21. Positive Relationships

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This chapter is from:

Lambert, N. M. (2021). Positive relationships. In R. Biswas-Diener & E. Diener (Eds), *Noba textbook series: Psychology*. Champaign, IL: DEF publishers. Retrieved from <http://noba.to/z7bf68n5>

## 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 (Priviti & 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, <https://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, <https://goo.gl/Hz9BOJ>, CC BY-NC 2.0, <https://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?

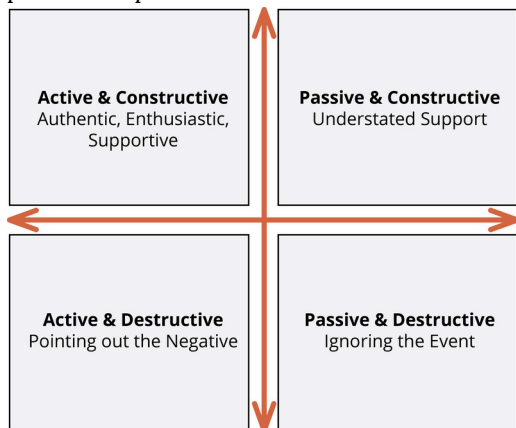


Figure 1. Types of Responding (figure used with permission from

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 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, <https://goo.gl/n1AJwg>, CC BY-SA 3.0, <https://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, <https://goo.gl/IADzgz>, CC BY-NC-ND 2.0, <https://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, <https://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.