Social Psychology

13

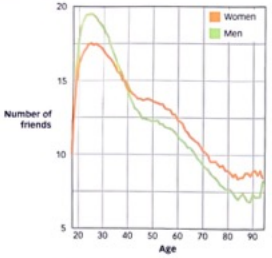
- The Survival Game
- The Mating Game
- Controlling Others
- Understanding Others

THE SENIOR SENATOR FROM ARIZONA AND THE FORMER PRESIDENT OF SOUTH AFRICA were different in many ways. One was a White man; one was a Black man. One was a right-wing conservative; one was a left-wing socialist. But both were victims of torture. Senator John McCain was an American navy pilot when he was shot down and captured by the North Vietnamese, and President Nelson Mandela was a political activist when he was imprisoned for 27 years in South Africa. Both men experienced a variety of tortures at the hands of their captors, and both agreed about which was the worst. It has nothing to do with electric shock or waterboarding. It does not require rope or razor blades. It is a remarkably simple technique that has been used for millennia to break the body and destroy the mind. It is called solitary confinement. John McCain spent two years in a cell by himself, and Nelson Mandela spent six. "It crushes your spirit and weakens your resistance more effectively than any other form of mistreatment," said McCain. "Nothing is more dehumanizing," said Mandela.

Torture often causes pain by depriving people of something they desperately need, such as oxygen, water, food, or sleep. As it turns out, the need for social interaction is just as vital. "I found solitary confinement the most forbidding aspect of prison life," Mandela wrote. "I have known men who took half a dozen lashes in preference to being locked up alone." Indeed, studies of prisoners show that extensive periods of isolation can induce symptoms of psychosis (Grassian, 2006), and even in smaller doses, social isolation takes a toll. Ordinary people who are socially isolated are more likely to become depressed, to become ill, and to die prematurely. In fact, being socially isolated is as bad for your health as being obese or smoking (Cacioppo & Patrick, 2008; Holt-Lunstad et al., 2015).

John McCain and Nelson Mandela each spent years in isolation and described it as the worst form of torture.

◀ STONE/GETTY IMAGES



▲ **Figure 13.1**
SOCIAL NETWORKS Human beings build large social networks. A recent analysis of the mobile phone calls of 3.2 million people revealed that the size of a person's social network peaks around the age of 25 and decreases thereafter [data from Bhattacharya et al., 2016].

WHAT KIND OF ANIMAL GETS SICK OR GOES CRAZY when left alone? Our kind. That's because of the 8.7 million species on our planet, human beings are the most social. A few other species—ants, bees, wasps, termites, and naked mole rats—build complex societies in which large numbers of individuals divide labor and cooperate for mutual benefit, but only humans build complex societies of genetically *unrelated* individuals (see **FIGURE 13.1**). Indeed, some scientists believe that the challenges of living and working in complex societies is the main reason that our brains have gotten so much bigger in the last 2 million years [Sallet et al., 2011; Shultz & Dunbar, 2010; Smith et al., 2010].

Social psychology is *the study of the causes and consequences of sociality.* Every animal faces the twin problems of survival and reproduction, and as you'll see in the first two sections of this chapter, sociality is how our species solved those problems. In the third section, you'll see how social creatures like us learn to influence and control each other's behavior by appealing to each other's basic motives. Finally, in the fourth section, you'll see how we gather and use information to make judgments about each other—sometimes for better and often for worse.

The Survival Game

Learning Objectives

- Identify biological and cultural influences on aggression.
- Explain why cooperation is risky.
- Describe the costs and benefits of groups.
- Distinguish between apparent and genuine altruism.

DATA VISUALIZATION
Do Humans Have a "Social Brain"?
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social psychology The study of the causes and consequences of sociality.

aggression Behavior whose purpose is to harm another.

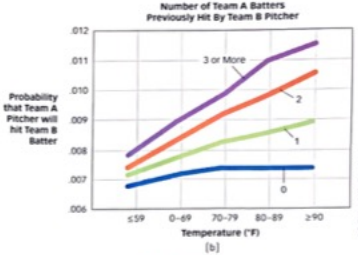
frustration–aggression hypothesis A principle stating that animals aggress when their goals are frustrated.

To survive, all animals must obtain resources such as food, water, and shelter. The problem is that these resources are always scarce, because if they weren't, then the population would increase until they were. Animals often solve this problem by hurting each other or helping each other. *Hurting* and *helping* are antonyms, so you might expect them to have little in common, but as you are about to see, these disparate behaviors are actually two solutions to the same problem (Hawley, 2002).

AGGRESSION

What is the simplest way to solve the problem of scarce resources? Take what you want and kick the stuffing out of anyone who tries to stop you. **Aggression** is *behavior whose purpose is to harm another* (Anderson & Bushman, 2002; Bushman & Huesmann, 2010), and it is a strategy used by just about every animal on the planet. Aggression is not something that animals do for sport but rather as a way of achieving their goals. The **frustration–aggression hypothesis** suggests that *animals aggress when their goals are frustrated* (Dollard et al., 1939). The chimp wants the banana (*goal*), but the pelican is about to take it (*frustration*), so the chimp threatens the pelican with its fist (*aggression*). The robber wants the money (*goal*), but the teller has it all locked up in a vault (*frustration*), so the robber threatens the teller with a gun (*aggression*). Frustrated goals don't cause aggression directly. Rather, they induce negative affect (commonly known as *feeling bad*), and negative affect is what triggers aggression (Berkowitz, 1990). That's why rats that are given painful electric shocks will attack anything in their cage, including other animals, stuffed dolls, or even tennis balls (Kruk et al., 2004). And that's why experimental participants who are required to immerse their hands in ice water or to sit in a very hot room are more likely to blast others with noise weapons or make others eat hot chili (Anderson, 1989; Anderson, Bushman, & Groom, 1997). The idea that negative affect causes aggression may help


(a)



(b)

▲ **Figure 13.2**
HOT AND BOTHERED (a) Professional pitchers have awfully good aim, so when they hit batters with the baseball, it's safe to assume it wasn't an accident. (b) This graph shows data from nearly 60,000 major-league baseball games. As you can see, as the temperature on the field increases, so does the likelihood that Team A batters will be hit by Team B pitchers. This effect becomes even stronger when Team B batters have previously been hit by Team A pitchers, suggesting that the Team B pitcher is seeking revenge [Larrick et al., 2011].

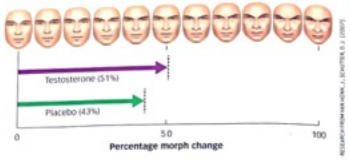
explain why so many acts of violence—from murders to brawls—are more likely to occur on hot days when people are feeling irritated and uncomfortable (Van Lange, Rinderu, & Bushman, 2016; see **FIGURE 13.2**). It is worth noting that not every kind of negative affect gives rise to aggression; for example, when people feel disgusted, they actually become less likely to aggress (Pond et al., 2012).

How Biology Influences Aggression

People aggress when they feel bad. But not everyone does, and no one does all the time. So who does, and when, and why? If you want to know whether someone is likely to behave aggressively and you can ask them just one question, it should be this: "Are you a man?" (Wrangham & Peterson, 1997). Violence is one of the most gender specific of all phenomena. Crimes such as assault, battery, and murder are almost exclusively perpetrated by men (and especially by young men), who are responsible for about 90% of the murders and 80% of the violent crimes in the United States (Strueber, Lueck, & Roth, 2006). Although socialization practices all over the world encourage males to be more aggressive than females (more on that shortly), male aggressiveness is not merely the product of playing with toy soldiers or watching football as a child. Studies show that aggression is strongly correlated with the presence of a hormone called *testosterone*, which is typically higher in men than in women, in younger men than in older men, and in violent criminals than in nonviolent criminals (Dabbs et al., 1995).

Testosterone appears to promote aggression not by making people feel negative affect, but by making them feel powerful and confident in their ability to prevail in interpersonal conflicts (Eisenegger et al., 2010; Eisenegger, Haushofer, & Fehr, 2011). Male chimpanzees with high testosterone tend to stand tall and hold their chins high (Muller & Wrangham, 2004); human beings with high testosterone walk more purposefully, focus more directly on the people they are talking to, and speak in a more forward and independent manner (Dabbs et al., 2001). Testosterone also makes people more sensitive to provocation (Ronay & Galinsky, 2011) and less sensitive to signs of retaliation. Participants in one experiment watched a face as its expression changed from neutral to threatening and were asked to respond as soon as the expression became threatening (see **FIGURE 13.3**). Participants who were given a small dose of testosterone were slower to recognize the threatening expression (van Honk & Schutter, 2007; see also Olsson et al., 2016). As you can imagine, failing to recognize that the guy you are arguing with over a parking space is getting really, really mad is a fairly good way to end up in a fight.

▶ Figure 13.3
I SPY THREAT Subjects who were given testosterone needed to see a more threatening expression before they were able to recognize it as such (van Honk & Schutter, 2007).



One of the most reliable methods for eliciting aggression in men is to challenge their status or dominance. Indeed, three quarters of all murders can be classified as "status competitions" or "contests to save face" (Daly & Wilson, 1988). Contrary to popular wisdom, it isn't men with low self-esteem who are most prone to aggression but men with unrealistically *high* self-esteem, because those men are especially likely to perceive others' actions as a challenge to their inflated sense of their own worth (Baumeister, Smart, & Boden, 1996). Men seem especially sensitive to these challenges when they are competing for the attention of women (Ainsworth & Maner, 2012), and losing those competitions can be deadly—for women. The rate at which women in their reproductive years die at the hands of a current or former partner is about as high as the rate at which they die of cancer (Garcia-Moreno et al., 2006).

So are women all sweetness and light? Hardly. Women can be just as aggressive as men, but their aggression tends to be more premeditated than impulsive, and more likely to be focused on obtaining or protecting an actual resource rather than status. Women are much less likely than men to aggress without provocation or to aggress in ways that cause physical injury, but they are only slightly less likely than men to aggress when provoked or to aggress in ways that cause psychological injury (Bettencourt & Miller, 1996; Eagly & Steffen, 1986). Indeed, women may even be more likely than men to aggress by causing social harm, for example, by ostracizing others (Benenson et al., 2011) or by spreading malicious rumors about them (Richardson, 2014).

How Culture Influences Aggression

"Our ancestors have bred pugnacity into our bone and marrow," wrote William James, "and thousands of years of peace won't breed it out of us" (1911, p. 272). Is that true? If James was saying that aggression is part of our biological heritage and that humans will always be capable of it, then yes, he was probably right. But if he was saying that our biological heritage means that we are destined to rape, pillage, and plunder our way through the rest of history, then he was clearly wrong. Indeed, human beings have become remarkably less aggressive in just the last century alone. As the psychologist Steven Pinker (2007) noted:

Men often aggress in response to status threats. In 2005, John Anderson (right) called Russell Tavares (left) a "nerd" on a social networking site. So Tavares got in his car, drove 1,300 miles, and burned down Anderson's trailer. "I didn't think anybody was stupid enough to try to kill anybody over an Internet fight," said Anderson. Tavares was later sentenced to 7 years in prison.

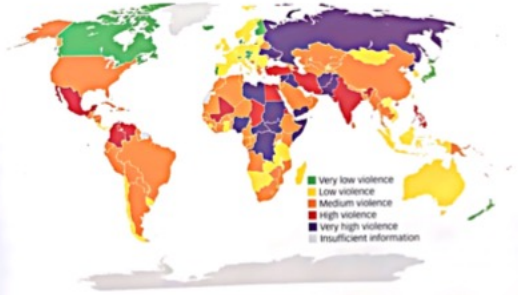
> We have been getting kinder and gentler. Cruelty as entertainment, human sacrifice to indulge superstition, slavery as a labor-saving device, conquest as the mission statement of government, genocide as a means of acquiring real estate, torture and mutilation as routine punishment, the death penalty for misdemeanors and differences of opinion, assassination as the mechanism of political succession, rape as the spoils of war, pogroms as outlets for frustration, homicide as the major form of conflict resolution—all were unexceptionable features of life for most of human history. But, today, they are rare to inconsistent in the West, far less common elsewhere than they used to be, concealed when they do occur, and widely condemned when they are brought to light.

Just as levels of aggression can change over time, so too can they differ across geographical boundaries. For example, violent crime in the United States is far more prevalent in the South, where men are taught to react aggressively when they feel their status has been challenged, than in the North, where men are taught to resolve conflicts by appealing to authority (Brown, Osterman, & Barnes, 2009; Nisbett & Cohen, 1996). In one set of experiments, researchers insulted American volunteers from northern and southern states and found that southerners were more likely to experience a surge of testosterone and to feel that their status had been diminished by the insult (Cohen et al., 1996). When a large man walked directly toward them as they were leaving the experiment, the insulted southerners got "right up in his face" before giving way, whereas northerners just stepped aside. On the other hand, in the control condition in which participants were *not* insulted, southerners stepped aside *before* northerners did, which is to say that when they aren't being insulted, southerners are generally more polite!

Variation over time and geography shows that culture can play an important role in determining whether our innate capacity for aggression will result in aggressive behavior (Leung & Cohen, 2011; see **FIGURE 13.4**). People learn by example, which is why some researchers believe that watching violent television shows and playing violent video games can make people more aggressive (Anderson et al., 2010) and less cooperative (Sheese & Graziano, 2005; cf. Ferguson, 2010). But cultures can discourage aggression as well as promote it. (Fry, 2012). For example, the Inuit people of the Canadian Arctic resolve conflicts not with guns or knives, but with song contests in

Baseball pitchers born in southern states are 40% more likely than those born in northern states to hit batters with their pitches (Timmerman, 2007).

▼ Figure 13.4
THE GEOGRAPHY OF VIOLENCE As this map shows, some places are more violent than others. In 2016, Iceland was the least violent nation on Earth, and Syria was the most violent.



Depending on where you live, violence may be normal, or it may be unthinkable. In Iraq, where children are exposed to the brutality of extremist groups such as ISIS on a daily basis, boys stage a mock execution as part of their daily play. In India, where Jain children are taught that every form of life is sacred, a girl wears a mask at all times so that she will not harm insects or microbes by inhaling them.

which the person who delivers the most effective verbal put-down of his opponent is declared the winner (Briggs, 2000).

COOPERATION

Two wolves can fight over a dead rabbit, or they can work together to bring down a gazelle. Aggression may be the simplest way to solve the problem of scarce resources, but it is rarely the most effective way, because when individuals work together they can often each get more resources than either could get alone. **Cooperation** is *behavior by two or more individuals that leads to mutual benefit* (Rand & Nowak, 2016), and it is one of our species' greatest achievements—right up there with language, fire, and dental floss (Axelrod, 1984; Axelrod & Hamilton, 1981; Nowak, 2006). Every roadway and supermarket, every iPad and cell phone, every ballet and surgery is the result of cooperation, and it is difficult to think of an important human achievement that could have occurred without it. But if the benefits of cooperation are clear, then why don't we cooperate all the time?

cooperation Behavior by two or more individuals that leads to mutual benefit.

Cooperation Is Risky

Although cooperation is potentially beneficial, it is also risky, and a simple game called the *prisoner's dilemma* shows how. Imagine that you and your friend Tucker have been arrested for hacking into a bank's mainframe and directing a few million dollars to your personal accounts. The police have found some stolen bank codes on your laptops but they don't know which of you actually did the hacking. You and Tucker are now being interrogated in separate rooms, and the detectives ask each of you to sign a statement saying that the other was the actual hacker. They explain that if you both sign, then you'll both get 2 years in prison for hacking, and if you both refuse to sign, then you'll both get 1 year in prison for possession of the stolen codes. However, if one of you signs and the other refuses, then the one who signs will go free, and the one who refuses will get 3 years in prison. What should you do (other than math)? As **FIGURE 13.5** shows, it would be great if you and Tucker cooperated

	Tucker refuses to sign (i.e., he cooperates with you)	Tucker signs (i.e., he does not cooperate with you)
You refuse to sign (i.e., you cooperate with Tucker)	You both serve 1 year	You serve 3 years Tucker goes free
You sign (i.e., you do not cooperate with Tucker)	You go free Tucker serves 3 years	You both serve 2 years

► Figure 13.5
THE PRISONER'S DILEMMA GAME The prisoner's dilemma game illustrates the risk of cooperation. Mutual cooperation leads to a moderate benefit to both players, but if one player cooperates and the other one doesn't, the cooperator gets no benefit and the noncooperator gets a large benefit.

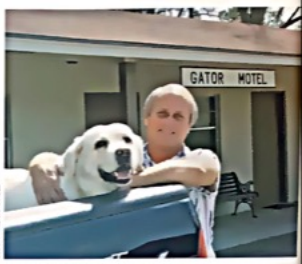
and agreed not to sign, because you'd both get off with a very light sentence. But if you agree to cooperate and then Tucker gets sneaky and decides to sign, you'll serve a long sentence while Tucker goes free. So should you cooperate with Tucker or not? Oh my. What a dilemma!

The prisoner's dilemma is not just a game (which is good, because compared with Grand Theft Auto V, it sort of sucks). It is a metaphor for the potential costs and benefits of cooperation in everyday life. For example, consider the dilemma Americans face at tax time. If everyone pays their taxes, then the government can afford to maintain the roads and bridges and everyone can use them. If no one pays their taxes, then the streets will buckle, the bridges will fall down, and everyone will be stranded. So there is a *moderate* benefit to everyone if everyone cooperates and pays their taxes. Alas, there is a *huge* benefit to any sneaky individual who doesn't cooperate because that person pays nothing and gets to use all the roads and bridges free of charge. So should you pay your fair share and risk being a chump, or cheat on your taxes and risk having the bridges collapse? If you are like most citizens, you are willing to cooperate in this situation, but you worry that others won't do the same—and *that's* the dilemma that cooperation so often produces.

Because so much of social life is essentially a prisoner's dilemma game, it is not surprising that people in all cultures value and reward those who play it honorably, and despise and sanction those who don't (Feinberg, Willer, & Shultz, 2014). When people are asked what single quality they most want those around them to have, the answer is *trustworthiness* (Cottrell, Neuberg, & Li, 2007), and when those around us fail to demonstrate that quality we react bitterly. For example, the *ultimatum game* requires one player (the divider) to divide a monetary prize into two parts and offer one of the parts to a second player (the decider) who can either accept or reject the offer. If the decider rejects the offer, then both players get nothing and the game is over. Studies show that deciders typically reject offers that they consider unfair because they'd rather get nothing than get cheated (Fehr & Gaechter, 2002; Thaler, 1988). In other words, people dislike unfairness so much that they will actually give up money in order to punish someone who has treated them unfairly. And it isn't just people who hate unfairness. In one study, monkeys were willing to work for a slice of cucumber until they saw the experimenter give another monkey a more delicious food for doing less work (Brosnan & DeWaal, 2003). At that point the first set of monkeys went on strike and refused to participate further.

How Groups Minimize the Risks of Cooperation

Cooperation requires that we take a risk by benefiting those who have not yet benefited us and then *trusting* them to do the same. But whom can we trust? A **group** is *a collection of people who have something in common that distinguishes them from others*. Every one of us is a member of many groups—from families and teams to religions and nations. Although these groups are quite different, they all have one thing in common, which is that the people in them tend to be especially nice to each other. **Prejudice** is *an evaluation of another person based solely on their group membership* (Dovidio & Gaertner, 2010), and although most people use this word to denote negative evaluations, psychologists use it to denote both positive and negative evaluations (Allport, 1954). Research suggests that although people are not always negatively prejudiced against members of other groups, they are almost always positively prejudiced toward members of their own groups (Brewer, 1999; DiDonato, Ullrich, & Krueger, 2011). This tendency—known as *in-group favoritism*—is evolutionarily ancient (Fu et al., 2012; Mahajan et al., 2011), arises early in development (Dunham, Chen, & Banaji, 2013), and is easily elicited (Efferson, Lalive, & Fehr, 2008). Even when people are randomly assigned to be members of meaningless groups such as "Group 1" or "Group 2," they still favor members of their own group (Hodson & Sorrentino, 2001; Locksley, Ortiz, & Hepburn, 1980). It appears that simply knowing that "I'm one of us and not one of *them*" is sufficient to create



Kevin Hart owns the Gator Motel in Fargo, Georgia, which he runs on an honor system: Guests arrive, stay as long as they like, and leave their payment on the dresser. If just a few people cheated, it would not affect the room rates, but if too many cheated, then prices would have to rise. How would you decide whether to pay or to cheat? Before answering this question, please notice the large dog.

group A collection of people who have something in common that distinguishes them from others.

prejudice A positive or negative evaluation of another person based on their group membership.

common knowledge effect The tendency for group discussions to focus on information that all members share.

group polarization The tendency for groups to make decisions that are more extreme than any member would have made alone.

groupthink The tendency for groups to reach consensus in order to facilitate interpersonal harmony.

in-group favoritism (Tajfel et al., 1971). Because group members can be relied on to favor each other, group membership makes cooperation less risky.

But if groups have benefits, they also have costs. For example, when groups try to make decisions, they rarely do better than the best member would have done alone—and they often do worse (Minson & Mueller, 2012). There are at least four reasons that this happens:

- Groups usually don't capitalize fully on the expertise of their members (Hackman & Katz, 2010). For instance, groups (such as a school board) often give too little weight to the opinions of members who are experts (the professor) and too much weight to the opinions of members who happen to be high in status (the mayor) or especially talkative (the mayor).
- The **common knowledge effect** is *the tendency for group discussions to focus on information that all members share* (Gigone & Hastie, 1993; Kerr & Tindale, 2004). What makes this a problem is that the information everyone shares (the size of the gymnasium) is often relatively unimportant, whereas the truly important information (how a school in a different district solved its budget crisis) is known to just a few.
- A group whose members come to the table with moderate opinions ("We should probably just renovate the auditorium") can end up making an extreme decision ("Let's build a new high school!") simply because, in the course of discussion, each member was exposed to many different arguments in favor of a single position (Isenberg, 1986). **Group polarization** is *the tendency for groups to make decisions that are more extreme than any member would have made alone* (Myers & Lamm, 1975).
- Group members usually care about how other members feel and are sometimes reluctant to "rock the boat" even when it needs a good rocking. **Groupthink** is *the tendency for groups to reach consensus in order to facilitate interpersonal harmony* (Janis, 1982). Harmony is important (especially if the group is a choir), but studies show that groups often sacrifice the soundness of their decisions in order to achieve it (Turner & Pratkanis, 1998).

For all of these reasons, then, groups underperform individuals in a wide variety of tasks. But the costs of groups go beyond making some suboptimal decisions. People in groups sometimes do truly terrible things that none of their members would do alone (Yzerbyt & Demoulin, 2010). Lynching, rioting, gang-raping—why do human beings sometimes behave so badly when they assemble in groups? Individuals are especially likely to behave well when they consider their personal values. You may want to steal the Rolex you've had your eye on for weeks or plant a kiss on the attractive

When are people most and least likely to cheat? Researchers posted a picture above an office coffee pot, and found that people were less likely to take coffee without paying when the picture showed eyes than when it showed flowers (Bateson, Nettle, & Roberts, 2006). Other researchers paid people to sit alone in a room and complete puzzles for cash and found that people were less likely to cheat when the lights was bright than when the lights were low (Zhong, Bohns, & Gino, 2010).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stranger you've had your eye on for months, but then you consider the fact that felony theft and sexual assault conflict with your personal values, and so you refrain. But research shows that when individuals assemble in groups, they stop thinking about what is going on inside and instead pay attention to what is going on outside. Their attention is drawn toward others and away from themselves, which makes them less likely to consider their personal values when they take action (Wicklund, 1975). **Deindividuation** occurs *when immersion in a group causes people to become less concerned with their personal values* (Postmes & Spears, 1998) and can lead them to do things they might not do on their own (Baumeister, Ainsworth, & Vohs, 2015).

A second reason that people in groups sometimes behave so badly is **diffusion of responsibility**, which refers to *the tendency for individuals to feel diminished responsibility for their actions when they are surrounded by others who are acting the same way.* Diffusion of responsibility is the main culprit behind something you've probably observed many times—a phenomenon that psychologists call **social loafing**, which is *the tendency for people to expend less effort when in a group than when alone.* For example, individuals in large groups are less likely than individuals in small groups to clap loudly after a performance (Latané, Williams, & Harkins, 1979), exert effort in a team sport (Williams et al., 1989), leave good tips at restaurants (Freeman et al., 1975), donate money to charity (Wiesenthal, Austrom, & Silverman, 1983), and even say hello to passersby (Jones & Foshay, 1984). But the diffusion of responsibility has much more pernicious effects. For example, studies of **bystander intervention**—which is *the act of helping strangers in an emergency situation*—reveal that people are less likely to help an innocent person in distress when there are many other bystanders present, simply because they assume that the other bystanders are collectively more responsible than they are (Darley & Latané, 1968; Fischer et al., 2011). If you saw a fellow student cheating on an exam, you'd probably feel more responsible for reporting the incident if you were taking the exam in a group of 3 than in a group of 3,000 because you'd have a greater share of the responsibility in the first instance than in the second (see **FIGURE 13.6**).

If groups make bad decisions and foster bad behavior, then might we be better off without them? Probably not. Not only do groups minimize the risks of cooperation, but they also contribute to our general well-being (Myers & Diener, 1995). People who are excluded from groups are typically anxious, lonely, depressed, and at increased risk for illness and premature death (Cacioppo & Patrick, 2008; Cohen, 1988; Leary, 1990). Belonging to groups is not just a source of psychological and physical well-being but also a source of identity (Ellemers, 2012; Leary, 2010; Tajfel & Turner, 1986), which is why people typically describe themselves by listing the groups of which they are members ("I'm a Canadian architect"). Groups may sometimes cause us to misjudge and misbehave, but they are also key to our cooperativeness, our health, and our happiness.

deindividuation A phenomenon that occurs when immersion in a group causes people to become less aware of their individual values.

diffusion of responsibility The tendency for individuals to feel diminished responsibility for their actions when they are surrounded by others who are acting the same way.

social loafing The tendency for people to expend less effort when in a group than when alone.

bystander intervention The act of helping strangers in an emergency situation.

◄ **Figure 13.6**
MOB SIZE AND LEVEL OF ATROCITY Groups are capable of horrible things. These two men were rescued by police just as residents of their town prepared to lynch them for stealing a car. Because larger groups provide more opportunity for diffusion of responsibility, their atrocities become more horrible as the ratio of mob members to victims becomes larger (Leader, Mullen, & Abrams, 2007).

In 2013, a customer at a Tim Horton's drive-through in Winnipeg, Canada decided to perform a random act of kindness and pay for the order of the car behind him. This caused a chain reaction of altruism as 228 consecutive cars received free orders and, in turn, decided to pay for the order of the folks in the next car. The cascade ended when a customer who received four free coffees refused to pay for the car behind him, which had ordered just three coffees.

ALTRUISM

Cooperation solves the problem of scarce resources. But is that the only reason we cooperate with others? Aren't we ever just . . . well, *nice*? **Altruism** is *intentional behavior that benefits another at a cost to oneself*, and for centuries, scientists and philosophers have argued about whether people are ever truly altruistic. That may seem like an odd argument to have. After all, people give their blood to the injured, their food to the homeless, and their time to the elderly. We volunteer, donate, contribute, and tithe. People do nice things like these all the time—so why is there any debate about whether people are altruistic?

Because behaviors that appear to be altruistic often have hidden benefits for those who do them. Consider some examples in the animal world. Squirrels emit alarm calls when they see a predator, which puts them at increased risk of being eaten but allows their fellow squirrels to escape. Honeybees spend their lives caring for the offspring of the queen rather than bearing offspring of their own. These behaviors appear to be altruistic, but in fact they are not, because the animals who give help are *genetically related* to the animals who receive it. The squirrels most likely to emit alarm calls are those most closely related to the other squirrels in the den (Maynard-Smith, 1965), and although honeybees do raise their queen's offspring, an odd genetic quirk causes honeybees to be more closely related to those offspring than they would be to their own. When an animal promotes the survival of its relatives, it is actually promoting the survival of its own genes (Hamilton, 1964). **Kin selection** is *the process by which evolution selects for individuals who cooperate with their relatives*, and although cooperating with related individuals may look altruistic, it's actually just selfishness in disguise.

So what about cooperating with unrelated individuals? Well, that isn't necessarily altruistic either. Male baboons will sometimes risk injury to help an unrelated male baboon win a fight, and monkeys will spend time grooming unrelated monkeys when they could be doing something else. Are these examples of altruism? Not really, because as it turns out, the animal that gives favors today tends to get favors tomorrow. **Reciprocal altruism** is *behavior that benefits another with the expectation that those benefits will be returned in the future*, and despite the second word in this term, there's nothing altruistic about it (Trivers, 1972). Indeed, reciprocal altruism is merely cooperation extended over time.

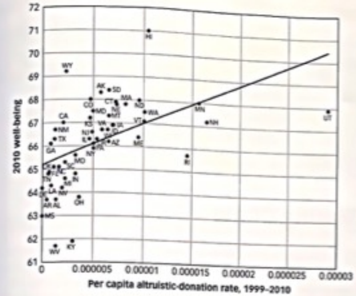
Wesley Autrey jumped onto the subway tracks to save a stranger's life. Would you have done what he did? Are you sure?

The behavior of nonhuman animals provides little if any evidence of genuine altruism (cf. Bartal, Decety, & Mason, 2011). So what about us? Are we any different? Like other animals, we tend to help our kin more than strangers (Burnstein, Crandall, & Kitayama, 1994; Komter, 2010), and we tend to expect those we help to help us in return (Burger et al., 2009). But unlike other animals, we *do* sometimes provide benefits to complete strangers who have no chance of repaying us (Batson, 2002; Warneken & Tomasello, 2009). We hold the door for people who share precisely none of our genes and tip waiters in restaurants to which we will never return. We give strangers directions, advice, and sometimes even our parking spots (see A World of Difference: Do Me a Favor?). And we do much more than that (see **FIGURE 13.7**). In 2007, Wesley Autrey noticed a student who was having an epileptic seizure at the 137th Street subway station in New York City. The student stumbled and fell onto the tracks just as a train was approaching. So Autrey jumped onto the tracks and lay on top of the student, allowing the train to pass over both of them with only an inch to spare. "I had a split-second decision to make," Autrey said. "I don't feel like I did something spectacular; I just saw someone who needed help. I did what I felt was right" (Buckley, 2007). Clearly, human beings sometimes help others even when the personal costs are potentially staggering. We are capable of genuine altruism, and some studies suggest that we are even more altruistic than we realize (Gerbasi & Prentice, 2013; Miller & Ratner, 1998).

altruism Behavior that benefits another without benefiting oneself.

kin selection The process by which evolution selects for individuals who cooperate with their relatives.

reciprocal altruism Behavior that benefits another with the expectation that those benefits will be returned in the future.



◄ **Figure 13.7**
ALTRUISM Every year, roughly a hundred Americans donate a kidney to a complete stranger. As this graph shows, these altruists are most likely to live in states that are high in well-being, suggesting that feeling happy and satisfied with one's life may play a role in the decision to help others at a cost to oneself (data from Brethel-Haurwitz & Marsh, 2014).

A WORLD OF DIFFERENCE

Do Me a Favor?

One of the many things that distinguish human beings from other animals is that we often do favors for strangers. Often, but not always. If a stranger walked up to you on the street and asked for directions, you'd tell him; but if he asked to borrow your credit card or move into your spare bedroom, you'd tell him to keep walking. Some requests are reasonable, and some are outrageous. So which are which?

The answer, it seems, depends on your cultural background. In one study (Jonas et al., 2009), researchers approached college students in a campus parking lot and asked them for one of two favors. Some students were asked to give up their parking privileges for a week ("Could I borrow your parking card this week so I can participate in a research project in a nearby building?") and others were asked to give up everyone's parking privileges for a week ("Would you mind if we closed the entire parking lot this week for a tennis tournament?"). Both of these requests required the students to relinquish their parking spots for a stranger, so both were a bit irritating. But which one was more irritating?

As the figure shows, European American students were more irritated when the researchers asked them—but only them—to give up their parking privileges. As members of an individualistic culture in which every person is expected to look out for his own interests, these students were especially annoyed when the researcher singled them out and asked them to give up something that everyone else would be allowed to keep. European American students didn't mind suffering as long as they weren't the only ones to suffer. But Latino students and Asian American students had precisely the opposite reactions. As members of collectivist cultures in which the needs of the many outweigh the needs of the few, these students were especially annoyed when the researcher suggested that many students should give up their parking privileges so that a few students could participate in a tennis tournament. Latino and Asian American students didn't mind suffering as long as everyone didn't have to.

Social life involves favors—soliciting them, offering them, doing them, and denying them. When is a request too big to grant? It all depends on who you ask.

Build to the Outcomes

1. How does the frustration-aggression hypothesis explain aggressive behaviors?
2. How and why does gender influence aggression?
3. What evidence suggests that culture can influence aggression?
4. What are the potential costs and benefits of cooperation?
5. How do groups lower the risks of cooperation?
6. How and why do individuals behave differently when they are in groups?
7. How can we explain selfish behaviors that appear to be altruistic?

The Mating Game

Learning Outcomes

- Explain the biological and cultural factors that influence selectivity in mate choice.
- Describe the situational, physical, and psychological factors that determine feelings of attraction.
- Describe the factors that cause people to get married and divorced.

All animals must survive and reproduce. As you have seen, social behavior can be very beneficial for survival. But it is an absolute prerequisite for reproduction, which doesn't happen until two people get very, very social with each other. The first step on the road to reproduction is finding someone who wants to travel that road with us, so let's start by seeing how humans do that.

Among sea horses, it is the male that carries the young, and not coincidentally, males are more selective than are females. If human males could become pregnant, how might their behavior change?

DEREK GEITH IMAGES

DR. PAUL ZAHL/SCIENCE SOURCE

SELECTIVITY

With the exception of a few well-known celebrities, most people don't mate randomly. Rather, they *select* their sexual partners, and as anyone who has lived on earth for more than a few minutes knows, women tend to be more selective than men (Feingold, 1992a; Fiore et al., 2010). When researchers arranged for an attractive man or woman to approach opposite-sex strangers on a college campus and ask, "Would you go out with me?" they found that roughly half of the men who were approached and half of the women who were approached agreed to the request. On the other hand, when the attractive person said to the stranger, "Would you go to bed with me?" exactly *none* of the women and *three quarters* of the men agreed to the request (Clark & Hatfield, 1989). There are many reasons that a woman might turn down a sexual offer from a strange man under such circumstances (Conley, 2011), but research suggests that women tend to be choosier than men under most other circumstances as well (Buss & Schmitt, 1993; Schmitt et al., 2012).

Why are women choosier? One reason is biology. Men produce billions of sperm in their lifetimes, their ability to conceive a child tomorrow is not inhibited by having conceived one today, and conception has no significant physical costs. Therefore, if a man makes a "mating error" and selects a woman who does not produce healthy offspring or who won't do her part to raise them, he's lost nothing but a few minutes and a teaspoon of bodily fluid. But women produce a small number of eggs in their lifetimes, conception eliminates their ability to conceive for at least 9 months, and pregnancy produces physical changes that increase their nutritional requirements and put them at risk of illness and death. So if a woman makes a mating error, she has lost a precious egg, borne the costs of pregnancy, risked her life in childbirth, and missed at least 9 months of other reproductive opportunities. Basic biology makes sex a riskier proposition for women than for men.

But culture and personal experience also play an important role in determining how selective a person will be (Petersen & Hyde, 2010; Zentner & Mitura, 2012). For example, women are typically approached by men more often than men are approached by women (Conley et al., 2011), which means that women can afford to be more selective simply because they have a larger selection to choose from! Another reason that women are more selective is that in most cultures, the reputational costs of promiscuity are higher for women than for men (Eagly & Wood, 1999; Kasser & Sharma, 1999). Indeed, when the potential costs of mating errors are high for men (e.g., when they are choosing a long-term mate rather than a short-term date), they can be every bit as choosy as women (Kenrick et al., 1990). In fact, as The Real World: Making the Move explains, relatively minor changes in the courtship ritual can actually cause men to be *choosier* than women. The point is that biology makes sex a riskier proposition for women than for men, but other factors can exaggerate, equalize, or even reverse those risks. The higher the risk, the more selective people of both sexes tend to be.

THE REAL WORLD

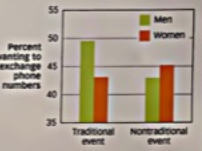
Making the Move

Women are generally choosier about their romantic partners than men are, and most scientists believe this has a lot to do with differences in their reproductive biology. But psychologists Eli Finkel and Paul Eastwick (2009) thought that it might also have something to do with the nature of the courtship dance itself.

When it comes to approaching a potential romantic partner, the person with the most interest should be most inclined to "make the first move." Of course, in most cultures, men are *expected* to make the first move, which led the researchers to wonder whether making the first move might *cause* men to think that they have more interest in a woman than she has in them. In other words, could the rule about first moves be one of the *reasons* that women are choosier?

To find out, the researchers teamed up with a local speed-dating service and created two kinds of speed-dating events. In the traditional event, the women stayed in their seats and the men moved around the room, stopping to spend a few minutes chatting with each woman. In the nontraditional event, the men stayed in their seats and the women moved around the room, stopping to spend a few minutes chatting with each man. When the event was over, the researchers asked each man and woman privately to indicate whether they wanted to exchange phone numbers with any of the potential partners they'd met.

The results were striking (see the accompanying figure). When men made the move (as they traditionally do), women were the choosier gender. That is, men wanted to get a lot more phone numbers than women wanted to give. But when women made the move, men were the choosier gender, and women asked for more numbers than men were willing to hand over. Apparently, approaching someone makes us eager, and being approached makes us cautious. One reason that women are so often the choosier gender may simply be that in most cultures, men are expected to make the first move. All of this suggests that if you'd like to meet the attractive person at the next table at Starbucks, you should probably avoid saying, "Can I sit with you?" and instead try saying, "Would you like to sit with me?"



DAVID GILBERT KOSHKIN/COM

ATTRACTION

For most of us, there is a very small number of people with whom we are willing to have sex, an even smaller number of people with whom we are willing to have children, and a staggeringly large number of people with whom we are unwilling to have either. So when we meet someone new, how do we decide which of these categories they belong in? Many things go into choosing a date, a lover, or a partner for life, but perhaps none is more important than the simple feeling we call *attraction* (Berscheid & Reis, 1998). Research suggests that this feeling is the result of situational, physical, and psychological factors.

Attraction Depends on Situational Factors

We tend to think that we select our romantic partners on the basis of their personalities, appearances, and so on—and we do. But we get to select only from the pool of

mere exposure effect The tendency for liking to increase with the frequency of exposure.

people we've met, and the likelihood of meeting a potential partner naturally increases with proximity. Before you ever start ruling out potential romantic partners, geography has already ruled out more than 99.99% of the world's population for you (Festinger, Schachter, & Back, 1950). Proximity not only provides the opportunity for attraction, it also provides the motivation. When you are assigned a roommate or an office mate, you know that your day-to-day existence will be a whole lot easier if you like them than if you don't, so you go out of your way to notice their good qualities and ignore their bad ones. When research participants are told that they will later interact with another person, they immediately like that person more, even before the interaction begins (Darley & Berscheid, 1967).

Proximity breeds attraction for another reason as well. The **mere exposure effect** is *the tendency for liking to increase with the frequency of exposure* (Bornstein, 1989; Zajonc, 1968). Every time we encounter a person, that person becomes a bit more familiar to us, and research shows that people generally prefer familiar to unfamiliar stimuli. For instance, in some experiments, geometric shapes, faces, or alphabetical characters were flashed on a computer screen so quickly that participants were unaware of having seen them. Participants were then shown some of the "old" stimuli that had been flashed across the screen as well as some "new" stimuli that had not. Although they could not reliably say which stimuli were old and which were new, they *liked* the old stimuli more than the new ones (Monahan, Murphy, & Zajonc, 2000). The fact that mere exposure leads to liking may explain why college students who were randomly assigned to seats during a brief psychology experiment were likely to be friends with the person they sat next to a full year later (Back, Schmukle, & Egloff, 2008). Although there are some circumstances under which "familiarity breeds contempt" (Norton, Frost, & Ariely, 2007), for the most part, familiarity seems to breed liking (Reis et al., 2011).

Attraction can be the result of geographical accidents that put people in the same place at the same time, but some places and times are clearly better than others. In one study, researchers observed men as they crossed a swaying suspension bridge. An attractive female researcher approached the men, either when they were in the middle of the bridge or after they had finished crossing it, and asked them to complete a survey. After they did so, she gave each man her telephone number and offered to explain her project in greater detail if he called. Results showed that the men were more likely to call the woman when they had met her in the middle of the swaying bridge (Dutton & Aron, 1974). Why? You may recall from the Emotion and Motivation chapter that people can misinterpret physiological arousal as a sign of attraction (Byrne et al., 1975; Schachter & Singer, 1962). The men were presumably more aroused when they were in the middle of a swaying bridge, and some of those men mistook their arousal for attraction. (By the way, it is worth noting that because researchers can't control who does or does not participate in a field study, it is likely that some of the men in this study were never even *potentially* attracted to the woman—perhaps because they were gay, or happily married, or much older than she was. And yet, the men who were stopped in the middle of the bridge were on average more likely to call the women later. When a study produces an effect on average despite the fact that some of the participants were unlikely to show that effect, then we know that those participants who did show the effect must have showed it quite strongly).

PETER KRAMER/NBC/NBCUNIVERSAL VIA GETTY IMAGES

"I'm a beast, I'm an animal, I'm that monster in the mirror." Like it or not, the mirror is the place where Usher most often sees himself. As a result, he probably prefers pictures of himself that are horizontally reversed (above *left*), whereas his fans probably prefer pictures of him that are not (above *right*). One consequence of the mere exposure effect is that people tend to like the photographic images with which they are most familiar (Mita, Dermer, & Knight, 1977).

Attraction Depends on Physical Factors

Once people are in the same place at the same time, they can begin to learn about each other's personal qualities, and in most cases, the first quality they learn about is the other person's appearance. The influence of appearance on attraction is remarkably strong. In one study, researchers arranged a "slow dance" for first-year university students and randomly assigned each student to an opposite-sex partner. Midway through the dance, the students confidentially reported how much they liked their partner, how

MARY ALTAFFER/AP IMAGES

Ben Bostic and Laura Zych were strangers when their US Airways flight crash-landed in the Hudson River in 2009. And then they fell in love. Research shows that when people are in arousing situations together, they often may become attracted to one another.

attractive they thought their partner was, and how much they would like to see their partner again. The researchers measured many of the students' attributes—from their attitudes to their personalities—and they found that the partner's physical appearance was the *only* attribute that reliably influenced the students' feelings of attraction (Walster et al., 1966). (Once again, the fact that some of the students in this field study were almost surely not straight suggests that the results are even stronger than they appear.) Other studies confirm this finding. For instance, one study found that a man's height and a woman's weight were among the best predictors of how many responses a personal ad received (Lynn & Shurgot, 1984), and another study found that physical attractiveness was the *only* factor that predicted the online dating choices of both women and men (Green, Buchanan, & Heuer, 1984).

But beauty gets us more than dates (Etcoff, 1999; Langlois et al., 2000). Beautiful people have more sex, more friends, and more fun than the rest of us do (Curran & Lippold, 1975). They even earn about 10% more money over the course of their lives (Hamermesh & Biddle, 1994; see **FIGURE 13.8**). We tend to think that beautiful people also have superior personal qualities (Dion, Berscheid, & Walster, 1972; Eagly et al., 1991), and in some cases they do. For instance, because beautiful people have more friends and more opportunities for social interaction, they tend to have better social skills than less beautiful people (Feingold, 1992b). Appearance is so powerful that it even influences non-romantic relationships. For example, mothers are more affectionate and playful when their children are attractive than when they are unattractive (Langlois et al., 1995). In fact, the only known disadvantages of being beautiful are that people sometimes feel threatened by beauty (Agthe, Spörrle, & Maner, 2010) and can be unsympathetic to beautiful people's problems (Fisher & Ma, 2014).

▼ **Figure 13.8**
HEIGHT MATTERS The NFL quarterback Tom Brady is 6'4" tall, and his wife, the supermodel Gisele Bundchen, is 5'10" tall. Research shows that tall people earn $789 more per inch per year. The graph shows the average hourly wage of adult White men in the United States classified by height (Mankiw & Weinzierl, 2010).

KEVIN MAZUR/GETTY IMAGES

Standards of beauty can vary across cultures. Mauritanian women long to be heavy (*left*), and Ghanian men are grateful to be short (*right*).

Research suggests that men and women are both powerfully and equally influenced by the physical appearance of their partners in the early stages of a relationship (Eastwick et al., 2011) but that this influence may fade more quickly for women than for men (Li et al., 2013; Meltzer et al., 2014).

So yes, it pays to be beautiful. But what exactly constitutes beauty? The answer to that question varies across cultures. In the United States, for example, most women want to be slender, but in Mauritania, young girls are encouraged to drink up to 5 gallons of high-fat milk every day so that someday they will be heavy enough to attract a husband. As one Mauritanian woman noted, "Men want women to be fat, and so they are fat" (LaFraniere, 2007). In the United States, most men want to be tall, but in Ghana, most men are short and consider height a curse. "To be a tall person can be quite embarrassing," said one particularly altitudinous Ghanaian man. "When you are standing in a crowd, the short people start to jeer at you," said another (French, 1997).

But beauty is not entirely in the eye of the beholder. Although different cultures have different standards of beauty, those standards have a surprising amount in common (Cunningham et al., 1995):

- *Body shape*. In most cultures, male bodies are considered attractive when they are shaped like a triangle (i.e., broad shoulders with a narrow waist and hips), and female bodies are considered attractive when they are shaped like an hourglass (i.e., broad shoulders and hips with a narrow waist). The most attractive female body in most cultures seems to be the "perfect hourglass," in which a woman's waist is about 70% the size of her hips (Singh, 1993). Culture may determine whether straight men prefer women who are heavy or thin, but in all cultures, straight men seem to prefer this particular waist-to-hip ratio.
- *Symmetry*. People in all cultures seem to prefer faces and bodies that are *bilaterally symmetrical*—that is, faces and bodies whose left half is a mirror image of the right half (Perilloux, Webster, & Gaulin, 2010; Perrett et al., 1999).
- *Age*. Characteristics such as large eyes, high eyebrows, and a small chin make people look immature or "baby faced" (Berry & McArthur, 1985). As a general rule, female faces are considered more attractive when they have immature features, whereas male faces are considered more attractive when they have mature features (Cunningham, Barbee, & Pike, 1990; Zebrowitz & Montepare, 1992). In every culture, straight women tend to prefer older men, and straight men tend to prefer younger women (Buss, 1989).

Is there any rhyme or reason to this list of scenic attractions? Some psychologists think so. They suggest that nature has designed us to be attracted to people who have good genes and will be good parents (Gallup & Frederick, 2010; Neuberg, Kenrick, & Schaller, 2010). As it turns out, the features we all seem to find so attractive tend to be fairly reliable indicators of these things. For example:

Straight women think men are sexier when they look proud rather than happy, but straight men think women are sexier when they look happy rather than proud. (Tracy & Beall, 2011).

- *Body shape*. Testosterone causes male bodies to become "triangles" and men who are high in testosterone tend to be socially dominant and therefore have more resources to devote to their offspring. Estrogen causes female bodies to become "hourglasses" and women who are high in estrogen tend to be especially fertile and potentially have more offspring to make use of those resources (Singh, 1993). In other words, body shape is an indicator of male dominance and female fertility.
- *Symmetry*. Symmetry is a sign of health, which may explain why people are so good at detecting it (Jones et al., 2001; Thornhill & Gangestad, 1993). Indeed, women can distinguish between symmetrical and asymmetrical men by smell alone, and their preference for symmetrical men is especially pronounced when they are ovulating (Thornhill & Gangestad, 1999).
- *Age*. Younger women are generally more fertile than older women, whereas older men generally have more resources than younger men. Thus, a youthful appearance is a signal of a woman's ability to bear children, just as a mature appearance is a signal of a man's ability to care for them.

If the feeling we call *attraction* is simply nature's way of telling us that we are in the presence of a person who has good genes and a propensity to be a good parent, then it isn't any wonder that straight people in different cultures appreciate so many of the same features in the opposite sex.

Interestingly, the same seems to be true of people who are not straight. (We have much more to say about the origins and consequences of sexual orientation in the Development chapter). Although research on this topic is still sparse (Amos & McCabe, 2015), studies suggest that gay and straight people generally agree on what features make men and women attractive (Legenbauer et al., 2009; Swami & Tovée, 2008). For example, gay men and straight women agree about which male faces and voices are the most and least attractive (Valentová, Roberts, & Havlíček, 2013). Both gay men and straight men find younger faces more attractive than older ones, but this tendency is particularly pronounced when straight men are looking at women and gay men are looking at men (Teuscher & Teuscher, 2007). It is also important to note that attraction isn't action. Studies show that although everyone may *desire* the most attractive person in the room, most people tend to approach, date, and marry someone who is about as attractive as they are (Berscheid et al., 1971; Lee et al., 2008).

Attraction Depends on Psychological Factors

If attraction is all about big biceps and high cheekbones, then why don't we just skip the small talk and pick our life partners from photographs? Because for human

JON THOMAS/GETTY IMAGES

Similarity is a very strong source of attraction.

beings, attraction is about much more than that. Physical appearance is assessed easily, early, and from across a crowded room (Lenton & Francesconi, 2010), and it definitely determines who draws our attention and quickens our pulse. But once people begin interacting, they move beyond appearances (Cramer, Schaefer, & Reid, 1996; Regan, 1998), which is why physical attractiveness matters less when people have known each other for a long time (Hunt, Eastwick, & Finkel, 2015). People's *inner* qualities—their personalities, points of view, attitudes, beliefs, values, ambitions, and abilities—play an important role in determining their sustained interest in each other, and there isn't much mystery about the kinds of inner qualities that most people find attractive. Intelligence, ambitiousness, loyalty, trustworthiness, and kindness seem to be high on just about everybody's list (Daniel et al., 1985; Farrelly, Lazarus, & Roberts, 2007; Fletcher et al., 1999).

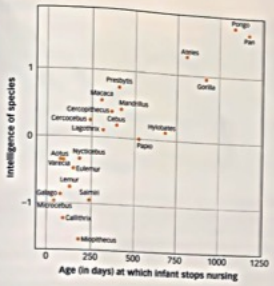
Exactly how much wit and wisdom do we want our mates to have? You might think the answer is "As much as humanly possible!" but research suggests that people are actually most attracted to those who are similar to them on these and almost all other dimensions (Byrne, Ervin, & Lamberth, 1970; Hatfield & Rapson, 1992; Neimeyer & Mitchell, 1988). We marry people of a similar age with similar levels of education, similar religious backgrounds, similar ethnicities, similar socioeconomic statuses, similar personalities, and so on (Botwin, Buss, & Shackelford, 1997; Buss, 1985; Caspi & Herbener, 1990). We even marry people with similar genes (Domingue et al., 2014). When researchers measured 88 distinct characteristics of 1,000 couples, they found that the couples were more similar than one would expect by chance on 66 of those characteristics, and less similar than one would expect by chance on precisely none (Burgess & Wallin, 1953). Indeed, of all the characteristics psychologists have measured, there is just one for which the majority of people have a consistent preference for dissimilarity, and that's gender.

Why is similarity so attractive? There are at least three reasons. First, it's easy to interact with people who are similar to us because we can instantly agree on a wide range of issues, such as what to eat, where to live, how to raise children, and how to spend our money. Second, when someone shares our attitudes and beliefs, we feel validated, and we become more confident that our attitudes and beliefs are right (Byrne & Clore, 1970). Indeed, research shows that when a person's attitudes or beliefs are challenged, they become even more attracted to similar others (Greenberg et al., 1990; Hirschberger, Florian, & Mikulincer, 2002). Third, because we like people who share our attitudes and beliefs, we can reasonably expect them to like us for exactly the same reason, and *being liked* is a powerful source of attraction (Aronson & Worchel, 1966; Backman & Secord, 1959; Condon & Crano, 1988), especially when the people who like us don't seem to like anyone else (Eastwick et al., 2007).

Our desire for similarity goes beyond attitudes and beliefs and extends to abilities as well. For example, we may admire extraordinary skill in quarterbacks and saxophone players, but when it comes to friends and lovers, extraordinary people can threaten our self-esteem and make us feel a bit nervous about our own competence (Tesser, 1991). This seems to be especially true when the extraordinary person is a woman and the nervous person is a man (Ratliff & Oishi, 2013). This may explain why people are attracted to those who have small pockets of incompetence. A minor flaw can make a highly competent person seem a bit more human—and therefore a bit more similar to us (Aronson, Willerman, & Floyd, 1966).

RELATIONSHIPS

The vast majority of human beings eventually become parents, and they typically do this in the context of committed, long-term relationships (Clark & Lemay, 2010). Most animals have relationships that end approximately thirty seconds after sex is over. So why do people have relationships that often last for their entire lives?



◀ **Figure 13.9**
BIG BRAIN BABY Smart animals tend to have helpless infants. This figure shows the relationship between the intelligence of different primate species and the age at which their offspring stop nursing. As you can see, the smarter a species is, the longer its infants remain reliant on their parents [data from Piantadosi & Kidd, 2016].

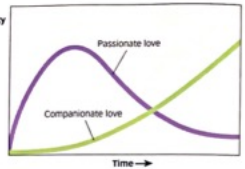
One (slightly weird) answer is that we're born half-baked. Because human beings have large heads to house their large brains, a fully developed human infant could not pass through its mother's birth canal, so human mothers must give birth while their babies are relatively underdeveloped—and underdeveloped babies need a lot more care than one parent can provide. If human infants were more like tadpoles—ready at birth to swim, find food, and escape predators—then their parents might not need to form enduring relationships. But human infants are among the most helpless creatures on earth. They require years and years of nurturing before they can even begin to fend for themselves, and that's one reason that human adults tend to do their parenting in the context of committed, long-term relationships (see **FIGURE 13.9**).

Marriage: Making the Commitment

In most cultures, committed, long-term relationships are signified by marriage, and ours is no exception. About 80% of all 40-year-old Americans have been married, and although marriage has become less popular over the last few decades, the best estimate is that about 75% of current 20-year-olds will eventually get married too (Wang & Parker, 2014). The median age at which Americans get married for the first time is currently 27 for women and 29 for men, which is considerably higher than it was a half century ago, when half of all American women were married by the age of 20. In 2012, 78% of all 25-year-old American men had never married, but 50 years earlier, only 28% had never married. The bottom line is that Americans are increasingly likely to marry late or not at all. Gay and lesbian Americans are, of course, an exception to this rule, because until very recently, the law kept their marriage rate at exactly zero percent. They now have nowhere to go but up!

People get married for many reasons, and love is one of the biggies. About 85% of Americans say that they would not marry without love (Kephart, 1967; Simpson, Campbell, & Berscheid, 1986); the vast majority say they would sacrifice their other life goals to attain it (Hammersla & Frease-McMahan, 1990); and most list love as one of the two most important sources of happiness in life (Freedman, 1978). The fact that people marry for love seems so obvious that you may be surprised to learn that this obvious fact is a rather recent invention. Throughout history, marriage has traditionally served a variety of economic, practical, and decidedly unromantic functions ranging from cementing agreements between clans to paying back debts. Marriage

► Figure 13.10
PASSIONATE AND COMPANIONATE LOVE
Companionate and passionate love have different time courses and trajectories. Passionate love begins to cool within just a few months, but companionate love can grow slowly but steadily over years.



was traditionally regarded as an alliance that helped people fulfill basic needs, such as growing food, building shelter, and protecting each other from violence. Although people have experienced love for ages, it wasn't until the 20th century that Westerners began to think of it as a reason to get married (Finkel et al., 2015).

So what is this thing that modern people marry for? Psychologists distinguish two basic kinds of love: **passionate love**, which is *an experience involving feelings of euphoria, intimacy, and intense sexual attraction*, and **companionate love**, which is *an experience involving affection, trust, and concern for a partner's well-being* (Acevedo & Aron, 2009; Hatfield, 1988; Rubin, 1973; Sternberg, 1986). The ideal romantic relationship gives rise to both types of love, but the speeds, trajectories, and durations of the two experiences are markedly different (see **FIGURE 13.10**). Passionate love is what brings people together: It has a rapid onset, reaches its peak quickly, and begins to diminish within just a few months (Aron et al., 2005). Companionate love is what keeps people together: It takes some time to get started, grows slowly, and need never stop growing (Gonzaga et al., 2001).

Divorce: Unmaking the Commitment

Although the divorce rate in America has fallen in the past few decades, more than a third of those Americans who are currently married will eventually decide to terminate that relationship. Marriage offers benefits (such as love, sex, and financial security), but it also imposes costs (such as additional responsibility, loss of personal freedom, and the potential for interpersonal conflict), and people tend to remain in relationships only as long as they perceive a favorable ratio of costs to benefits (Homans, 1961; Thibaut & Kelley, 1959). But whether a person considers a particular cost-benefit ratio to be favorable depends on at least two things (Le & Agnew, 2003; LeMay, 2016; Rusbult & Van Lange, 2003).

First, it depends on the person's **comparison level**, which is *the cost–benefit ratio that a person believes he or she could attain in another relationship*. A cost–benefit ratio that seems favorable to two people stranded on a desert island may seem unfavorable to two people who live in a large city filled with other potential partners. Indeed, people often accept relationships that have many costs simply because they believe that being single would have even more (Spielmann et al., 2013). Second, the favorability of a cost–benefit ratio depends on how much the person has already invested in the relationship. A ratio that seems favorable to people who have been married for many years may seem unfavorable to people who have been married for just a few months, which is one of the reasons why new marriages are more likely to end than old ones are (Bramlett & Mosher, 2002; Cherlin, 1992). It is also worth noting that people care about their partners' cost–benefit ratio as well as their own. **Equity** is *a state of affairs in which the cost–benefit ratios of two partners are roughly equally favorable* (Bolton & Ockenfels, 2000; Messick & Cook, 1983; Walster, Walster, & Berscheid, 1978), and research suggests that although people are naturally distressed when their ratio is less favorable than their partner's, they are also distressed when it is more favorable (Schafer & Keith, 1980).

passionate love An experience involving feelings of euphoria, intimacy, and intense sexual attraction.

companionate love An experience involving affection, trust, and concern for a partner's well-being.

comparison level The cost–benefit ratio that people believe they deserve or could attain in another relationship.

equity A state of affairs in which the cost–benefit ratios of two partners are roughly equal.

Build to the Outcomes

1. Why are women generally more selective in choosing mates than men?
2. What situational factors play a role in attraction?
3. Why is physical appearance so important?
4. What kind of information does physical appearance convey?
5. Why is similarity such a powerful determinant of attraction?
6. What are the two basic kinds of love?
7. How do people weigh the costs and benefits of their relationships?

Controlling Others

Learning Outcomes

- Describe the hedonic motive and explain how appeals to it can backfire.
- Describe the approval motive and distinguish normative influence, conformity, and obedience.
- Describe the accuracy motive and distinguish informational influence, persuasion, and consistency.

Those of us who grew up reading comics or watching cartoons have usually thought a bit about which of the standard superpowers we'd most like to have. Super strength and super speed have obvious benefits, invisibility and X-ray vision could be interesting as well as lucrative, and there's a lot to be said for flying. But when it comes down to it, the ability to control other people would probably be the most useful of all. Why get in a death match with an alien overlord or rescue orphans from a burning building when you can convince someone else to do these things for you? The things we want from life—gourmet food, interesting jobs, big houses, fancy cars—can all be given to us by others, and the things we want most—loving families, loyal friends, admiring children, appreciative employers—cannot be gotten in any other way.

Social influence is *the ability to change or direct another person's behavior* (Cialdini & Goldstein, 2004). But how does it work? If you want someone to give you their time, money, allegiance, or affection, you'd be wise to consider first what it is *they* want. People have three basic motivations that make them susceptible to social influence (Bargh, Gollwitzer, & Oettingen, 2010; Fiske, 2010). First, people are motivated to experience pleasure and to avoid experiencing pain (the *hedonic motive*). Second, people are motivated to be accepted and to avoid being rejected (the *approval motive*). Third, people are motivated to believe what is right and to avoid believing what is wrong (the *accuracy motive*). As you will see, most attempts at social influence appeal to one or more of these motives.

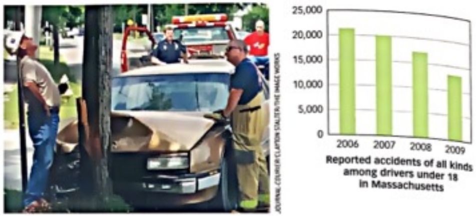
social influence The ability to change or direct another person's behavior.

THE HEDONIC MOTIVE

If there is an animal that prefers pain to pleasure it must be very good at hiding, because no one has ever seen it. Pleasure seeking is the most basic of all motives, and social influence often involves creating situations in which others can achieve more pleasure by doing what we want them to do than by doing something else. Parents, teachers, governments, and businesses influence our behavior by offering rewards and

According to a group of eminent historians, the civil rights leader Martin Luther King, Jr. (1929–1968) and the suffragist and feminist Susan B. Anthony (1820–1906) are among the 50 most influential Americans who have ever lived. In what ways did these two people "change or direct" your behavior?

▸ Figure 13.11
THE COST OF SPEEDING The penalty for speeding in Massachusetts used to be a modest fine. Then the legislature changed the law so that drivers under 18 who are caught speeding lose their licenses for 90 days—and to get them back, they have to pay $500, attend 8 hours of training classes, and retake the state's driving exam. Guess what? Deaths among drivers under 18 fell by 38% in just 3 years. In other words, more than 8,000 young lives were saved by appealing to the hedonic motive.



JOURNAL-COURIER/CLAYTON STALTER/THE IMAGE WORKS

threatening punishments (see **FIGURE 13.11**). There's nothing mysterious about how these influence attempts work, and they are often quite effective. When the Republic of Singapore warned its citizens that anyone caught chewing gum in public would face a year in prison and a $5,500 fine, the rest of the world was outraged; but when the outrage subsided, it was hard to ignore the fact that gum chewing in Singapore had fallen to an all-time low. A good caning will get your attention every time.

You'll recall from the Memory chapter that even a sea slug will repeat behaviors that are followed by rewards and avoid behaviors that are followed by punishments. Although the same is generally true of human beings, in some instances, rewards and punishments can backfire. For example, children in one study were allowed to play with colored markers, and then some were given a "Good Player Award." When the children were given markers the next day, those who had received an award the previous day were *less* likely to play with the markers than were those who had not received an award (Lepper, Greene, & Nisbett, 1973). Why? Because children who had received an award the first day came to think of drawing as something one does to receive rewards, and if no one was going to give them an award the second day, then why the heck should they do it (Deci, Koestner, & Ryan, 1999)? Similarly, rewards and punishments can backfire simply because people resent being bribed and threatened. Researchers placed signs in two restrooms on a college campus: "Please don't write on these walls" and "Do not write on these walls under any circumstances." Two weeks later, the walls in the second restroom had more graffiti, presumably because students didn't appreciate the threatening tone of the second sign and wrote on the walls just to show that they could (Pennebaker & Sanders, 1976).

THE APPROVAL MOTIVE

Other people stand between us and starvation, predation, loneliness, and all the other things that make getting shipwrecked such a bad idea. We depend on others for safety, sustenance, and solidarity, and being rejected or excluded by others is one of the most painful of all human experiences (Eisenberger, Lieberman, & Williams, 2003; Uskul & Over, 2014; Williams, 2007). We are powerfully motivated to have others accept us, like us, and approve of us (Baumeister & Leary, 1995; Leary, 2010), and that motive leaves us vulnerable to social influence.

Normative Influence: We Do What's Appropriate

Consider the many things you know about elevators. When you get on an elevator you are supposed to face forward and not talk to the person next to you even if you were talking to that person before you got on the elevator unless you are the only two people on the elevator in which case it's okay to talk and face sideways but still not backward. Although no one ever taught you this long-winded rule, you probably picked it up somewhere along the way. The unwritten rules that govern social behavior are called **norms**, which are *customary standards for behavior that are widely shared by members of a culture* (Cialdini, 2013; Miller & Prentice, 1996). We learn norms with exceptional ease, and we obey them with exceptional fidelity, because we know that if we don't, others won't approve of us (Centola & Baronchelli, 2015). For example, every human culture has a **norm of reciprocity**, which is *the unwritten rule that people should benefit those who have benefited them* (Gouldner, 1960). When a friend buys you lunch, you return the favor; and if you don't, your friend gets miffed. Indeed, the norm of reciprocity is so strong that when researchers randomly pulled the names of strangers from a telephone directory and sent them all Christmas cards, they received Christmas cards back from most (Kunz & Woolcott, 1976).

norms Customary standards for behavior that are widely shared by members of a culture.

FRANCIS DEAN/DEAN PICTURES/THE IMAGE WORKS

◂ Figure 13.12
THE PERILS OF CONNECTION Other people's behavior defines what is normal, and so we tend to do the things we see others doing. Overeating is one of those things. Research shows that if someone you know becomes obese, your chances of becoming obese can increase dramatically (Christakis & Fowler, 2007).

Norms are a powerful weapon in the game of social influence. **Normative influence** occurs when *another person's behavior provides information about what is appropriate* (see **FIGURE 13.12**). For example, waiters and waitresses know all about the norm of reciprocity, which is why they often give customers a piece of candy along with the bill. Studies show that customers who receive a candy feel obligated to do "a little extra" for the waiter who did "a little extra" for them (Strohmetz et al., 2002). Indeed, people will sometimes refuse small gifts precisely because they don't want to feel indebted to the gift giver (Shen, Wan, & Wyer, 2011).

The norm of reciprocity involves swapping, but the thing being swapped doesn't have to be a favor. The **door-in-the-face technique** is *an influence strategy that involves getting someone to deny an initial request*. Here's how it works: You ask someone for something more valuable than you really want, you wait for that person to refuse (to "slam the door in your face"), and then you ask the person for what you really wanted in the first place. For example, when researchers asked college students to volunteer to supervise adolescents who were going on a field trip, only 17% of the students agreed. But when the researchers first asked students to commit to spending 2 hours per week for 2 years working at a youth detention center (to which every one of the students said no) and *then* asked them to supervise a field trip, 50% of the students agreed (Cialdini et al., 1975). Why? The norm of reciprocity! The researchers began by asking for a large favor, which the students refused. Then the researchers made a concession by asking for a smaller favor. Because the researchers made a concession, the norm of reciprocity demanded that the students make one too—and half of them did.

Conformity: We Do What Others Do

People can influence us by invoking familiar norms, such as the norm of reciprocity. But if you've ever found yourself at a fancy dinner, sneaking a peek at the person next

DON PAULSON PHOTOGRAPHY/PURESTOCK/SUPERSTOCK

Have you ever wondered which big spender left the bill as a tip? In fact, the bills are often put there by the very people you are tipping because they know that the presence of paper money will suggest to you that others are leaving big tips and that it would be socially appropriate for you to do the same. By the way, the customary gratuity for someone who writes a textbook for you is 15%. But most students send more.

norm of reciprocity The unwritten rule that people should benefit those who have benefited them.

normative influence A phenomenon that occurs when another person's behavior provides information about what is appropriate.

door-in-the-face technique An influence strategy that involves getting someone to deny an initial request.

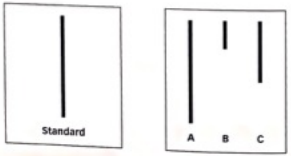
A perplexed participant (center), flanked by trained actors, is on the verge of conforming in one of Solomon Asch's line-judging experiments.

to you in the hopes of discovering whether the little fork is supposed to be used for the shrimp or the salad, then you know that other people can influence us by defining *new* norms in ambiguous, confusing, or novel situations. **Conformity** is *the tendency to do what others do simply because others are doing it*, and it results in part from normative influence.

In a classic study, the psychologist Solomon Asch had participants sit in a room with seven other people who appeared to be ordinary participants, but who were actually trained actors (Asch, 1951, 1956). An experimenter explained that the participants would be shown cards with three printed lines and their job was simply to say which of the three lines matched a "standard line" that was printed on another card (see **FIGURE 13.13**). The experimenter held up a card and then asked each person to answer in turn. The real participant was among the last to be called on. Everything went well on the first two trials, but then on the third trial, something really strange happened: The actors all began giving the same wrong answer! What did the real participants do? Although most participants gave the right answer on most trials, 75% conformed and announced the wrong answer on at least one trial. Subsequent research has shown that these participants didn't actually misperceive the length of the lines, but were instead succumbing to normative influence (Asch, 1955; Nemeth & Chiles, 1988). Giving the wrong answer was apparently the "right thing to do," and so participants did it.

The behavior of others can tell us what is proper, appropriate, expected, and accepted (in other words, it can define a norm), and once a norm is defined, we feel obliged to honor it. When a Holiday Inn in Tempe, Arizona, left a variety of different "message cards" in guests' bathrooms in the hopes of convincing those guests to reuse their towels rather than laundering them every day, it discovered that the single most effective message was the one that simply read: "Seventy-five percent of our guests use their towels more than once" (Cialdini, 2005). When the Sacramento Municipal Utility District randomly selected 35,000 customers and sent them electric bills showing how their energy consumption compared with that of their neighbors, consumption fell by 2% (Kaufman, 2009). Clearly, normative influence can be a force for good (see Other Voices: Ninety-One Percent of All Students Read This Box and Love It).

conformity The tendency to do what others do simply because others are doing it.



► **Figure 13.13**
ASCH'S CONFORMITY STUDY If you were asked which of the lines on the right (A, B, or C) matches the standard line on the left, what would you say? Research on conformity suggests that your answer would depend, in part, on how other people in the room answered the same question.

MAE WHITMAN/THE NEW YORK TIMES-REDUX

NORMATIVE INFLUENCE AT HOME In 2008, the Sacramento Municipal Utility District randomly selected 35,000 of its customers and sent them electric bills like the one above. The bill showed not only how much electricity the customer had used, it also showed how much electricity was used by neighbors who lived in similar-sized homes. When the utility crunched the numbers, they discovered that customers who had received this "compare with the neighbors" bill had reduced their electricity consumption by 2%, compared with customers who had received a traditional bill (Kaufman, 2009). Clearly, normative influence can be a force for good.

OTHER VOICES

Ninety-One Percent of All Students Read This Box and Love It

NOAH GREENBERG PHOTOGRAPHY

Tina Rosenberg is an editorial writer for the *New York Times*. Her 1995 book *The Haunted Land: Facing Europe's Ghosts After Communism* won both the Pulitzer Prize and the National Book Award.

Binge drinking is a problem on college campuses across America (Wechsler & Nelson, 2001). About half of all students report doing it, and those who do are much more likely to miss classes, fall behind in their school work, drive drunk, and have unprotected sex. So what to do?

Colleges have tried a number of remedies—from education to abstinence—and none of them has worked particularly well. But lately, some schools have taken a new approach called "social norming." Although this approach is surprisingly effective, it is also controversial. Tina Rosenberg's most recent book is *Join the Club: How Peer Pressure Can Transform the World*. In the following essay, she describes both the technique and the controversy.

Like most universities, Northern Illinois University in DeKalb has a problem with heavy drinking. In the 1980s, the school was trying to cut down on student use of alcohol with the usual strategies. One campaign warned teenagers of the consequences of heavy drinking. "It was the 'don't run with a sharp stick you'll poke your eye out' theory of behavior change," said Michael Haines, who was the coordinator of the school's Health Enhancement Services. When that didn't work, Haines tried combining the scare approach with information on how to be well: "It's O.K. to drink if you don't drink too much—but if you do, bad things will happen to you."

That one failed, too. In 1989, 45 percent of students surveyed said they drank more than five drinks at parties. This percentage was slightly higher than when the campaigns began. And students thought heavy drinking was even more common; they believed that 69 percent of their peers drank that much at parties.

But by then Haines had something new to try. In 1987 he had attended a conference on alcohol in higher education sponsored by the United States Department of Education. There Wes Perkins, a professor of sociology at Hobart and William Smith Colleges, and Alan Berkowitz, a psychologist in the school's counseling center, presented a paper that they had just published on how student drinking is affected by peers. "There are decades of research on peer influence—that's nothing new," Perkins said at the meeting. What was new was their survey showing that when students were asked how much their peers drank, they grossly overestimated the amount. If the students were responding to peer pressure, the researchers said, it was coming from imaginary peers.

The "aha!" conclusion Perkins and Berkowitz drew was this: maybe students' drinking behavior could be changed by just telling them the truth.

Haines surveyed students at Northern Illinois University and found that they also had a distorted view of how much their peers drink. He decided to try a new campaign, with the theme "most students drink moderately." The centerpiece of the campaign was a series of ads in the Northern Star, the campus newspaper, with pictures of students and the caption "two thirds of Northern Illinois University students (72%) drink 5 or fewer drinks when they 'party.' . . .

Haines's staff also made posters with campus drinking facts and told students that if they had those posters on the wall when an inspector came around, they would earn $5. (35 percent of the students did have them posted when inspected.) Later they made buttons for students in the fraternity and sorority system—these students drank more heavily—that said "Most of Us," and offered another $5 for being caught wearing one. The buttons were deliberately cryptic, to start a conversation.

After the first year of the social norming campaign, the perception of heavy drinking had fallen from 69 to 61 percent. Actual heavy drinking fell from 45 to 38 percent. The campaign went on for a decade, and at the end of it NIU students believed that 33 percent of their fellow students were episodic heavy drinkers, and only 25 percent really were—a decline in heavy drinking of 44 percent. . . .

Why isn't this idea more widely used? One reason is that it can be controversial. Telling college students "most of you drink moderately" is very different than saying "don't drink." (It's so different, in fact, that the National Social Norms Institute, with headquarters at the University of Virginia, gets its money from Anheuser Busch—a decision that has undercut support for the idea of social norming.) The approach angers people who lobby for a strong, unmuddled message of disapproval—even though, of course, disapproval doesn't reduce bad behavior, and social norming does.

Rosenberg's essay suggests that social norming is a powerful tool for changing behavior, but its use raises important questions. When we tell students about drinking on campus, should we tell them what's true—even if the truth is a bit ugly? Or should we tell them what's best—even if they are unlikely to do it? There are no easy or obvious answers to this question, but as a society, we have no choice but to choose.

persuasion A phenomenon that occurs when a person's attitudes or beliefs are influenced by a communication from another person.

systematic persuasion The process by which attitudes or beliefs are changed by appeals to reason.

heuristic persuasion The process by which attitudes or beliefs are changed by appeals to habit or emotion.

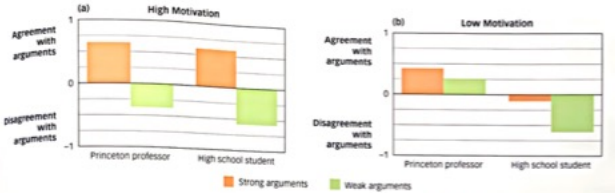
that refer to soft drinks as "popular" or books as "best sellers" are reminding you that other people are buying these particular drinks and books, which suggests that they know something you don't and that you'd be wise to follow their example. Situation comedies provide laugh tracks because the producers know that when you hear other people laughing, you will mindlessly assume that something must be funny (Fein, Goethals, & Kugler, 2007; Nosanchuk & Lightstone, 1974). Bars and nightclubs make people stand in line outside even when there is plenty of room inside, because they know that passersby will see the line and assume that the club is worth waiting for. In short, the world is full of objects and events that we know little about, and we can often cure our ignorance by paying attention to the way in which others are acting toward them. Alas, the very thing that makes us open to information leaves us open to manipulation as well.

Persuasion: Changing Behavior by Changing Minds

When the next presidential election rolls around, two things will happen. First, the candidates will say that they intend to win your vote by making arguments that focus on the issues. Second, the candidates will then avoid arguments, ignore issues, and attempt to win your vote with a variety of cheap tricks and emotional appeals. What the candidates promise to do and what they actually do reflect two basic forms of **persuasion**, which occurs when *a person's attitudes or beliefs are influenced by a communication from another person* (Albarracín & Vargas, 2010; Petty & Wegener, 1998). The candidates will promise to persuade you by demonstrating that their positions on the issues are the most practical, intelligent, fair, and beneficial. Having made that promise, they will then devote most of their financial resources to persuading you by other means: for example, by dressing nicely and smiling a lot, by surrounding themselves with famous athletes and movie stars, by repeatedly pairing their opponent's picture with Osama bin Laden's, and so on. In other words, the candidates will promise to engage in **systematic persuasion**, *the process by which attitudes or beliefs are changed by appeals to reason*, but they will spend most of their time and money engaged in **heuristic persuasion**, *the process by which attitudes or beliefs are changed by appeals to habit or emotion* (Chaiken, 1980; Petty & Cacioppo, 1986).

How do these two forms of persuasion work? Systematic persuasion appeals to logic and reason and assumes that people will be more persuaded when evidence and arguments are strong rather than weak. Heuristic persuasion appeals to habit and emotion and assumes that rather than weighing evidence and analyzing arguments, people will often use *heuristics* (simple shortcuts or "rules of thumb") to help them decide whether to believe a communication (see the Language and Thought chapter). Which form of persuasion will be more effective depends on whether the person is willing and able to weigh evidence and analyze arguments.

Does Kim Kardashian know more about toilet paper than you do? Probably not. So why do advertisers hire celebrities like her to endorse their products? (If the phrase "heuristic persuasion" doesn't come to mind, go back and reread this section.)



▲ **Figure 13.15**
SYSTEMATIC AND HEURISTIC PERSUASION
[a] Systematic persuasion. When students were motivated to analyze arguments because they would be personally affected by them, their attitudes were influenced by the strength of the arguments [strong arguments were more persuasive than weak arguments] but not by the status of the communicator [the Princeton professor was not more persuasive than the high school student]. [b] Heuristic persuasion. When students were not motivated to analyze arguments because they would not be personally affected by them, their attitudes were influenced by the status of the communicator [the Princeton professor was more persuasive than the high school student] but not by the strength of the arguments [strong arguments were no more persuasive than weak arguments; Petty, Cacioppo, & Goldman, 1981].

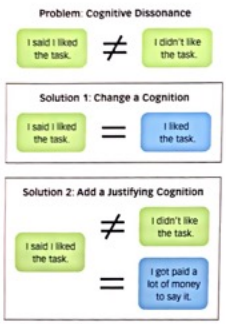
In one study, students heard a speech that contained either strong or weak arguments in favor of instituting comprehensive exams at their school (Petty, Cacioppo, & Goldman, 1981). Some students were told that the speaker was a Princeton University professor, and others were told that the speaker was a high school student—a bit of information that the students could use as a heuristic or shortcut to decide whether to believe the speech. Some students were told that their university was considering implementing these exams right away, whereas others were told that their university was considering implementing these exams in 10 years—a bit of information that made students feel motivated or unmotivated to analyze the evidence. As **FIGURE 13.15** shows, when students were motivated to analyze the evidence, they were systematically persuaded—that is, their attitudes and beliefs were influenced by the strength of the arguments but not by the status of the speaker. But when students were not motivated to analyze the evidence, they were heuristically persuaded—that is, their attitudes and beliefs were influenced by the status of the speaker but not by the strength of the arguments.

Consistency: Changing Minds by Changing Behavior

If a friend told you that rabbits had just staged a coup in Antarctica and were halting all carrot exports, you probably wouldn't turn on CNN. You'd know right away that your friend was either joking or really, really gullible because the statement is logically inconsistent with other things that you know are true, for example, that rabbits do not foment revolution and that Antarctica does not export carrots. People evaluate the accuracy of new beliefs by assessing their consistency with old beliefs. Although this is not a foolproof method for determining whether something is true, it provides a pretty good approximation. We are motivated to be accurate, and because consistency is a rough measure of accuracy, we are motivated to be consistent as well (Cialdini, Trost, & Newsom, 1995).

That motivation leaves us vulnerable to social influence. For example, the **foot-in-the-door** technique involves *making a small request and then following it with a larger request* (Burger, 1999). In one study (Freedman & Fraser, 1966), experimenters went to a neighborhood and knocked on doors to see if they could convince homeowners to agree to have a big ugly "Drive Carefully" sign installed in their front yards. One group of homeowners was simply asked to install the sign, and only 17% said yes. A second group of homeowners was first asked to sign a petition urging the state legislature to promote safe driving (which almost all agreed to do) and was *then* asked to install

foot-in-the-door technique A technique that involves making a small request and following it with a larger request.



▲ Figure 13.16
ALLEVIATING COGNITIVE DISSONANCE Telling a lie can produce an uncomfortable feeling known as cognitive dissonance. One way to reduce that dissonance is to believe the lie (Solution 1). Another is to justify having told it (Solution 2).

MICHELE JOURNIAC/IMAGES

Members of Michigan Tech University's Sigma Tau Gamma fraternity brave subzero wind chill to participate in the group's annual "Grundy Run" through the campus. Painful rituals like these often breed group loyalty.

cognitive dissonance An unpleasant state that arises when a person recognizes the inconsistency of his or her actions, attitudes, or beliefs.

the ugly sign. And 55% said yes! Why would homeowners be more likely to grant two requests than one?

Just imagine how the homeowners in the second group felt. They had just signed a petition stating that they thought safe driving was important, yet they knew they didn't want to install an ugly sign in their front yards. As they wrestled with this inconsistency, they probably began to experience **cognitive dissonance**, which is *an unpleasant state that arises when a person recognizes the inconsistency of his or her actions, attitudes, or beliefs* (Festinger, 1957). When people experience cognitive dissonance, they naturally try to alleviate it. Although there are many ways to do this (Randles et al., 2015), one perfectly ordinary way is to put your money where your mouth is—that is, to act in ways that are consistent with your beliefs (Aronson, 1969; Cooper & Fazio, 1984; Harmon-Jones, Harmon-Jones, & Levy, 2015). Agreeing to install a yard sign was just such an action. Indeed, one of the best ways to get people to take an action is to first get them to express an attitude with which that action is consistent. If hotel guests are subtly induced at check-in to call themselves "Friends of the Earth," they are 25% more likely to reuse their towels during their stay (Baca-Motes et al., 2013).

Just as people take actions that are consistent with their attitudes, so too do they adopt attitudes that are consistent with their actions. In a classic study, female college students applied to join a weekly discussion on "the psychology of sex." Women in the control group were allowed to join the discussion, but women in the experimental group were allowed to join the discussion only after first passing an embarrassing test that involved reading pornographic fiction to a strange man. Although the carefully staged discussion was as dull as possible, women in the experimental group found it more interesting than did women in the control group (Aronson & Mills, 1958). Why? Women in the experimental group knew that they had paid a steep price to join the group ("I read all that porn out loud!"), but that belief was inconsistent with the belief that the discussion was worthless. Thus, the women experienced cognitive dissonance, which they alleviated by changing their beliefs about the value of the discussion (see the top half of **FIGURE 13.16**.). We normally think that people pay for things because they value them, but as this study shows, people sometimes value things because they've paid for them—with money, time, attention, blood, sweat, or tears. It is little wonder that some fraternities use hazing to instill loyalty, that some religions require their adherents to make large personal or monetary sacrifices, that some gourmet restaurants charge outrageous amounts to keep their patrons coming back, or that some men and women play hard to get to maintain their suitors' interest.

We are motivated to be consistent, but inevitably there are times when we just can't—for example, when we tell a friend that her new hairstyle is "daring" when it actually resembles a wet skunk after an unfortunate encounter with a snow blower. Why don't we experience cognitive dissonance under such circumstances and come to believe our own lies? Because whereas telling a friend that her hairstyle is daring is inconsistent with the belief that her hairstyle is hideous, it is perfectly consistent with the belief that one should be nice to one's friends. When small inconsistencies are *justified* by large consistencies, cognitive dissonance is reduced.

For example, participants in one study were asked to perform a dull task that involved turning knobs one way, then the other way, and then back again. After the participants were sufficiently bored, the experimenter explained that he desperately needed a few more people to volunteer for the study, and he asked the participants to go into the hallway, find another person, and tell that person that the knob-turning task was great fun. The experimenter offered some participants $1 to tell this lie, and he offered other participants $20. All participants agreed to tell the lie, and after they did so, they were asked to report their true enjoyment of the knob-turning task. The results showed that participants liked the task *more* when they were paid $1 than $20 to lie about it (Festinger & Carlsmith, 1959). Why? Because the belief *this knob-turning task is dull* was inconsistent with the belief *I recommended the task to that person in the hallway*, but the latter belief was perfectly consistent with the belief that *$20 is a lot of money*. For some participants, the large payment justified the lie, so only those people who received the small payment experienced cognitive dissonance. As such, only the participants who received $1 felt the need to restore consistency by changing their beliefs about the enjoyableness of the task (see the bottom half of Figure 13.16).

Build to the Outcomes

1. What are the three basic motives that social influence involves?
2. Why do attempts to influence others with rewards and punishments sometimes backfire?
3. How can the norm of reciprocity be used to influence people?
4. Why do people sometimes do what they see others doing?
5. When and why do people obey authority?
6. What is the difference between normative and informational influence?
7. When is it more effective to engage in systematic persuasion rather than heuristic persuasion?
8. Why does the accuracy motive lead to a desire for consistency?
9. What is cognitive dissonance? How do people alleviate it?

Understanding Others

Learning Outcomes

- Explain how stereotypes cause people to draw inaccurate conclusions about others.
- Explain why stereotypes are so difficult to overcome.
- Explain what an attribution is and what kinds of errors attributions entail.

Kanye West is a creative genius—or at least that's what he tells anyone who will listen. Whether or not you agree with his assessment, reading about it almost surely activated your medial prefrontal cortex, an area of your brain that becomes especially active when you think about other human beings but not when you think about inanimate objects such as houses or tools (Mitchell, Heatherton, & Macrae, 2002). Although most of your brain shows diminished activity when you are at rest, this area remains active all the time (Buckner, Andrews-Hanna, & Schacter, 2008; Spunt, Meyer, & Lieberman, 2015). Why does your brain have specific areas that seem specialized for processing information about just *one* of the millions of objects you might encounter? And why is this area constantly switched on?

Because of the millions of objects you might encounter, other human beings are the single most important. **Social cognition** is *the processes by which people come to understand others*, and your brain is doing it all day long. Whether you know it or not, your brain is constantly making inferences about other people's thoughts and feelings, beliefs and desires, abilities and aspirations, intentions, needs, and characters. It bases these inferences on two kinds of information: the categories to which people belong, and the things they do and say.

LEON BENNETT/WIREIMAGE/GETTY IMAGES

Thinking about the musician Kanye West activates your medial prefrontal cortex. Do you think about him now and then? Because he's coming home again, loyee oyeee oh.

social cognition The processes by which people come to understand others.

STEREOTYPING: DRAWING INFERENCES FROM CATEGORIES

You'll recall from the Language and Thought chapter that categorization is the process by which people identify a stimulus as a member of a class of related stimuli. Once we have identified a novel stimulus as a member of a category ("That's a textbook"), we can then use our knowledge of the category to make educated guesses about the properties of the novel stimulus ("It's probably expensive") and act accordingly ("I think I'll download it illegally").

GIDEON MARKOWICZ/AP IMAGES

Stereotypes can be inaccurate. Shlomo Koenig does not fit most people's stereotype of a police officer or a rabbi, but he is both.

What we do with textbooks we also do with people. No, not the illegal downloading part. The educated guessing part. **Stereotyping** *is the process by which people draw inferences about others based on their knowledge of the categories to which others belong.* The moment we categorize a person as an adult, a male, a baseball player, and a Russian, we can use our knowledge of those categories to make some educated guesses about him—for example, that he shaves his face but not his legs, that he understands the infield fly rule, and that he knows more about Vladimir Putin than we do. When we offer children candy instead of beer or ask gas-station attendants for directions instead of financial advice, we are making inferences about people whom we have never met before based solely on their category membership. As these examples suggest, stereotyping is a very helpful process (Allport, 1954). And yet, ever since the word was coined by the journalist Walter Lippmann in 1936, it has had a distasteful connotation. Why? Because stereotyping is a helpful process that can often produce harmful results, and it does so because stereotypes tend to have four properties: They can be inaccurate, overused, self-perpetuating, and automatic. Let's examine each of them.

stereotyping The process by which people draw inferences about others based on their knowledge of the categories to which others belong.

Stereotypes Can Be Inaccurate

Americans have a wide range of stereotypes that appear to vary on two important dimensions: warmth ("Are these people nice?") and competence ("Are these people capable?"; Cuddy, Fiske, & Glick, 2007). As **FIGURE 13.17** shows, Americans see some categories of people as warm and competent (women), others as warm but incompetent (the elderly), others as cold and competent (the rich), and others as cold and incompetent (the homeless). Some of these stereotypes are probably right on average (educated professionals are generally more capable than people with intellectual disabilities), but others are surely wrong (Whites are not generally warmer than Hispanics). So where do these inaccurate stereotypes come from?

Much of what we think we know about human categories is hearsay—stuff we picked up from watching television, listening to pop songs, or just hearing people talk. But inaccurate beliefs about human categories can also be produced by direct observation of their members. For example, research participants in one study were shown a long series of positive and negative behaviors and were told that each behavior had been performed by a member of one of two groups: Group A or Group B (see **FIGURE 13.18**). The behaviors were carefully arranged so that each group behaved negatively exactly one third of the time. However, there were more positive than negative behaviors in the series, and there were more members of Group A than of Group B. Thus, negative behaviors were rarer than positive behaviors, and Group B members were rarer than Group A members. After seeing the behaviors, participants correctly reported that Group A had behaved negatively one third of the time. However, they incorrectly reported that Group B had behaved negatively more than *half* the time (Hamilton & Gifford, 1976).

▶ **Figure 13.17**
STEREOTYPE CONTENT Stereotypes tend to vary on the dimensions of warmth and competence. This figure shows how Americans see a variety of different groups (data from Cuddy, Fiske, & Glick, 2007).

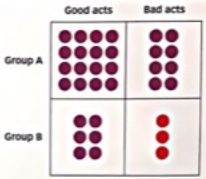
Why did this happen? Bad behavior was rare, and being a member of Group B was rare. Thus, participants were especially likely to notice when the two co-occurred ("Aha! There's one of those unusual Group B people doing an unusually awful thing again"). These findings help explain why members of majority groups tend to overestimate the number of crimes (which are relatively rare events) committed by members of minority groups (who are relatively rare people, hence the word *m-i-n-o-r-i-t-y*). The point here is that even when we directly observe people, we can end up with inaccurate beliefs about the groups to which they belong.

Stereotypes Can Be Overused

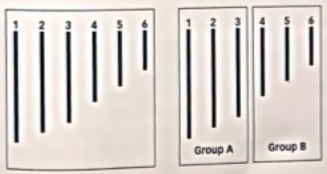
Because all thumbtacks are pretty much alike, our stereotypes about thumbtacks (small, cheap, painful when chewed) are quite useful. We will rarely be mistaken if we generalize from one thumbtack to another. But human categories are so variable that our stereotypes may offer only the vaguest of clues about the individuals who populate those categories. You probably believe that men have greater upper body strength than women do, and this belief is right *on average*. But the upper body strength of individuals *within* each of these categories is so varied that you cannot easily predict how much weight a particular person can lift simply by knowing that person's gender. The inherent variability of human categories makes stereotypes much less useful than they seem.

Alas, we don't always recognize this because the mere act of categorizing a stimulus tends to warp our perceptions of that category's variability. For instance, participants in some studies were shown a series of lines of different lengths (see **FIGURE 13.19**; McGarty & Turner, 1992; Tajfel & Wilkes, 1963). For one group of participants, the longest lines were labeled *Group A* and the shortest lines were labeled *Group B*, as they are on the right side of Figure 13.20. For the second group of participants, the lines were shown without these category labels, as they are on the left side of Figure 13.20. Interestingly, those participants who saw the category labels *overestimated* the similarity of the lines that shared a label and *underestimated* the similarity of lines that did not.

You've probably experienced this phenomenon yourself when looking at a rainbow. Because we identify colors as members of categories such as *blue* or *green*, we overestimate the similarity of colors that share a category label and underestimate the similarity of colors that do not. That's why we see discrete *bands* of color when we look at rainbows, which are actually a smooth chromatic continuum (see **FIGURE 13.20**). The same thing happens when we try to estimate distances. Memphis, Tennessee is about the same distance from Pierre, South Dakota as it is from Toronto, Canada, but people underestimate its distance from Pierre because the two towns are in the same nation, and overestimate its distance from Toronto because the two towns are in different nations. (Burris & Branscombe, 2005). Indeed, people believe that they are



▲ **Figure 13.18**
SEEING CORRELATIONS THAT AREN'T REALLY THERE Group A and Group B each perform two thirds good acts and one third bad acts. However, Group B and bad acts are both rare, leading people to notice and remember their co-occurrence, which leads them to perceive a correlation between group membership and behavior that isn't really there.



◀ **Figure 13.19**
HOW CATEGORIZATION WARPS PERCEPTION People who see the lines on the right tend to overestimate the similarity of lines 1 and 3 and underestimate the similarity of lines 3 and 4. Simply labeling lines 1–3 Group A and lines 4–6 Group B causes the lines within a group to seem more similar to each other than they really are and the lines in different groups to seem more different from each other than they really are.

► Figure 13.20
PERCEIVING CATEGORIES
Categorization can influence how we see colors and estimate distances.

more likely to feel an earthquake whose epicenter is 230 miles away when that spot is in their state rather than in a neighboring state (Mishra & Mishra, 2010).

What's true of colors and cities is true of people as well. The mere act of categorizing people as Blacks or Whites, Jews or Gentiles, artists or accountants, can cause us to underestimate the variability within those categories ("All artists are wacky") and to overestimate the variability between them ("Artists are much wackier than accountants"). When we underestimate the variability of a human category, we naturally overestimate how useful our stereotypes about it will be (Park & Hastie, 1987; Rubin & Badea, 2012).

Stereotypes Can Be Self-Perpetuating

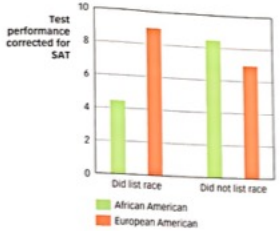
When we meet a truck driver who likes ballet more than football or a senior citizen who likes Drake more than Bach, why don't we simply abandon our stereotypes of these groups? The answer is that stereotypes tend to be self-perpetuating. Like viruses and parasites, once they take up residence inside us, they resist even our most concerted efforts to eradicate them. There are three reasons why:

- **Self-fulfilling prophecy** is *the tendency for people to behave as they are expected to behave.* When people know that observers have a negative stereotype about them, they may experience **stereotype threat**, which is *the fear of confirming the negative beliefs that others may hold* (Aronson & Steele, 2004; Schmader, Johns, & Forbes, 2008; Walton & Spencer, 2009). Ironically, this fear may cause them to behave in ways that confirm the very stereotype that threatened them. In one study (Steele & Aronson, 1995), African American and White students took a test, and half the students in each group were asked to list their race at the top of the exam. When students were not asked to list their race, they performed at their academic level, but when students were asked to list their race, African American students became anxious about confirming a negative stereotype of their group, which caused them to perform well below their academic level (see **FIGURE 13.21**). Stereotypes perpetuate themselves in part by causing the stereotyped individual to behave in ways that confirm the stereotype.
- Even when people do *not* confirm stereotypes, observers often think they have. **Perceptual confirmation** is *the tendency for people to see what they expect to see*, and this tendency helps perpetuate stereotypes. In one study, participants listened to a radio broadcast of a college basketball game and were asked to

self-fulfilling prophecy The tendency for people to behave as they are expected to behave.

stereotype threat The fear of confirming the negative beliefs that others may hold.

perceptual confirmation The tendency for people to see what they expect to see.



◄ Figure 13.21
STEREOTYPE THREAT When asked to indicate their race before taking an exam, African American students performed below their academic level [as determined by their SAT scores], but European American students did not.

evaluate the performance of one of the players. Although all participants heard the same prerecorded game, some were led to believe that the player was African American, and others were led to believe that the player was White. Participants' stereotypes led them to expect different performances from athletes of different ethnic origins—and the participants perceived just what they expected. Those who believed the player was African American thought he had demonstrated greater athletic ability but less intelligence than did those who thought he was White (Stone, Perry, & Darley, 1997). Stereotypes perpetuate themselves in part by biasing our perception of individuals, leading us to believe that those individuals have confirmed our stereotypes even when they have not (Fiske, 1998).

- So what happens when people clearly *disconfirm* our stereotypes? **Subtyping** is *the tendency for people who receive disconfirming evidence to modify their stereotypes rather than abandon them* (Weber & Crocker, 1983). For example, most of us think of people who work in public relations as sociable. In one study, participants learned about a PR agent who was *slightly* unsociable, and the results showed that their stereotypes about PR agents shifted a bit to accommodate this new information. So far, so good. But when participants learned about a PR agent who was *extremely* unsociable, their stereotypes did not change at all (Kunda & Oleson, 1997). Instead, they decided that the extremely unsociable PR agent was "an exception to the rule," which allowed them to keep their stereotypes intact. Subtyping is a powerful method of preserving our stereotypes in the face of contradictory evidence.

CHIP SOMODEVILLA/GETTY IMAGES

The former First Lady of the United States, Michelle Obama, understands the nature of stereotype threat. "That's a burden that President Obama and I proudly carry every single day in the White House, because we know that everything we do and say can either confirm the myths about folks like us—or it can change those myths" (Baker, 2015).

Stereotyping Can Be Unconscious and Automatic

If we recognize that our stereotypes are inaccurate and self-perpetuating, then why don't we just make a firm resolution to stop using them? The answer is that stereotyping often happens *unconsciously* (which means that we don't always know we are doing it) and *automatically* (which means that we often cannot avoid doing it even when we try; Banaji & Heiphetz, 2010; Greenwald, McGhee, & Schwartz, 1998; Greenwald & Nosek, 2001).

For example, in one study, participants played a video game in which photos of Black or White men holding either guns or cameras were flashed on the screen for less than 1 second each. Participants earned money by shooting men with guns and lost money by shooting men with cameras. The results showed that participants made two kinds of mistakes: They tended to shoot Black men holding cameras and tended not to shoot White men holding guns (Correll et al., 2002). Although the photos appeared on the screen so quickly that participants did not have enough time to consciously consider their stereotypes, those stereotypes worked unconsciously, causing them to mistake a camera for a gun when it was in the hands of a Black man and a gun for a

subtyping The tendency for people who receive disconfirming evidence to modify their stereotypes rather than abandon them.

The Implicit Association Test measures how easily people can learn to associate two things (Greenwald, McGhee, & Schwartz, 1998). Studies using the test show that 70 percent of White Americans find it easier to associate White faces with positive concepts, such as "peace," and Black faces with negative concepts, such as "bomb," than the other way around. Surprisingly, 40 percent of African Americans show this same pattern. You can take the IAT yourself at https://implicit.harvard.edu/implicit/

Major League Baseball umpires try to be objective, but when they mistakenly call a strike, it benefits the pitcher's team. A recent study showed that umpires are 10 percent less likely to make this "helpful error" when the pitcher is African American than when he is European American (Kim & King, 2014). Because stereotypes are automatic, they can influence the judgments of even those who work hard not to apply them.

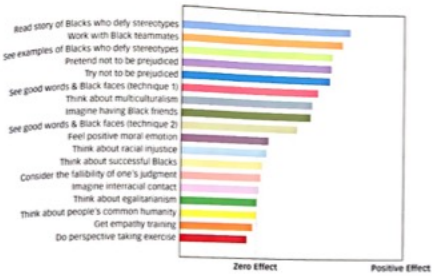
camera when it was in the hands of a White man (Correll et al., 2015). It is instructive to note that Black participants were just as likely to make this pattern of errors as were White participants. Why did these errors happen?

Stereotypes comprise all the information about human categories that we have absorbed over the years from friends and uncles, books and blogs, jokes and movies and late-night television. When we see Black men holding guns in rap videos, our minds associate these two things, and although we realize that we are watching art and not news, our brains make and remember the association. We cannot later *decide* that we just won't be influenced by it any more than we can *decide* that we just won't be influenced by our knowledge of English or the smell of French fries.

In fact, some research suggests that trying not to use our stereotypes can make matters worse instead of better. Participants in one study were shown a photograph of a tough-looking male "skinhead" and were asked to write an essay describing a typical day in his life. Some of the participants were told that they should not allow their stereotypes about skinheads to influence their essays, and others were given no such instructions. Next, the experimenter brought each participant to a room with eight empty chairs. The first chair had a jacket draped over it, and the experimenter explained that it belonged to a skinhead, who had gone to use the restroom. Where did participants choose to sit? Participants who had earlier been told not to use their stereotypes sat farther away from the jacket than did participants who had been given no instructions (Macrae et al., 1994). As you know from reading the Consciousness chapter, thought suppression is an ironic business that often causes us to do the very thing we were trying to avoid doing (Wegner et al., 1987), and this appears to apply to stereotypes as well.

Are the Consequences of Stereotyping Inevitable?

Although stereotyping is unconscious and automatic, that does not mean that its undesirable consequences—bias and prejudice—are inevitable (Blair, 2002; Kawakami et al., 2000; Milne & Grafman, 2001; Rudman, Ashmore, & Gary, 2001). For instance, police officers who receive special training before playing the camera-or-gun video game described earlier do not show the same biases that ordinary people do (Correll et al., 2007). Like ordinary people, they take a few milliseconds longer to decide not to shoot a Black man than a White man, indicating that their stereotypes are unconsciously and automatically influencing their perception. But unlike ordinary people, they don't actually *shoot* Black men more often than White men, indicating that they have learned how to keep those stereotypes from influencing their behavior (Phills et al., 2011; Todd et al., 2011). Other studies suggest that because stereotypes reflect all the information to which people are chronically exposed through music



◀ **Figure 13.22**
STEREOTYPE CONTEST Results of a study that compared 18 techniques for reducing unconscious stereotyping of Blacks by Whites (data from Lai et al., 2014).

videos, advertisements, newscasts, and social media, changing that information can change the stereotypes. In laboratory experiments, for example, White participants who are exposed to positive examples of African-Americans (e.g., Michael Jordan and Denzel Washington) show a reduction in automatic anti-Black bias (Dasgupta, 2013).

So which techniques are most effective? In 2014, a team of psychologists held a contest in which they invited researchers to submit techniques for reducing unconscious stereotyping of Blacks, and then tested each of the techniques against the other. As **FIGURE 13.22** shows, about half the techniques had some effect, and these tended to be techniques that exposed Whites to examples of Blacks who defy their stereotypes. For example, the most effective technique asked participants to imagine in gory detail that they were being assaulted by a White man and then to image being rescued by a Black man. The least effective techniques were those that simply encouraged people to feel compassion toward or take the perspective of a Black person (see Hot Science: Through Other Eyes). One troubling finding was that many of the failed techniques look a lot like the techniques that are often used in schools, businesses, and other organizations. Indeed, when a team of psychologists conducted a thorough examination of the scientific literature on "multicultural education, anti-bias instruction more generally, workplace diversity initiatives, dialogue groups, cooperative learning, moral and values education, intergroup contact, peace education, media interventions, reading interventions, intercultural and sensitivity training, cognitive training, and a host of miscellaneous techniques and interventions," they reluctantly concluded that "we currently do not know whether a wide range of programs and policies tend to work on average, and we are quite far from having an empirically grounded understanding of the conditions under which these programs work best" (Paluck & Green, 2009, p. 357). Eliminating the prejudice that stereotyping can produce in everyday settings is a worthwhile goal, but not one that scientists are very close to achieving.

ATTRIBUTION: DRAWING INFERENCES FROM ACTIONS

In 1963, Dr. Martin Luther King Jr. gave a speech in which he described his vision for America: "I have a dream that my four children will one day live in a nation where they will not be judged by the color of their skin but by the content of their character." Research on stereotyping demonstrates that Dr. King's concern was well-justified. We do judge others by the color of their skin—as well as by their gender, nationality, religion, age, and occupation—and in so doing, we sometimes make consequential mistakes. But are we any better at judging people by the content of their character? If we could somehow turn off our stereotypes and treat each person as a unique individual, would we judge them more accurately?

HOT SCIENCE

Through Other Eyes

Every human being sees the world through the lens of his or her own personal experience. Each of us has just one ethnicity, one gender, and one sexual orientation, and we don't really know what it would be like to have different ones. So how can we best understand people whose experiences are unlike our own? In 1895, Mary T. Lathrap wrote a poem entitled "Judge Softly." It wasn't very good, but it did contain a line that is quoted to this day:

> Pray, don't find fault with the man that limps,
> Or stumbles along the road.
> Unless you have worn the moccasins he wears,
> Or stumbled beneath the same load.
>
> Just walk a mile in his moccasins
> Before you abuse, criticize and accuse.
> If just for one hour, you could find a way
> To see through his eyes, instead of your own muse.

Lathrap's poem is a call for compassion, and it suggests that the best way to generate compassion for someone is to "walk a mile in his moccasins" if "just for one hour." That suggestion certainly rings true—but is it? To find out, Silverman, Gwinn, and van Boven (2015) gave sighted people the opportunity to experience blindness, and then measured how well they understood those who are actually blind. Participants reported to the laboratory, were blindfolded, and were then asked to perform a variety of ordinary tasks ranging from filling a glass with water to finding the stairwell in a hallway. Participants in a control condition merely watched the first group of participants perform these tasks. After either performing these tasks or watching others perform them, all participants reported their feelings toward blind people, and then estimated how capable blind people are of working and living independently.

Wearing the blindfold did precisely what Lathrop's poem suggested it would do: It made participants feel more compassionate—more empathetic, friendly, open, sympathetic, and warm toward blind people. But it also had a side effect that the poet did not anticipate. Compared with observers, participants who wore the blindfold thought that blind people were much less competent and capable—less able to get around a city, to cook, to own their own business, to teach school or become an accountant, and so on. In other words, walking in a blind person's moccasins for a few minutes led participants to conclude that walking was pretty much impossible.

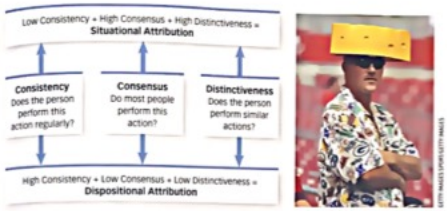
But it isn't. Most blind people are perfectly capable of performing ordinary tasks, such as pouring water and finding a stairwell, and perfectly capable of performing jobs from schoolteacher to accountant. Blindness is a disability to which people adapt extraordinarily well over time, and although there are a few things that blind people can't do as well as sighted people can [e.g., drive], there are other things they can do even better [e.g., hear]. Participants in this study had enough time to experience blindness but not enough time to adapt to it. And yet, being blindfolded for a few minutes led them to mistakenly believe that they understood what a lifetime of blindness was like. Rather than becoming more accurate about what it is like to have this particular disability, they became less accurate.

All of us are forever trapped inside our own skins. We can never really know what another person's experience of the world is like, and well-meaning exercises that are designed to expand our horizons can actually do the opposite. If we listen carefully to people, we can gain some appreciation of their perspectives. But we should not be fooled into thinking that we have ever seen the world through someone else's eyes.

▲ Paul Scruggs is blind, but that doesn't prevent him from working as a machine operator in a factory that makes military uniforms. You could probably run this machine with your eyes closed—but not in the first hour of trying.

Not necessarily. Treating people as individuals means judging them by their own words and deeds. This is more difficult than it sounds because the relationship between what a person *is* and what a person *says or does* is not always straightforward. An honest person may lie to save a friend from embarrassment, and a dishonest person may tell the truth to bolster her credibility. Happy people have some weepy moments, polite people can be rude in traffic, and people who despise us can be flattering when they need a favor. In short, people's behavior sometimes tells us about the kinds of people they are, but sometimes it simply tells us about the kinds of situations they happen to be in.

To understand people, we need to know not only *what* they did but also *why* they did it. Is the batter who hit the home run a talented slugger, or was the wind blowing in just the right direction at just the right time? Is the politician who gave the pro-life speech really opposed to abortion, or was she just trying to win the conservative vote? When we answer questions such as these, we are making **attributions**, which are *inferences about the causes of people's behaviors* (Epley & Waytz, 2010; Gilbert, 1998). We make *situational attributions* when we decide that a person's behavior was caused by some temporary aspect of the situation in which it happened ("He was lucky that the wind carried the ball into the stands"), and we make *dispositional attributions* when we decide that a person's behavior was caused by a relatively enduring tendency to think, feel, or act in a particular way ("He's got a great eye and a powerful swing").



◄ **Figure 13.23**
THE COVARIATION MODEL OF ATTRIBUTION The covariation model tells us whether to make a dispositional or situational attribution for a person's action.

How do we know whether to make a dispositional or a situational attribution? According to the *covariation model* (Kelley, 1967), the consistency, consensuality, and distinctiveness of an action can tell us what kind of attribution to make. For example, why did the man in **FIGURE 13.23** decide to wear a cheese-shaped hat? Is it because he has a goofy personality (*dispositional attribution*)? Or is he a non-goofy guy who happens to be on his way to a Wisconsin football game (*situational attribution*)? According to the covariation model, you can answer this question by asking whether his behavior is *consistent* (does he usually wear this hat?), *consensual* (are other people wearing this hat?), and *distinctive* (does he do other goofy things?). If it turns out that he wears this hat every day (*high consistency*), and if no one else is wearing a cheese hat today (*low consensus*), and if he tends to do other goofy things—such as wearing clown shoes and saying "Honk, honk" to passersby (*low distinctiveness*)—then you should probably make a dispositional attribution ("He's a certified goofball"). On the other hand, if he rarely wears this hat (*low consistency*), if lots of other people are wearing cheese hats today (*high consensus*), and if he doesn't tend to do other goofy things (*high distinctiveness*), then you should probably make a situational attribution ("He's a Green Bay Packers fan on game day"). As Figure 13.23 shows, patterns of consistency, consensus, and distinctiveness provide useful information about the cause of a person's behavior.

As sensible as this seems, research suggests that people don't always use this information as they should. The **correspondence bias** is *the tendency to make a dispositional attribution when we should instead make a situational attribution* (Gilbert & Malone, 1995; Jones & Harris, 1967; Ross, 1977). This bias is so common and so basic that it is often called the *fundamental attribution error*. For example, volunteers in one experiment played a trivia game in which one participant acted as the quizmaster and made up a list of unusual questions, another participant acted as the contestant and tried to answer those questions, and a third participant acted as the observer and simply watched the game. The quizmasters tended to ask tricky questions based on their own idiosyncratic knowledge, and contestants were generally unable to answer them. After watching the game, the observers were asked to decide how knowledgeable the quizmaster and the contestant were. Although the quizmasters had asked good questions and the contestants had given bad answers, it should have been clear to the observers

attribution An inference about the cause of a person's behavior.

correspondence bias The tendency to make a dispositional attribution even when we should instead make a situational attribution.

"I think success is all perspiration. You make your own luck," said Robert Herjavec, a successful businessman and a judge on Shark Tank. But research on the correspondence bias suggests that it is dangerously easy to credit success to intelligence and tenacity, and to blame failure on stupidity and laziness.

actor–observer effect The tendency to make situational attributions for our own behaviors while making dispositional attributions for the identical behavior of others.

that all this asking and answering was a product of the roles they had been assigned to play and that the contestant would have asked equally good questions and the quizmaster would have given equally bad answers had their roles been reversed. And yet observers tended to rate the quizmaster as more knowledgeable than the contestant (Ross, Amabile, & Steinmetz, 1977) and were more likely to choose the quizmaster as their own partner in an upcoming game (Quattrone, 1982). Even when we know that a successful athlete had a home-field advantage or that a successful entrepreneur had family connections, we tend to attribute their success to talent and tenacity.

What causes the correspondence bias? First, the situational causes of behavior are often invisible (Ichheiser, 1949). For example, professors tend to assume that fawning students really do admire them in spite of the strong incentive for students to kiss up to those who control their grades. The problem is that professors can actually see students laughing at witless jokes and applauding after boring lectures, but they cannot see "control over grades." Situations are not as tangible or visible as behaviors, so it is all too easy to ignore them (Taylor & Fiske, 1975). Second, situational attributions tend to be more complex than dispositional attributions and require more time and attention. When participants in one study were asked to make attributions while performing a mentally taxing task (keeping a seven-digit number in mind), they had no difficulty making dispositional attributions, but they found it quite difficult to make situational attributions (Gilbert, Pelham, & Krull, 1988; Winter & Uleman, 1984). In short, information about situations is hard to get and hard to use, so we tend to believe that other peoples' actions are caused by their dispositions even when there is a perfectly reasonable situational explanation.

The correspondence bias is stronger in some cultures than in others (Choi, Nisbett, & Norenzayan, 1999), among some people than others (D'Agostino & Fincher-Kiefer, 1992; Li et al., 2012), and under some circumstances than others. For example, we seem to be more prone to correspondence bias when judging other people's behavior than when judging our own. The **actor–observer effect** is *the tendency to make situational attributions for our own behaviors while making dispositional attributions for the identical behavior of others* (Jones & Nisbett, 1972). When college students are asked to explain why they and their friends chose their majors, they tend to explain their own choices in terms of situations ("I chose economics because my parents told me I have to support myself as soon as I'm done with college") and their friends' choices in terms of dispositions ("Leah chose economics because she's materialistic"; Nisbett et al., 1973). The actor–observer effect occurs because people typically have more information about the situations that caused their own behavior than about the situations that caused other people's behavior. We will always remember getting the please-major-in-something-practical lecture from our parents, but we weren't at Leah's house to see her get the same lecture. As observers, we are naturally focused on another person's behavior, but as actors, we are quite literally focused on the situations in which our behavior occurs. Indeed, when people are shown videotapes of their conversations that allow them to see themselves from their partner's point of view, they tend to make dispositional attributions for their own behavior and situational attributions for their partner's (Storms, 1973; Taylor & Fiske, 1975).

Build to the Outcomes

1. Where do stereotypes come from? What purpose do they serve?
2. When are stereotypes most and least likely to be useful?
3. Why do stereotypes sometimes seems more accurate than they really are?
4. Why is it difficult not to use stereotypes?
5. What are the three kinds of information that determine whether a dispositional or situational attribution is warranted?
6. Why do people tend to make dispositional attributions even when they should not?

Chapter Review

The Survival Game

- Survival and reproduction require scarce resources; aggression and cooperation are two ways to acquire them.
- Aggression often results from negative affect. The likelihood that people will aggress when they experience negative affect is determined both by biological and cultural factors.
- Cooperation can be beneficial, but it also is risky. One strategy for reducing those risks is to form groups whose members show in-group favoritism.
- Groups can be beneficial, but they also have costs. They make poor decisions because they overemphasize information that all members share, and they allow people to behave unethically by causing them to lose focus on their personal values.
- Many behaviors that appear to be altruistic have hidden benefits for the person who performs them, but there is no doubt that humans sometimes do exhibit genuine altruism.

The Mating Game

- Both biology and culture tend to make the costs of reproduction higher for women than for men, which is one reason that women tend to be choosier when selecting potential mates.
- Attraction is determined by situational factors (such as proximity), physical factors (such as symmetry), and psychological factors (such as similarity).
- Human reproduction usually occurs within the context of a long-term relationship. People weigh the costs and benefits of their relationships and are least likely to end them when they do not believe they can do better, when they and their partners have similar cost–benefit ratios, and/or when they have invested a lot of time in the relationship.

Controlling Others

- People are motivated to experience pleasure and avoid pain (the hedonic motive), and thus can be influenced by rewards and punishments. These influence attempts can sometimes backfire by changing how people think about their own behavior or by making them feel as though they are being manipulated.
- People are motivated to attain the approval of others (the approval motive), and thus can be influenced by social norms, such as the norm of reciprocity. People often look to the behavior of others to determine what kinds of behavior are normative. People tend to obey authorities even when they should not.
- People are motivated to know what is true (the accuracy motive). People often look to the behavior of others to determine what is true.
- People can be persuaded by appeals to reason or emotion. Each is effective under different circumstances.
- People feel bad when they notice inconsistency among their attitudes, beliefs, and actions, and they will often change one of these things in order to achieve consistency.

Understanding Others

- We make inferences about others based on the categories to which they belong (stereotyping). This sometimes leads us to misjudge others because stereotypes are often inaccurate, overused, self-perpetuating, unconscious, and automatic.
- Some techniques may reduce stereotyping, but so far, none has proved powerful and long-lasting.
- We sometimes make mistakes when drawing inferences about people from their behaviors. We tend to attribute those behaviors to the person's dispositions even when we should attribute them to the person's situation.

KEY CONCEPT QUIZ

1. Why are acts of aggression—from violent crime to athletic brawls—more likely to occur on hot days when people are feeling irritated and uncomfortable?
   a. frustration
   b. negative affect
   c. resource scarcity
   d. the prisoner's dilemma
2. What is the single best predictor of aggression?
   a. temperament
   b. age
   c. gender
   d. status
3. The prisoner's dilemma game illustrates
   a. in-group favoritism.
   b. the diffusion of responsibility.
   c. group polarization.
   d. the benefits and costs of cooperation.
4. Which of the following best describes reciprocal altruism?
   a. the ultimatum game
   b. diminished responsibility in groups
   c. cooperation extended over time
   d. cooperation with relatives
5. Which of the following is a situational factor that influences attraction?
   a. proximity
   b. similarity
   c. appearance
   d. personality
6. The fact that people in relationships want their cost–benefit ratio to be about the same as their partners' is known as
   a. companionate love.
   b. bilateral symmetry.
   c. equity.
   d. comparison level.

7. The _____ motive explains the fact that people prefer to experience pleasure rather than pain.
   a. altruistic
   b. accuracy
   c. approval
   d. hedonic

8. The tendency to do what authorities tell us to do is known as
   a. persuasion.
   b. obedience.
   c. conformity.
   d. the self-fulfilling prophecy.

9. What is the process by which people come to understand others?
   a. heuristic processing
   b. reciprocal altruism
   c. social cognition
   d. cognitive dissonance

10. The tendency to make a dispositional attribution even when a person's behavior was caused by the situation is referred to as
    a. comparison leveling.
    b. stereotyping.
    c. covariation.
    d. correspondence bias.

Don't stop now! Quizzing yourself is a powerful study tool. Go to LaunchPad to access the LearningCurve adaptive quizzing system and your own personalized learning plan. Visit launchpadworks.com.

KEY TERMS

social psychology (p. 508)
aggression (p. 508)
frustration–aggression hypothesis (p. 508)
cooperation (p. 512)
group (p. 513)
prejudice (p. 513)
common knowledge effect (p. 514)
group polarization (p. 514)
groupthink (p. 514)
deindividuation (p. 515)
diffusion of responsibility (p. 515)
social loafing (p. 515)
bystander intervention (p. 515)
altruism (p. 516)
kin selection (p. 516)
reciprocal altruism (p. 516)
mere exposure effect (p. 520)
passionate love (p. 526)
companionate love (p. 526)
comparison level (p. 526)
equity (p. 526)
social influence (p. 527)
norms (p. 528)
norm of reciprocity (p. 529)
normative influence (p. 529)
door-in-the-face technique (p. 529)
conformity (p. 530)
obedience (p. 532)
attitude (p. 533)
belief (p. 533)
informational influence (p. 533)
persuasion (p. 534)
systematic persuasion (p. 534)
heuristic persuasion (p. 534)
foot-in-the-door technique (p. 535)
cognitive dissonance (p. 536)
social cognition (p. 537)
stereotyping (p. 538)
self-fulfilling prophecy (p. 540)
stereotype threat (p. 540)
perceptual confirmation (p. 540)
subtyping (p. 541)
attribution (p. 545)
correspondence bias (p. 545)
actor–observer effect (p. 546)

CHANGING MINDS

1. One of the senators from your state is supporting a bill that would impose heavy fines on aggressive drivers who run red lights. One of your classmates thinks this is a good idea. "The textbook taught us a lot about punishment and reward. It's simple. If we punish aggressive driving, its frequency will decline." Is your classmate right? Might the new law backfire? Might another policy be more effective in promoting safe driving?
2. One of your friends is outgoing, funny, and a star athlete on the women's basketball team. She has started to date a man who is introverted and prefers playing computer games to attending parties. You tease her about the contrast in personalities, and she replies, "Well, opposites attract." Is she right?
3. A large law firm is found guilty of discriminatory hiring practices. Your friend reads about the case and scoffs, "People are always so quick to claim racism. Sure, there are still a few racists out there, but if you do surveys and ask people what they think about people of other races, they generally say they feel fine about them." What would you tell your friend?
4. One of your friends has a very unique fashion sense and always wears a neon orange track suit with a battered fedora. "Most people follow the crowd," he explains. "I don't. I'm an individual, and I make my own choices, without influence from anyone else." Could he be right? What examples might you provide for or against your friend's claim?
5. A classmate learns about the Milgram (1963) study, in which participants were willing to obey orders to administer painful electric shocks to a learner who begged them to stop. "Some people are such sheep!" she says. "I know that I wouldn't behave like that." Is she right? What evidence would you give her to support or oppose her claim?
6. Your family gathers for a holiday dinner, and your cousin Wendy brings her fiancée, Amanda. It's the first time Amanda has met the whole family, and she seems nervous. She talks too much, laughs too loud, and rubs everyone the wrong way. Later, an uncle says to you, "It's hard to imagine Wendy wanting to spend the rest of her life married to someone so annoying." How can you explain to your uncle that you think he has fallen prey to the correspondence bias?