Social Psychology

ACCORDING TO THE GENEVA CONVENTIONS, prisoners of war should be treated with respect and dignity. Even amid the horrors of war, we expect the military to behave in a civilized and professional manner. This is why the events at Abu Ghraib prison, in Iraq, were so shocking. American soldiers brutalized and humiliated Iraqi detainees, threatening them with dogs, beating them with broom handles and chairs, and forcing them to lie on top of each other naked and simulate oral sex and masturbation. When photographs of these actions appeared on the Internet, outrage and condemnation of the deplorable conduct were immediate. Responding quickly to this fury, U.S. government officials stressed that these were isolated incidents carried out by a small group of wayward soldiers. The idea that only a few troubled individuals were responsible for torturing and humiliating Iraqi prisoners is bizarrely
comforting. Somehow we are relieved to know that their deviant behavior does not reflect on ordinary people. Surely most of us would not inflict such humiliation and pain on prisoners, many of whom were just teenagers and young men rounded up for questioning. Or would we?

Would you beat up or humiliate someone simply because you were ordered to do so or were in a situation where others were doing so? Or would you defy authority and resist peer pressure? How do we explain the guards’ actions at Abu Ghraib, whether or not the guards were ordered to perform them? The case of Abu Ghraib challenges many commonsense notions about human nature and forces us to consider questions about humanity’s dark side. People beat, rape, torture, and murder others. Is something wrong with these people?

According to social psychologists, nothing typically is wrong with people such as the guards at Abu Ghraib. Rather, they are probably normal people caught up in overwhelming situations that shape their actions. Social psychologists point out a number of situational factors that likely influenced the guards’ behavior at Abu Ghraib, such as an unclear chain of command and a diffusion of responsibility. Moreover, social psychologists know that people typically are obedient to authority, especially in times of war. Also, the working conditions promoted aggression: One of the Abu Ghraib units had expected to be in Iraq a short time, working in traffic control; instead, they found themselves in an overcrowded prison (with a notorious reputation, before the war, for having been a torture chamber under Saddam Hussein’s regime) where they worked long hours, six or seven days a week, in extremely hot temperatures while under frequent mortar attack. Finally, during wartime, people are especially likely to view the world as consisting of “us” and “them.” Members of the enemy group are viewed as being all the same, often as evil and inferior, and are treated in a dehumanized fashion. All these factors contributed to the mistreatment of prisoners at Abu Ghraib.

In a classic study that illuminates the forces at work in situations like Abu Ghraib, the psychologists Philip Zimbardo and Chris Haney had male Stanford undergraduates play the roles of prisoners and guards in a mock prison (Haney, Banks, & Zimbardo, 1973). The students, who had all been screened and found to be psychologically stable, were randomly assigned to their roles. What happened was unexpected and shocking. Within days, the guards became brutal and sadistic. They constantly harassed the prisoners, forcing them to engage in meaningless and tedious tasks and exercises. Although the study was scheduled to last two weeks, it became necessary to stop it after only six days. The Stanford prison study demonstrated the speed at which apparently normal college students could be transformed into the social roles they were playing. Similarly, the guards at Abu Ghraib believed it was their job to “soften up” the prisoners for interrogation, and their actions were strikingly similar to those of the Stanford participants (FIGURE 12.1).

When people act brutally and sadistically, we assume they are brutal and sadistic. We neglect to consider the situation in which they have acted brutally and sadistically and to assess how much power it had in shaping their behavior. This is not to suggest that individual traits are unimportant or that people are not responsible for their behavior; however, many behaviors become more understandable within particular contexts.

Humans are social animals who live in a highly complex world. At any moment, hundreds of millions of people are talking with friends, forming impressions of strangers, arguing with family members, even falling in love with potential mates. Our regular interactions with others—even imagined others—shape who we are and how we understand the world. Social psychology is concerned with how people influence other people’s thoughts, feelings, and actions. Because almost every human activity

FIGURE 12.1 When Good People Go Bad (a) Were soldier-guard at Abu Ghraib who harassed, threatened, and tortured prisoners just a few “bad apples,” or were they normal people reacting to an extreme situation? (b) In the Stanford prison study, student-guards took on their roles with such vigor that the study was ended early because of concerns for the well-being of the “guards” and the “prisoners.”
has a social dimension, research in social psychology covers expansive and varied territory: how we perceive ourselves and others, how we function in groups, why we hurt or help people, why we fall in love, why we stigmatize and discriminate against certain people. In this chapter, you will learn the basic principles of how people interact with each other. You will see that research in social psychology provides insights into situations such as Abu Ghraib, revealing to us not that humans are inherently flawed or evil but rather that social context is powerful.

How Do Attitudes Guide Behavior?

How do you feel about the Abu Ghraib prisoner abuse scandal? You quite likely had feelings, opinions, and beliefs about it before you started reading this chapter, just as you have feelings, opinions, and beliefs about yourself, your friends, your favorite television program, and so on. These feelings, opinions, and beliefs are called attitudes. The concept of attitudes—their evaluation of objects, events, or ideas—is central to social psychology. Attitudes are shaped by social context and play an important role in how we evaluate and interact with other people. We have attitudes about all sorts of things, from trivial and mundane matters such as which deodorant works best to grand issues such as politics, morals, and religion—that is, the core beliefs and values that define who we are as human beings. Some of these attitudes we are aware of, whereas others we do not even know we hold. Some attitudes are complex and involve multiple components. You might enjoy eating ice cream but believe it is bad for your health. You might be disgusted with the Abu Ghraib prisoner abuse but have pity for the U.S. soldiers caught up in the horrific situation. This section considers how attitudes affect our daily lives.

We Form Attitudes through Experience and Socialization

Direct experience or exposure to things provides information that shapes attitudes. As we encounter new objects, we explore them and learn about them. In general, people develop negative attitudes about new objects more quickly than they develop positive attitudes (Fazio, Eiser, & Shook, 2004).

We talk about acquiring a taste for foods that we did not like originally, such as coffee or sushi, but how do we come to like something that we could not stand the first time we were exposed to it? Typically, the more a person is exposed to something, the more he or she tends to like it. In a classic set of studies, Robert Zajonc (1968, 2001) exposed people to unfamiliar items a few times or many times. Greater exposure to the item, and therefore greater familiarity with it, caused people to have more positive attitudes about the item; this process is known as the mere exposure effect. For example, when people are presented with normal and reversed photographs of themselves, they tend to prefer the reversed images, which correspond to what they see when they look in the mirror (FIGURE 12.2). Their friends and family members prefer the true photographs, which correspond to how they view the people.

Attitudes can be conditioned (on conditioning, see Chapter 6, “Learning”). Advertisers often use classical conditioning: When we see an attractive celebrity paired with a product, we develop more-positive attitudes about the product. After conditioning, a formerly neutral stimulus, such as a deodorant, triggers the same attitude response as the paired object, such as Brad Pitt (if Brad Pitt were to endorse a deodorant). Operant conditioning also shapes attitudes. If you are rewarded with good grades each time you study, you will develop a more positive attitude toward studying.

FIGURE 12.2 The Mere Exposure Effect
If he is like most people, U.S. president Barack Obama will prefer (right) his mirror image, with which he is more familiar, to (left) his photographic image.
Attitudes are also shaped through socialization. Caregivers, media, teachers, religious leaders, and politicians guide our attitudes about many things, including what kinds of music we should like, how we should feel about people who behave in certain ways, and how we should treat the environment. Society socializes many of our basic attitudes, including which things are edible. For instance, many Hindus do not eat beef, whereas many Jews do not eat pork. Would you eat a worm? Most Westerners would find it disgusting. But in some cultures worms are a delicacy.

**Behaviors Are Consistent with Strong Attitudes**

To the extent that attitudes are adaptive, they should guide behavior. In general, the stronger and more personally relevant the attitude, the more likely it will predict behavior, be consistent over time, and be resistant to change. For instance, someone who grew up in a strongly Democratic household, especially one where derogatory comments about Republicans were expressed frequently, will more likely register as a Democrat and vote Democratic than someone who grew up in a more politically neutral environment. Moreover, the more specific the attitude, the more predictive it is. For instance, your attitudes toward recycling are more predictive of whether you take your soda cans to a recycling bin than are your general environmental beliefs. Attitudes formed through direct experience also tend to predict behavior better. No matter what kind of parent you think you will be, for example, once you have seen one child through toddlerhood, you will have formed very strong attitudes about child-rearing techniques, and these attitudes will predict how you approach the early months and years of your second child.

The ease with which memories related to an attitude are retrieved—attitude accessibility—predicts behavior consistent with the attitude. Russell Fazio (1995) has shown that easily activated attitudes are more stable, predictive of behavior, and resistant to change. Thus the more quickly you recall that you like your psychology course, the more likely you will attend lectures and read the textbook.

Attitudes can be explicit or implicit. Explicit attitudes are those you know about and can report to other people. If you say you like bowling, you are stating your explicit attitude toward it. Anthony Greenwald and Mahzarin Banaji (1995) have noted that our many implicit attitudes influence our feelings and behaviors at an unconscious level. We access implicit attitudes from memory quickly, with little conscious effort or control. Just as implicit memory (see Chapter 7, “Attention and Memory”) allows us to perform actions, such as riding a bicycle, without thinking through all the required steps, so implicit attitudes shape behavior without our awareness. For instance, you might purchase a product endorsed by a celebrity even though you have no conscious memory of having seen the celebrity use the product. (Maybe Brad Pitt has endorsed a deodorant?) Some evidence suggests that implicit attitudes involve brain regions associated with implicit memory in general (Liebman, 2000). Also as with implicit memory, researchers assess implicit attitudes through indirect means, such as through behaviors rather than through self-reports.

One method researchers use to assess implicit attitudes is the Implicit Association Test (IAT; Greenwald, McGhee, & Schwartz, 1998), a reaction time test that can identify implicit attitudes. The IAT measures how quickly we associate concepts or objects with positive or negative words (FIGURE 12.3). Responding more quickly to the association of female = bad than female = good indicates your implicit attitude about females. Implicit attitudes are also revealed in people’s behaviors. Under particular circumstances, for example, even people who claim to harbor no racist beliefs might respond differently to people of other races than to people of
their own race (say, if a person of one race is in a situation where the majority of people are of a different race). Indeed, a recent meta-analysis of more than 100 studies found that, in socially sensitive situations in which people might not want to admit their real attitudes, the IAT is a better predictor of behavior than are explicit self-reports (Greenwald, Poehlman, Uhlmann, & Banaji, in press). And as discussed below, implicit attitudes are important for understanding racial stereotypes.

Discrepancies Lead to Dissonance

Most people expect attitudes to guide behavior. We expect people to vote for candidates they like and to avoid eating foods they do not like. In 1957, Leon Festinger, studying how people resolved situations in which they held conflicting attitudes, proposed an elegant theory that was to become one of the most important catalysts of research in experimental social psychology (Figure 12.4). He proposed that cognitive dissonance occurs when there is a contradiction between two attitudes or between an attitude and a behavior. For example, people experience cognitive dissonance when they smoke even though they know that smoking might kill them. A basic assumption of dissonance theory is that dissonance causes anxiety and tension and therefore motivates people to reduce the dissonance and relieve displeasure. Generally, people reduce dissonance by changing their attitudes or behaviors; they sometimes also rationalize or trivialize the discrepancies.

Dissonance theory provides important insights into many perplexing behaviors. Consider the American soldiers who served as prison guards at Abu Ghraib. Their treatment of prisoners likely was dissonant from their views on how people generally should be treated. In such poorly run, overcrowded wartime prisons, guards commonly develop extremely negative attitudes about their prisoners, even viewing them as subhuman. Although this might resolve dissonance for the guards, it encourages mistreatment of the prisoners. The following sections examine how dissonance affects attitudes and behavior.

Postdecisional Dissonance

According to cognitive dissonance theory, holding positive attitudes about two options but having to choose one of them causes dissonance. For example, a person might have trouble deciding which college to attend. The person might narrow the choice to two or three alternatives and then have to choose. Postdecisional dissonance then motivates the person to focus on one school—the chosen school’s—positive aspects and the other schools’ negative aspects. Similarly, a person leaning toward buying a truck rather than a car might suddenly think of many reasons for owning a truck rather than a car, whereas a person buying a car might do just the opposite. This effect occurs automatically, with minimal cognitive processing, and apparently without awareness. Indeed, even patients with long-term memory loss may show postdecisional effects for past choices, even if the patients do not consciously recall the outcomes of those choices (Lieberman, Ochsner, Gilbert, & Schacter, 2001).

Attitude Change

In one of the original dissonance studies (Festinger & Carlsmith, 1959), each participant performed an extremely boring task for an hour. The experimenter then paid the participant $1 or $20 to lie and tell the next participant that the task was really interesting, educational, and worthwhile. Nearly all the participants subsequently provided the false information. Later, under the guise of a different survey, the same participants were asked how worthwhile and enjoyable the task had actually been. You might think that those paid $20 remembered the task as more enjoyable, but just the opposite happened.
Participants who were paid only $1 to mislead a fellow participant experienced cognitive dissonance, which led them to alter their attitudes about how pleasurable the task had been.

**FIGURE 12.5** Cognitive Dissonances In Festinger’s dissonance studies, participants performed an extremely boring task and then reported to other participants how enjoyable it was. Some participants were paid $20 to lie, and some were paid $1.

**FIGURE 12.6** Justifying Effort In early 2008, the University of Maryland removed the Delta Sigma chapter of the Delta Tau Delta fraternity from the College Park campus. Photos such as this one revealed that the fraternity’s hazing included abusive alcohol consumption and mental, emotional, and physical duress. Might the pledges have justified their mistreatment by feeling intensely committed to the group?

persuasion The active and conscious effort to change attitudes through the transmission of a message.

Participants who had been paid $1 rated the task much more favorably than those who had been paid $20. According to the researchers, this effect occurred because those paid $1 had insufficient monetary justification for lying. Therefore, to justify why they went along with the lie, they changed their attitudes about performing the dull experimental task. Those paid $20 had plenty of justification for lying, since $20 was a large amount of money in 1959 (roughly equivalent to $140 today), so they did not experience dissonance and did not have to change their attitudes about the task (FIGURE 12.5). As this research shows, one way to get people to change their attitudes is to change their behaviors first, using as few incentives as possible. As discussed in Chapter 9, for example, giving children rewards for drawing creatively with colored pens undermines how much they subsequently use the pens.

**JUSTIFYING EFFORT** If people’s attitudes can be changed so easily by changes in their behavior, what effect might extreme group-related behaviors, such as initiation rites, have on members’ attitudes about the group? On college campuses, administrators impose rules and penalties to discourage hazing, yet fraternities and sororities have continued to do it. They do not simply select new members and let them in without initiation because requiring people to undergo embarrassing or difficult rites of passage makes membership in the group seem much more valuable and makes the group more cohesive. To test these ideas, Elton Aronson and Judson Mills (1959) required women to undergo a test to see if they qualified to take part in a research study. One group of women had to read a list of obscene words and sexually explicit passages in front of the male experimenter, whereas a control group read a list of milder words (such as **positive**). Both groups then listened to a boring and technical presentation about mating rituals in lower animals. Women who read the embarrassing words reported that the presentation was much more interesting, stimulating, and important than did the women who read the milder words.

As this research shows, when people put themselves through pain, embarrassment, or discomfort to join a group, they experience a great deal of dissonance. After all, they typically would not choose to be in pain, embarrassed, or uncomfortable. Yet they made such a choice. They resolve the dissonance by inflating the importance of the group and their commitment to it. This justification of effort helps explain why people are willing to subject themselves to humiliating experiences such as hazing (FIGURE 12.6). More tragically, it may help explain why people who give up connections to families and friends to join cults or to follow enigmatic leaders are willing to die rather than leave the groups. If they have sacrificed so much to join a group, people believe, the group must be extraordinarily important.

**Attitudes Can Be Changed through Persuasion**

A number of forces other than dissonance can conspire to change attitudes. We are bombarded by television advertisements; lectures from parents, teachers, and physicians; public service announcements; politicians appealing for our votes; and so on. Persuasion is the active and conscious effort to change attitudes through the transmission of a message. The earliest scientific work on persuasion was conducted by Carl Hovland and his colleagues (1953), who emphasized that persuasion is most likely to occur when people pay attention to a message, understand it, and find it convincing; in addition, the message must be memorable, so its impact lasts over time.

Researchers have noted that persuasion leads to attitude change in two fundamental ways (FIGURE 12.7). According to Richard Petty and John Cacioppo’s
elaboration likelihood model (1986), persuasion works via two routes: The central route—in which people pay attention to arguments, consider all the information, and use rational cognitive processes—leads to strong attitudes that last over time and are resistant to change. The peripheral route—in which people minimally process the message—leads to more-impulsive action, as when a person decides to purchase a product because a celebrity has endorsed it.

The cues that influence a message’s persuasiveness include the source (who delivers the message), the content (what the message says), and the receiver (who processes the message). Sources who are both attractive and credible are the most persuasive. Thus television ads for medicines and medical services often feature very attractive people playing the roles of physicians. The message is effective because of peripheral processing. Even better, of course, is when a drug company ad uses a spokesperson who is both attractive and an actual doctor. Credibility and persuasiveness may also be heightened when the receiver perceives the source as similar to himself or herself.

Of course, the arguments in the message are also important for persuasion. Strong arguments that appeal to our emotions are the most persuasive. Advertisers also use the mere exposure effect, repeating the message over and over in the hope that multiple exposures will lead to increased persuasiveness. For this reason, politicians often make the same statements over and over during campaigns. Those who want to persuade (including, of course, politicians) also have to decide whether to deliver one-sided arguments or to consider both sides of particular issues. One-sided arguments work best when the audience is on the speaker’s side or is gullible. With a more skeptical crowd, speakers who acknowledge both sides but argue that one is superior tend to be more persuasive than those who completely ignore the opposing view.

**FIGURE 12.7** The Elaboration Likelihood Model When people are motivated to consider information carefully, they process it via the central route, and their attitude changes reflect cognitive elaboration (left). When they are not motivated, they process information via the peripheral route, and their attitude changes reflect the presence or absence of shallow peripheral cues (right).
Making Sound Arguments

In everyday language, the word *argument* refers to a dispute between people. In terms of *rhetoric*—the art of speaking or writing as a means of communication or persuasion—it has a somewhat different and more precise meaning. An argument consists of one or more statements, called reasons or premises, used to support a conclusion (i.e., to persuade the reader or listener that the conclusion is true or probably true). Such arguments appear in much of the information we consume, from blog entries to this textbook. An argument may include a qualifier, a constraint or restriction on the conditions under which the conclusion is supported. It may also include a counterargument, or reasons that run counter to the conclusion. A person strengthens his or her argument by acknowledging alternative opinions, showing that various points of view have been taken into account in reaching the argument’s conclusion.

Because an argument must have a conclusion and reasons—that is, not necessarily in that order—a statement such as

*Psychology is my favorite subject.*

is not an argument; it is just a simple statement about a preference. However, *Get plenty of exercise because it helps relieve stress.* is a simple argument, with one conclusion (*Get plenty of exercise*) and one reason that supports the conclusion (*because it helps relieve stress*). The argument

*Young children love to learn from books, so you should develop the habit of reading to your young child every day, even if you are feeling tired from work or family life.***

has a conclusion (*develop the habit of reading to your young child every day*), a reason (*Young children love to learn from books*), and a counterargument (*even if you are feeling tired from work or family life*). Being tired is a reason for not reading to young children, but it is mentioned in a way that makes it seem like a weak counterargument. The qualifier (*Young children*) specifies the condition under which the conclusion is valid.

Making sound arguments is an essential critical thinking skill. If you develop the habit of systematically listing reasons and counter-reasons; weighing each reason as weak, moderate, or strong; and listing qualifiers, you will have greater confidence in the conclusions you come to, and you will be more persuasive in getting people to agree with your conclusions.

Suppose you wanted to address the relationship between media and violence (see the discussions in Chapter 6, “Learning”). Specifically, you want to argue that playing violent video games increases people’s aggressiveness. You would first gather reasons supporting that conclusion, and then gather counter-reasons against that same conclusion. Some reasons, for and against, would be stronger than others. For example, one piece of evidence supporting the conclusion might be a large and well-controlled study that found teenage boys who played violent video games will more likely push people after playing these games. In contrast, if you and your friends spend hours every week playing violent video games, and all of you are not aggressive, you could list this “finding” as a reason that runs counter to the conclusion.
The results from the study would provide strong support for the conclusion, however, while your personal experience would be weak (because anecdotal) evidence against the conclusion. (On the weakness of anecdotal evidence, see the discussion of ESP in Chapter 5, "Sensation and Perception.")

When making your own arguments or analyzing arguments presented to you, you must consider the strengths of both the reasons supporting the conclusion and those running counter to the conclusion. You need to combine this information to determine if the overall support for the conclusion is strong, medium, weak, or nonexistent. To assess the argument's overall strength, you also need to take into account everything you know about good research and about critical thinking. Assessing arguments in this way is not about making everyone think the same; rather, it is about focusing on important information and becoming a better thinker (FIGURE 12.8).

**FIGURE 12.8 Think Critically: Argument Template**

Start with a question.

State your tentative conclusion.

List supporting evidence for your conclusion and rate each piece of evidence as weak, moderate, strong, or very strong.

Give two or three counterarguments against your conclusion and rate each as weak, moderate, strong, or very strong.

Support: Rating:  
Support: Rating:  
Support: Rating:  
Counter: Rating:  
Counter: Rating:  
Counter: Rating:  
List any qualifiers for your evidence.

List any qualifiers for counterarguments.

Rate the overall strength of your argument: weak, moderate, strong, or very strong.


**SUMMING UP**

How Do Attitudes Guide Behavior?

Attitudes are evaluations of objects, of events, or of ideas. They are formed through socialization and direct experience and best predict behavior when they are strong and easily accessible. Discrepancies between attitudes, or between attitudes and behavior, lead to cognitive dissonance. Dissonance theory can be used to explain a wide range of human behavior. Attitudes can be changed through persuasion centrally, when people think carefully about the issues, or peripherally, when they receive the message to a much smaller extent.
MEASURING UP

1. Identify the attitude formation(s) or change process(es) described in each of the following examples. Choose from cognitive dissonance, conditioning, mere exposure effect, persuasion, and socialization.
   a. Akira returns home from her first day of kindergarten. She tells her parents, “I don’t like my teacher.” A few weeks later, her parents hear Akira talking about how much she likes her teacher.
   b. Arnie always wears his seat belt, because his parents taught him to when he was a child.
   c. Given the choice between a Coke or a Pepsi, Marish chooses a Coke. Later that night, he watches his favorite TV show and realizes that Coca-Cola is one of its sponsors.
   d. Sam proclaims her love of coffee to her date. Later, the couple goes to a café. Although Sam is really craving an Italian soda, she orders a coffee.

2. For each of the following scenarios, indicate whether the attitude is likely to predict the subsequent behavior. In a few words, explain why or why not.
   a. Badu somewhat agrees that it is important to vote. Later, a friend asks Badu if he would like to go to the polling place with him.
   b. When asked how she feels about eating fast food, Brooke immediately looks disgusted and proclaims, “Ick!” Later, a friend asks her to grab lunch at a popular fast food joint.
   c. Zane writes a blog entry advocating fair treatment for all people. Later, a friend asks Zane to attend a protest supporting an increase in the wages earned by migrant farm workers.

How Do We Form Our Impressions of Others?

Social psychologists study attitudes because attitudes influence so many of our actions. As you might expect, the attitudes we hold about others are especially interesting to social psychologists. In addition to holding attitudes about other people, we also try to predict how people will act and try to understand why they act the way they do. Over the course of human evolution, one fact has remained constant: As social animals, we live in groups. Groups provide security from predators and from competing groups, mating opportunities, and assistance in hunting food and gathering it. At the same time, members within a group may compete for food and for mates. Mechanisms have therefore evolved for distinguishing members of one's own group from members of other groups, as well as for detecting dangers from within the group, such as deception, coercion, and infidelity. We constantly are required to make social judgments, assessing whether people are friends or foes, potential mates or potential challengers, honest or dishonest, trustworthy or unreliable, and so on. We also automatically classify people into social categories, and doing so can have major implications for how we treat them.

Nonverbal Actions and Expressions Affect Our Impressions

Over the years, social psychology has confirmed the importance of first impressions on long-term evaluations of people. Suppose someone is walking toward you. You make a number of quick judgments, such as whether you know the person, whether the person poses danger, and whether you want to know the person better. How you initially feel about that person will be determined mostly by
nonverbal behaviors. Facial expressions, gestures, walking style, and fidgeting are all examples of nonverbal behavior, sometimes referred to as body language (FIGURE 12.9). Many factors influence impression formation, ranging from the observer’s expectations and attitudes to what the observed person says, as well as his or her nonverbal gestures and physical appearance.

**FACIAL EXPRESSIONS** The first thing we notice about another person is usually the face. When human babies are less than an hour old, they prefer to look at and will track a picture of a human face rather than a blank outline of a head (Morton & Johnson, 1991). The face communicates a great deal, such as emotional state, interest, and distrust. People use their eyes, for example, to indicate anger, to flirt, to catch the attention of a passing waiter, and so on. Eye contact is important in social situations, though how we perceive it depends on our culture. People from Western cultures tend to seek eye contact when they speak to someone. If the other person does not meet their eyes, they might assume, perhaps incorrectly, that the person is embarrassed, ashamed, or lying, whereas they tend to view a person who looks them in the eyes as truthful and friendly. For this reason, people wearing sunglasses are often described as cold and aloof, and police officers sometimes wear sunglasses partly to seem intimidating. In other groups, such as certain Native American tribes, making direct eye contact, especially with the elderly, is considered disrespectful.

**BODY LANGUAGE** How much can be learned from nonverbal behavior? Nalini Ambady and Robert Rosenthal have found that people can make accurate judgments based on only a few seconds of observation, what they refer to as thin slices of behavior. For instance, videotapes of judges giving instructions to juries reveal that judges’ nonverbal actions can predict whether juries find defendants guilty or not guilty. Judges, perhaps unconsciously, may indicate their beliefs about guilt or innocence through facial expressions, tone of voice, and physical gestures. In one study, participants viewed soundless 30-second film clips of college teachers lecturing. Based solely on nonverbal behaviors, the participants’ ratings corresponded very highly to the ratings given by the instructor’s students (Ambady & Rosenthal, 1993).

One important nonverbal cue is how people walk, known as gait. Gait provides information about affective state. People with a bounce in their step, who walk along swinging their arms, are seen as happy. By contrast, people who scurry along, taking short steps while stooped over, are perceived as hostile, while those taking long strides with heavy steps are perceived to be angry. In an intriguing study, researchers found that participants accurately judged sexual orientation at a better-than-chance rate after watching a 10-second silent video or a dynamic figural outline of someone walking or gesturing (Ambady, Hallahan, & Conner, 1999; FIGURE 12.10). What aspects of behavior gave cues to sexual orientation? According to recent research, the extent to which body shape and body motion differed from those of the typical male or female was the primary cue used by perceivers (Johnson, Gill, Reichman, & Tassinary, 2007). Such thin slices of behavior are powerful cues for impression formation.

**We Make Attributions about Others**

We constantly try to explain other people’s motives, traits, and preferences. Why did she say that? Why is he crying? Why does she study so hard? and so on. **Attributions** are people’s causal explanations for events or actions, including other

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*FIGURE 12.9 Nonverbal Behavior* People’s body language affects our impressions of the people and their situations. For example, observers of this couple might assume they are having a conflict.

*FIGURE 12.10 Nonverbal Cues from Body Shape* After watching a 10-second clip of a figural outline such as this one, participants correctly guessed the figure’s sexual orientation at a better-than-chance rate.
people’s behavior. People are motivated to draw inferences in part by a basic need for both order and predictability. The world can be a dangerous place in which many unexpected things happen. People prefer to think that things happen for reasons, and that therefore they can anticipate future events. For instance, you might expect that if you study for an exam you will do well on it. Indeed, when a violent act, such as a rape or murder, appears to be senseless, people often make attributions about the victim, such as “she deserved it” or “he provoked it.” Such attributions are part of what is referred to as the just world hypothesis. From this perspective, victims must have done something to justify what happened to them. People might apply the just world hypothesis, for example, by saying that the Iraqi detainees at the Abu Ghraib prison probably did something that led them to be arrested and therefore were in a sense responsible for and deserving of the abuse they received. It is simply easier to believe that the prisoners, not the guards, must be guilty of criminal actions. Such attributions make the mistreatment seem more understandable and more justified and make the world seem safer and saner.

**Attributional Dimensions** In any situation, there are dozens of plausible explanations for specific outcomes. Doing well on a test, for example, could be due to brilliance, luck, intensive studying, the test’s being unexpectedly easy, or a combination of factors. Fritz Heider, the originator of attribution theory, drew the essential distinction between personal and situational attributions. Personal attributions, also known as internal or dispositional attributions, are explanations that refer to things within people, such as abilities, traits, moods, or efforts. By contrast, situational attributions, also known as external attributions, refer to outside events, such as the weather, accidents, or people’s actions. Bernard Weiner (1974) noted that attributions can vary on other dimensions, such as whether they are stable over time versus unstable, or controllable versus uncontrollable. For instance, weather is situational, unstable, and uncontrollable. Good study habits are personal, stable, and controllable. Weiner’s theory has been used to explain psychological states such as depression. As discussed in Chapters 13 and 14, depressed people attribute their failures to their own incompetence, which they believe is permanent. By contrast, those who are not depressed often self-servingly attribute their failures to situational, unstable, or uncontrollable attributes. Essentially, nondepressed people tend to attribute their failures to temporary aspects of situations, as in blaming failing a test on not getting enough sleep or on the professor’s creating a bad exam. By contrast, they attribute success to personal, permanent factors, as in doing well on an exam because they are smart.

**Attributional Bias** So is it the person? Or is it the situation? When explaining other people’s behavior, we tend to overemphasize the importance of personality traits and underestimate the importance of situation. This tendency is so pervasive that it has been called the fundamental attribution error. Theories such as Fritz Heider and Harold Kelley have described people as intuitive scientists who try to draw inferences about others and make attributions about events. Unlike objective scientists, however, people tend to be systematically biased in their social-information processing. They make self-serving attributions consistent with their preexisting beliefs, and they generally fail to take into account that other people are influenced by social circumstances (FIGURE 12.11). Edward Jones originated the idea of fundamental attribution error during the 1960s, (though he called it the correspondence bias, emphasizing that people expect others’ behaviors to correspond with their own beliefs and personalities). In contrast, according to Jones, when people make attributions about themselves, they tend to focus on situations rather than on their personal dispositions, an error that, in conjunction with the
fundamental attribution error, leads to the actor/observer discrepancy. For instance, people tend to attribute their own lateness to external factors, such as traffic or competing demands, but they tend to attribute other people’s lateness to personal characteristics, such as laziness or lack of organization.

A meta-analysis of 173 studies found that the actor/observer effect is observed most commonly for negative events (Malle, Knobe, & Nelson, 2007). Indeed, we tend to attribute positive events to our dispositions and negative events to outside forces. (For a further examination of this tendency, the self-serving bias, see Chapter 13, “Personality.”)

Is the fundamental attribution error really fundamental? Might there also be cultural differences in the attributional styles that typify people from Eastern and Western societies? Indeed, as discussed in Chapter 1, people in Eastern cultures tend to be more holistic in how they perceive the world, seeing the forest rather than individual trees. The variation within all cultures is important, of course, but on average the evidence indicates that people from Eastern cultures use much more information when making attributions than do people in Western cultures, and they are more likely to believe that human behavior is the outcome of both personal and situational factors (Choi, Dalal, Kim-Prieto, & Park, 2003; Miyamoto & Kitayama, 2002). Easterners may not be susceptible to some of the same attributional biases as Westerners, but they are more likely to take situational forces into account, whereas people in the West place overriding emphasis on personal factors. Thus the basic predictions derived from the fundamental attribution error are found across cultures, though there is a difference in the extent to which people in different cultures attribute others’ behaviors to personality traits rather than to the situations.

**CRITICAL THINKING SKILL**

Identifying and Avoiding the Actor/Observer Discrepancy

An important part of critical thinking is understanding the way we assign causes to our own and others’ behaviors. According to the actor/observer discrepancy, people strongly tend to believe that individual attributes underlie other peoples’ actions (“She failed the quiz because she is stupid”) but to see their own actions as caused by circumstances (“I failed the quiz because I was tired”). With a little attention, you will begin to see people around you making such attributions. During a political campaign, listen to the way the various candidates explain their own behaviors and those of their opponents. This bias is especially noticeable when a candidate says or does something controversial. For example, a candidate who has changed his or her position on an important policy issue likely will claim to have done so for situational reasons, perhaps because of a lack of access to certain information when making the initial statement. However, if that candidate’s opponent has changed position on another issue, the first candidate likely will attribute this change of stance to a lack of firm convictions or another personality flaw on the opponent’s part.

It is easier to recognize the actor/observer discrepancy in others’ thinking than in your own, but once you are aware of this bias, it becomes easier to avoid it. Consider the following scenario: If you have a quick encounter with someone who seems rude or inattentive, do you immediately think,
“Wow, what a nasty person”? Now turn the situation around. Suppose a troubling family problem has made you late for class. As you rush across campus, someone stops you and asks a question. How likely is it that you will think, “Can this person see I’m busy?” and be somewhat rude and inattentive? Yet you might feel justified in behaving this way because of your immediate situation. By learning to recognize the actor/observer discrepancy in your own thinking, you will be able to judge others’ behavior more fairly and to take more responsibility for your own.

**Stereotypes Are Based on Automatic Categorization**

What are Italians like—do they all have fiery tempers? Do all Canadians like hockey? Can white men jump? We hold attitudes and beliefs about groups because they allow us to answer these sorts of questions quickly. Such attitudes and beliefs are stereotypes, cognitive schemas that help us organize information about people on the basis of their membership in certain groups. Stereotypes are mental shortcuts that allow for easy, fast processing of social information. As discussed in Chapter 8, heuristic processing allows us to make quick decisions. Stereotyping occurs automatically and, in most cases, outside of our awareness. In and of themselves, stereotypes are neutral and simply reflect efficient cognitive processes. Indeed, some stereotypes are based in truth: Men tend to be more violent than women, and women tend to be more nurturing than men. However, these are true on average; not all men are violent, nor are all women nurturing.

People construct and use categories to streamline their impression formation and to deal with the limitations inherent in mental processing. That is, because of limited mental resources, people cannot scrutinize every person they encounter. Rather than consider each person as unique and unpredictable, they categorize people as belonging to particular groups about which they hold knowledge in long-term memory. For example, they might automatically categorize people on the basis of their clothing or hairstyles. Once they have categorized those people, they will have beliefs about them based on their stereotypes about the particular categories. That is, stereotypes affect impression formation (Kunda & Spencer, 2003). For example, people are more likely to falsely remember a male name than a female name as that of a famous person (the false fame effect, discussed in Chapter 7), apparently because of the stereotype that men are more likely than women to be famous (Banaji & Greenwald, 1995).

Once people form stereotypes, they maintain them by a number of processes. As schematic structures, stereotypes guide attention toward information that confirms the stereotypes and away from disconfirming evidence. People’s memories are also biased to match stereotypes. These biases lead to illusory correlations in which people believe relationships exist when they do not. A professor who notices one black student performing poorly but fails to notice other black students doing well is confirming a false belief relating race to performance. Similarly, the same behavior might be perceived in different ways so it is consistent with a stereotype. Thus a white man’s success may be attributed to hard work and determination, whereas a black man’s success may be attributed to outside factors, such as luck or affirmative action. A lawyer described as aggressive
and a construction worker described as aggressive conjure up different images. Moreover, when people encounter someone who does not fit a stereotype, they put that person in a special category rather than alter the stereotype, a process known as subtyping. Thus a racist who believes blacks are lazy may categorize a superstar such as Michael Jordan as an exception to the rule rather than as evidence for the stereotype's invalidity. Forming a subtype that includes successful blacks allows the racist to maintain the stereotype that most blacks are unsuccessful.

**SELF-FULFILLING EFFECTS** How does being treated as members of stereotyped groups affect people? Initially untrue stereotypes can become true through self-fulfilling prophecy, in which people come to behave in ways that confirm their own or others' expectations. In the 1960s, the psychologist Robert Rosenthal and a school principal, Lenore Jacobsen, conducted one of the most impressive early examinations of this process. In this study, elementary-school students took a test that supposedly identified some of them, called bloomers, as being especially likely to show large increases in IQ during the school year. Teachers were given a list of the bloomers in their classes. At the end of the year, standardized testing revealed that the bloomers showed large increases in IQ. As you might have guessed, the bloomers had been chosen at random rather than through the test, and therefore their increases in IQ seemed to have resulted from the extra attention and encouragement provided by the teachers. Thus teacher expectations turned into reality.

Of course, negative stereotypes can become self-fulfilling as well. Teachers who expect certain students to fail might, however unconsciously, subtly undermine those students' self-confidence or motivation. For instance, offering unwanted help, even with the best intentions, can send the message that the teacher does not believe the students have what it takes to succeed.

In another study, each man believed he was speaking with either an attractive woman or an unattractive woman on the phone about a potential date (Snyder, Tanke, & Berscheid, 1977). The men who thought the women they talked with were attractive, based on a photo, rated the women as more sociable, poised, and humorous than did men who thought they were talking with unattractive women. Perhaps this finding is not surprising. In addition, however, other participants, who did not know which women were believed to be attractive, listened to only the women's sides of the conversations; those participants also rated the women believed to be attractive in more positive terms. That is, women interacting with men who believed they were attractive behaved more pleasantly than those interacting with men who believed they were unattractive. The men’s behavior helped confirm their stereotypes. This study is another example of the ways our thoughts and behaviors are influenced by events about which we are not consciously aware.

Yet another example of how expectations can affect performance is stereotype threat. As discussed in Chapter 8, stereotype threat applies to any group for which there is a negative stereotype. For instance, when women are asked to indicate if they are male or female and then tested on their math ability, they tend to perform more poorly than when they are not initially reminded of their sex (Steele, 1997). Stereotype threat may partly explain the underlying disparity between the numbers of men and women in science careers. Stereotype threat is among the most studied topics in social psychology over the past decade, as researchers have sought to understand what causes it and how to prevent it. A recent review of the literature identified three interrelated mechanisms as responsible for producing decreased performances following threat: (1) physiological stress affecting prefrontal functioning; (2) a tendency for people to think about their performances, which can distract them from the tasks; and (3) attempts to suppress
negative thoughts and emotions, which require a great deal of effort (Schmader, Johns, & Forbes, 2008). A recent brain imaging study found that women exposed to a math stereotype threat showed reduced activity in brain regions associated with math performance and increased activation in brain regions involved in social and emotional processing, supporting the idea that stereotype threat undermines cognitive processes by raising performance anxiety (Kendall, Richeson, Kelley, & Heatherton, 2008). In each of these examples, people’s beliefs about how others viewed them altered their behaviors in ways that confirmed the stereotypes, even though they had no conscious knowledge of these influences.

**Stereotypes Can Lead to Prejudice**

Stereotypes may be neutral categories, but negative stereotypes of groups lead to prejudice and discrimination. Prejudice consists of the affective or attitudinal responses associated with stereotypes, and it usually involves negative judgments about people based on their group membership. Discrimination is the unjustified and inappropriate treatment of people as a result of prejudice. Prejudice and discrimination are responsible for much of the conflict and warfare around the world. Within nearly all cultures, some groups of people are treated negatively because of prejudice. Social psychologists have spent the last half century studying the causes and consequences of prejudice as well as trying to find ways to reduce its destructive effects.

Why do stereotypes so often lead to prejudice and discrimination? Various researchers have theorized that only certain types of people are prejudiced, that people treat others as scapegoats to relieve the tensions of daily living, and that people discriminate against others to protect their own self-esteem. One explanation, consistent with the theme that the mind is adaptive, is that evolution has led to two processes that produce prejudice and discrimination: We tend to favor our own groups over other groups, and we tend to stigmatize those who pose threats to our groups.

**INGROUP/OUTGROUP BIAS** We are powerfully connected to the groups to which we belong. We cheer them on, fight for them, and sometimes are even willing to die for them. Those groups to which we belong are ingroups; those to which we do not belong are outgroups (FIGURE 12.12). As discussed in Chapter 6, when people participate in conditioning experiments in which aversive stimuli are paired with members of their own racial group or members of a different racial group, they more easily associate the negative stimuli with outgroup members (Olsson, Ebert, Banaji, & Phelps, 2005). This finding suggests that people are predisposed to be wary of others who do not belong to their own groups, since presumably outgroup members have been more dangerous over the course of human evolution. However, people low in racial bias, on both implicit and explicit measures, are less likely to acquire negative associations to neutral stimuli in a classical conditioning paradigm (Livingston & Drwecki, 2007). That is, some people quickly learn that some neutral unfamiliar pictures are repeatedly paired with negative images whereas others resist making those associations. Livingston and Drwecki found that the latter group is less likely to show race bias, and Caucasian people in this group are more likely to be recognized by their African American friends as not prejudiced. The separation of people into ingroup and outgroup members appears to occur early in development. As noted in Chapter 5, people are better able to remember faces of people of their own race than those of people of other races. Researchers have found that three-month-old Caucasian infants in the United Kingdom recognize faces from their own group as well as they recognize faces from other groups.
(African, Middle Eastern, and Chinese). However, by six months of age the infants recognize only Caucasian and Chinese faces, and by nine months they recognize only Caucasian faces (Kelly et al., 2007). When researchers examined implicit race attitudes of Caucasian children using the IAT, they found that six-year-olds showed as much implicit racial bias as 10-year-olds and adults, although by age 10 children reported more egalitarian explicit attitudes (Baron & Banaji, 2006).

Once people categorize others as ingroup or outgroup members, they treat them accordingly. For instance, due to the outgroup homogeneity effect, people tend to view outgroup members as less varied than ingroup members. UCLA students may think Berkeley students are all alike, but when they think about UCLA students they cannot help but notice the wide diversity of different student types. Of course, for Berkeley students, the reverse is true about UCLA students and themselves. Similarly, most people recognize that residents of their home countries differ in substantial ways; but Westerners, for example, tend to view Arabs as being very similar to one another, sharing similar values and even attitudes about the West, while Arabs tend to hold the same sort of views about Westerners.

The consequence of categorizing people as ingroup or outgroup members is ingroup favoritism, in which people will more likely distribute resources to ingroup members than to outgroup members. In addition, people are more willing to do favors for ingroup members or to forgive their mistakes or errors. The power of group membership is so strong that people exhibit ingroup favoritism even if the groups are determined by arbitrary processes. Henri Tajfel and John Turner (1979) randomly assigned volunteers to two groups, using meaningless criteria such as flipp ing a coin. Participants were then given a task in which they divided up money. Not surprisingly, they gave more money to their ingroup members, but they also tried to prevent the outgroup members from getting any money, even when they were told that the basis of group membership was arbitrary and that giving money to the outgroup would not affect how much money their own group obtained.

Why do people value members of their own groups? We can speculate that over the course of human evolution, personal survival has depended on group survival. Especially when there is competition for scarce resources, those who work together to keep resources within their group and deny resources to outgroup members have a selective advantage over those willing to share with the outgroup. At the psychological level, our group memberships are an important part of our social identity and contribute to our overall sense of self-esteem. In addition, women show a much greater automatic ingroup bias toward other women than men do toward other men (Rudman & Goodwin, 2004). Although men generally favor their ingroups, they fail to do so when the category is sex. Rudman and Goodwin speculate that men and women depend on women for nurturing and that both are threatened by male violence. Moreover, although women can freely express their affection for their female friends, males appear to be less comfortable doing so, perhaps because it might threaten their sexual identities.

**STEREOTYPES AND PERCEPTION**  How can social psychology help us understand a tragedy such as the killing of Amadou Diallo by New York City police officers, described in the opening of Chapter 1? In crossing levels of analysis, we find that implicit social attitudes can influence basic perceptual processes. In two experiments that demonstrated this, Payne (2001) showed pictures of various objects to white participants and asked them to classify the objects as guns or tools as quickly as possible. Immediately before seeing a picture, the participants briefly were shown a picture of a white face or a black one. Priming by a black face led participants to identify guns more quickly and to mistake tools for guns.
A more recent study, in which over 90% of the participants were white, found that the reverse is also true: Priming people with pictures of weapons (e.g., guns and knives) leads them to pay greater attention to black faces than to white faces (Eberhardt, Goff, Purdie, & Davies, 2004). Such findings suggest that implicit bias may have been involved in the Diallo shooting. The officers were looking for individuals who fit a specific racial profile. When forced to make a split-second decision, they mistook Diallo’s wallet for a weapon.

In a virtual reality simulation of the Diallo shooting, Greenwald, Oakes, and Hoffman (2003) required each participant, in the role of a police officer, to respond to a criminal holding a gun (by clicking a computer mouse to shoot him), to a fellow police officer holding a gun (by pressing the space bar), or to a civilian holding a neutral object (by doing nothing). In some trials, the criminal holding a gun was a white male and the police officer holding a gun was a black male. In the other trials, these racial matches were reversed. Whatever their roles in the study, blacks were more likely to be incorrectly shot, in part because the objects they held were more likely to be identified as weapons. Fortunately, recent evidence suggests that computerized training, in which race is unrelated to the presence of a weapon, can eliminate this racial bias in shooting behavior among police officers (Plant & Peruche, 2005). Indeed, research comparing police officers and community members on simulated decisions to shoot or not shoot blacks and whites found that police officers were much less likely to shoot unarmed people and were equally likely to shoot blacks and whites (Correll et al., 2007). Community members were more likely to shoot unarmed black targets, suggesting that the extensive training received by police officers helps them avoid race bias in deciding whether to shoot.

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**FIGURE 12.13 Scientific Method: Payne’s Experiments on Stereotypes and Perception**

**Hypothesis:** Social attitudes can influence basic perceptual processes.

**Research Method:**

1. **White participants were shown a white or black face.**

2. **Immediately after viewing a face, participants were shown an object and asked to classify it as a gun or a tool as quickly as possible.**

**Results:** Participants primed by seeing black faces identified guns more quickly and mistook tools for guns.

**Conclusion:** Implicit stereotypes affect perception.
Kurzban, 2003). In a four-minute experiment, Kurzban found that when categorization cues stronger than race were present (he used shirt color to indicate coalitional alliances), the categorization based on race was diminished or eliminated. For example, when you watch a football game between the Broncos and the Cowboys, you see Broncos and Cowboys, not white players and black ones. You are categorizing by coalitional alliance, not by race.

Mary Wheeler and Susan Fiske (2005) investigated whether social goals such as social categorization (e.g., guessing the age of the black or white person in a photo), social individuation (e.g., guessing a person’s vegetable preference), and simple visual inspection (e.g., detecting a dot on the face) would affect the amygdala response and cognitive responses to racial outgroups. One study recorded brain activity in the amygdala using fMRI, and another measured cognitive activation of stereotypes by word priming. They found that neither response to racial outgroups was inevitable; instead, both responses depended on perceivers’ current social-cognitive goals. Changing the social context in which a target person is viewed affects the outgroup perception, measurable in both the brain and reaction time behavior.

Even if someday we are able to link specific brain activity to racist thoughts, it will not mean that racist thoughts necessarily lead to racist acts. Since categorizing people need not entail mistreating them, should the products of automatic processing be revealed and used to judge people? Is the use of psychological testing and of brain scans for racist thoughts justified if it prevents even one race-based death, such as Amaadu Diallo’s (see Chapter 1), or prevents a jury from unjustly convicting even one innocent person because of race bias? Might it be worthwhile to use such tests to identify which police officers may need special sensitivity training or which jurors should not be chosen for a case in which race might be a factor?
**Inhibiting Stereotypes**  Most people do not consider themselves prejudiced, and many are motivated to avoid stereotyping others. Yet according to many social cognition researchers, categorization and stereotyping occur automatically, without people’s awareness or intent (Bargh & Ferguson, 2000). Patricia Devine (1989) has made the important point that people can override the stereotypes they hold and act in nondiscriminatory ways. For instance, most people in North America know the negative stereotypes associated with African Americans, and when a nonblack person encounters a black person, the information in the stereotypes becomes cognitively available. According to Devine, people low in prejudice override this automatic activation and act in a nondiscriminatory fashion. While some automatic stereotypes alter how we perceive and understand the behavior of those we stereotype, simply categorizing people need not lead to mistreating them.

Indeed, numerous studies have shown that we can consciously alter our automatic stereotyping (Blair, 2002). For instance, Dasgupta and Greenwald (2001) found that presenting positive examples of admired black individuals (e.g., Denzel Washington) produced more favorable attitudes toward African Americans on the IAT. In another study, training people to respond counter-stereotypically, as in having them press a “no” key when they saw an elderly person paired with a stereotype of the elderly, led to reduced automatic stereotyping in subsequent tests (Kawakami, Dovidio, Moll, Herrnstein, & Russin, 2000). Telling people their tests scores indicate that they hold negative stereotypes can motivate people to correct their attitudes, and the worse they feel about holding those attitudes, the harder they try not to be biased (Monteith, 1993).

Inhibiting stereotyped thinking in everyday life is difficult and requires self-regulation (Monteith, Ashburn-Nardo, Voils, & Czopp, 2002), in part because of the brain activity involved. As discussed throughout this book, the frontal lobes are important for controlling both thoughts and behavior. In one brain imaging study, briefly showing white participants pictures of black faces produced amygdala activity. The amygdala is involved in detecting threat; in this context, the amygdala activity may indicate that the participants’ immediate responses to black faces were negative. However, if the faces were presented longer, the frontal lobes became active and the amygdala response decreased; thus the frontal lobes appear to have overridden this immediate reaction. This reaction happened more for those whose IAT scores indicated negative stereotypes about blacks (Cunningham et al., 2004). In another study, when white participants observed black faces their frontal lobe activity was associated with poor performance on a subsequent task of mental function, a finding that implies controlling stereotypes is mentally taxing (Richeson et al., 2003). The general pattern indicates that those with high levels of motivation to avoid appearing racist have an anxious arousal response when interacting with African Americans, a response that subsequently can interfere with cognition (Richeson & Trawalter, 2008).

**Cooperation Can Reduce Prejudice**

Can social psychologists use what they have learned in the laboratory to help reduce prejudice and to encourage peace? Since the 1950s, numerous such attempts have been made to alleviate the hostility and violence between factions, but it is extraordinarily difficult to change cultural and religious beliefs, and attitudes toward ethnic groups are embedded deeply in both. Around the world, groups clash over disputes that predate the births of most of the combatants, and sometimes people cannot even remember the original sources of particular conflicts. Yet as the global response to the deadly tsunami of late 2004 indicates, people can work together and, in doing so, overcome intergroup hostilities if they have a greater purpose, such as dealing with a natural catastrophe that killed hundreds of thousands and left millions homeless.
Social psychology may be able to suggest strategies for promoting intergroup harmony and producing greater tolerance for outgroups. The first study to suggest so was conducted by the psychologist Muzafer Sherif and his colleagues in the late 1950s. Sherif arranged for 22 well-adjusted and intelligent white fifth-grade boys from Oklahoma City to attend a summer camp. None of the boys knew each other before that summer. Before arriving at camp, the boys were divided into two groups that were essentially the same. During the first week, the boys lived in separate camps, each unaware that a similar group of boys was across the lake.

The next week, over a four-day period, the groups competed in a number of athletic competitions, such as tug-of-war, football, and softball. The stakes were high: the winning team would get a trophy, individual medals, and appealing prizes; the losers would receive nothing. The groups named themselves the Rattlers and the Eagles. Group pride was extremely strong, and animosity between the groups quickly escalated. The Eagles burned the Rattlers’ flag, and the Rattlers retaliated by trashing the Eagles’ cabin. Eventually, confrontations and physical fights had to be broken up by the experimenters. All the typical signs of prejudice emerged, including the outgroup homogeneity effect and ingroup favoritism.

Phase 1 of the study was complete. Sherif had shown how easy it was to get people to hate each other—simply divide them into groups and have the groups compete, and prejudice and mistreatment would result. Phase 2 of the study then explored whether the hostility could be undone.

Sherif first tried what made sense at the time, simply having the groups come into contact with one another. This approach failed miserably. The hostilities were too strong, and skirmishes continued. Sherif reasoned that if competition led to hostility, then cooperation should reduce hostility. The experimenters created situations in which members of both groups had to cooperate to achieve necessary goals. For instance, the experimenters rigged a truck to break down. Getting the truck moving required all the boys to pull together—in an ironic twist—on the same rope used earlier in the tug-of-war. When they succeeded, a great cheer arose from the boys, with plenty of backslapping all around. After a series of tasks that required cooperation, the walls between the two sides broke down, and the boys became friends across the groups. Among strangers, competition and isolation created enemies. Among enemies, cooperation created friends (Figure 12.15).

**FIGURE 12.15 Scientific Method: Sherif’s Study of Competition and Cooperation**

**Hypothesis:** Just as competition between groups promotes prejudice and hostility, so cooperation between groups can promote harmony.

**Research Method:**

1. In Phase 1 of the experiment, boys from two summer camps were pitted against each other in athletic competitions.

2. In Phase 2, the boys from the two camps were required to work together as one group to achieve common goals.

**Results:** Competition created tension and hostility, but after a series of cooperative efforts, the boys began to make friends across groups.

**Conclusion:** Shared goals requiring cooperation across group lines can reduce hostility between groups.
Research over the past four decades has indicated that only certain types of contact between hostile groups will likely reduce prejudice and discrimination. Shared superordinate goals—those that require people to cooperate—reduce hostility between groups. People who work together to achieve a common goal often break down subgroup distinctions as they become one larger group (Dovidio et al., 2004). For example, athletes on multiethnic teams often develop positive attitudes toward other ethnicities.

**Jigsaw Classroom** The programs that most successfully bring groups together involve person-to-person interaction. A good example is Eliot Aronson’s jigsaw classroom, which he developed with his students in the 1970s. In this program, students work together in mixed-race or mixed-sex groups in which each member of the group is an expert on one aspect of the assignment. For instance, when studying Mexico, one group member might study its geography, another its history, and so on. The various geography experts from each group get together and master the material. They then return to their own groups and teach the material to their team members. Thus cooperation is twofold: Each group member cooperates not only with members of other groups but also within the group. More than 800 studies of the jigsaw classroom have demonstrated that it leads to more-positive attitudes toward other ethnicities and that students learn the material better and perform at higher levels. According to Aronson, children in jigsaw classrooms grow to like each other more and develop higher self-esteem than do children in traditional classrooms. The lesson is clear: Communal work toward superordinate goals can reduce prejudice.

**Summing Up**

How Do We Form Our Impressions of Others?

Human social interaction requires people to form impressions of others. People are highly sensitive to nonverbal information and can develop accurate impressions of others on the basis of very thin slices of behavior. People also are motivated to figure out what causes other people to behave the way they do. People often make biased attributions about others. They tend to attribute other people’s behavior to dispositions rather than to situations, and they use heuristic processing, which biases social judgment. Stereotypes result from the normal cognitive process of categorization. However, negative stereotypes and prejudice lead to discrimination. Humans tend to discriminate against those who are threatening, such as outgroup members.

**Measuring Up**

1. Label each of the following statements as an example of stereotyping, prejudice, or discrimination.
   a. “People from New York are loud and obnoxious.”
   b. “What can I say, I just don’t like people from New York.”
   c. Walter tells a joke that makes fun of people from New York.

2. Max was arrested for driving while under the influence of alcohol. Label each of the following statements as an example of personal attribution, situational attribution, or fundamental attribution error.
   a. Max says, “Nobody would give me a ride home. I couldn’t sleep at the bar, so I had to get home. I had no other option.”
   b. Max’s friend says, “Max should know better, but he is a selfish and irresponsible jerk.”
   c. Max says, “That was really stupid of me. Maybe I have a drinking problem.”
How Do Others Influence Us?

We humans have an overriding motivation to fit in with the group. One way we try to fit in is by presenting ourselves positively, as in being on our best behavior and in trying not to offend others. But we also conform to group norms, obey authorities’ commands, and are easily influenced by others in our social groups. The desire to fit in with the group and avoid being ostracized is so great that under some circumstances we willingly engage in behaviors we otherwise would condemn. As noted throughout this chapter, the power of the social situation is much greater than most people believe—and this truth is perhaps the single most important lesson from social psychology. The importance of social influences was summed up by Philip Zimbardo, who commented that it is difficult to remain a cucumber while those around you become pickles.

Groups Influence Individual Behavior

The first social psychology experiment was conducted in 1897, by Norman Triplett, who showed that bicyclists pedal faster when riding with other people than when riding alone. They do so because of social facilitation, in which the presence of others enhances performance. Social facilitation also occurs in other animals, including horses, dogs, rats, birds, fish, and even cockroaches. Robert Zajonc (1965) proposed a model of social facilitation that involves three basic steps (FIGURE 12.16). According to Zajonc, all animals are genetically predisposed to become aroused by the presence of others of their own species, since others are associated with most of life’s rewards and punishments. Zajonc then invoked Clark Hull’s well-known learning principle that arousal leads animals to emit a dominant response, that is, the response most likely to be performed. In front of food, for example, the dominant response is to eat. Zajonc’s model expands on Triplett’s, predicting that social facilitation can enhance or impair performance. The presence of others improves the performance of a simple task for which the dominant response is well learned, such as the adding of single digits, but it interferes with the performance of a complex task that requires greater thought, such as differential calculus. If employees are performing simple tasks such as database entry, they might work best in a fairly open environment, either around a common table or in cubicles, where each person is aware of the rate at which others are performing. If employees are performing more complicated tasks, such as editing manuscripts, they might work best in private offices, since concentration is paramount and an awareness of how others are performing is irrelevant to the complex work at hand.

Social loafing  In some cases, people work less hard when in a group than when working alone. This social loafing occurs when people’s efforts are pooled so that no one individual feels personally responsible for the group’s output. In a classic study, six blindfolded people wearing headphones were told to shout as loudly as they could. Some were told they were shouting alone; others were told that they were shouting with other people. Participants did not shout as loudly when they believed that others were shouting as well (Latane, Williams, & Harkins, 1979). However, making it clear that individual efforts can be monitored eliminates social loafing. Thus if a group is working on a project, each person must feel personally responsible for some component of the project for everyone to exert maximum effort.

Deindividuation  People sometimes lose their individuality when they become part of a group. Deindividuation occurs when people are not self-aware and therefore are not paying attention to their personal standards. Recall that self-awareness

social loafing  The tendency for people to work less hard in a group than when working alone.

deindividuation  A phenomenon of low self-awareness, in which people lose their individuality and fail to attend to personal standards.
typically causes people to act in accordance with the values and beliefs they hold. When self-awareness disappears, so do restraints. Deindividuated people often do things they would not do if they were alone or self-aware. A good example is crowd behavior. Most of us like to think we would try to help a person who was threatening suicide. But people in crowds often not only fail to intercede but also sometimes egg the person on, yelling “Jump! Jump!” to someone teetering on a ledge.

People are especially likely to become deindividuated when they are aroused and anonymous and when responsibility is diffused. Roaring by fans, looting following disasters, and other mob behaviors are the products of deindividuation. Recall the Stanford prison study, mentioned at the beginning of this chapter. The study had to be stopped after just six days because the students became so immersed in their roles that many guards acted brutally and many prisoners became listless and apathetic. The situation was powerful enough to radically alter people’s behavior through a process of deindividuation. Most military personnel around the world require each of their members to have a standard haircut and an identical uniform because people who look similar are more likely to conform and respond to orders—including orders to commit acts of violence against an enemy. Not all deindividuated behavior is so serious, of course. Gamblers in crowded casinos, fans doing the wave, and people dancing the funky chicken while inebriated at weddings are most likely in deindividuated states, and accordingly they act in ways they would not if they were self-aware (FIGURE 12.17).

GROUP DECISION MAKING  It has been said that a group’s intelligence can be determined by averaging its members’ IQs and then dividing that average by the number of people in the group. In other words, groups are known for making bad decisions. Social psychologists have shown that being in a group influences decision making in curious ways. For instance, in the 1960s the psychologist James Stoner found that groups often made riskier decisions than individuals did. This phenomenon, the risky-shift effect, accounts for why children in a group may try something dangerous that none of them would have tried alone. Subsequent research has demonstrated that groups are sometimes riskier than individuals and sometimes more cautious, as groups tend to enhance the initial attitudes of members who already agree. This process is known as group polarization. For example, discussion tends to make people on juries believe more strongly in their initial opinions about defendants’ guilt or innocence. When groups make risky decisions, they usually do so because the individuals initially favor a risky course of action and, through mutual persuasion, come to agreement.

Sometimes group members are particularly concerned with maintaining the group’s cohesiveness, so that the sake of cordiality the group will make a bad decision. In 1972, the social psychologist Irving Janis coined the term groupthink to describe this extreme form of group polarization. Contemporary examples of groupthink include the decision to launch the space shuttle Challenger despite the clear evidence of a problem with a part; choices made by President Bill Clinton and his advisers following the allegations of his affair with Monica Lewinsky; a sequence of events that ultimately led to his impeachment; and the second Bush administration’s decision to go to war with Iraq over weapons of mass destruction that did not exist, as later investigations showed (see “Critical Thinking Skill: Recognizing and Correcting for Belief Persistence . . .,” in Chapter 9). Groupthink typically occurs when a group is under intense pressure, is facing external threats, and is biased in a particular direction. The group does not carefully process all the information available to it, dissemination is discouraged, and group members assure each other they are doing the right thing. To prevent groupthink, leaders must refrain from expressing their opin-
ions too strongly at the beginning of discussions. The group should be encouraged to consider alternative ideas, either by having someone play devil’s advocate or by purposefully examining outside opinions. Carefully going through alternatives and weighing the pros and cons of each can help people avoid groupthink (FIGURE 12.18).

We Conform to Social Norms

Society needs rules. Imagine, for example, the problems you would cause if you woke up one morning and decided that from then on you would drive on the wrong side of the road. Social norms—expected standards of conduct—influence behavior in multiple ways, such as indicating which behavior is appropriate in a given situation. Standing in line is a social norm, and people who violate that norm by cutting in line are often reprimanded and directed to the back of the line. Conformity, the altering of one’s behaviors or opinions to match those of others or to match social norms, is also a powerful form of social influence.

How much do people conform? Muzafer Sherif was one of the first researchers to demonstrate the power of norms and conformity in social judgment. His studies, conducted in the 1930s, relied on a perceptual phenomenon known as the autokinetic effect, in which a stationary point of light appears to move when viewed in a totally dark environment. This effect occurs because people have no frame of reference and therefore cannot correct for small eye movements. Sherif asked participants who were alone in a room to estimate how far the light moved. Individual differences were considerable; some saw the light move only an inch or two, whereas others saw it

social norms: Expected standards of conduct, which influence behavior.

conformity: The altering of one’s opinions or behaviors to match those of others or to match social norms.
move eight inches or more. In the second part of the study, Sherif put two or more participants in the room and had them call out their estimates. Although there were initial differences, participants very quickly revised their estimates until they agreed. In ambiguous situations, people often compare their reactions with others’ to judge what is appropriate.

Solomon Asch (1955) speculated that Sherif’s effect probably occurred because the autokinetic effect is a subjective visual illusion. If there were objective perceptions, Asch thought, participants would not conform. To test his hypothesis, Asch assembled male participants for a study of visual acuity. In the 18 trials, the participants looked at a reference line, decided which of three other lines matched it, and said their answers aloud. Normally, people are able to perform this easy task with a high level of accuracy. But in these studies, Asch included a naïve participant with a group of five confederates pretending to be participants but actually working for the experimenter. The real participant always went sixth, giving his answer after the five confederates gave theirs. On 12 of the 18 trials, the confederates deliberately gave the same wrong answer. After hearing five wrong answers, the participant then had to state his answer. Because the answer was obvious, Asch speculated that the participant would give the correct answer, but about one-third of the time, the participant went along with the confederates. More surprisingly, in repeated trials, three out of four people conformed to the incorrect response at least once (FIGURE 12.19).

FIGURE 12.19 Scientific Method: Asch’s Study on Conformity to Social Norms

**Hypothesis:** Conformity would not take place if there were objective perceptions.

**Research Method:**

1. A participant joined a group of five other participants—who were confederates, secretly in league with the researcher. Each participant was asked to look at a reference line (left) and then say out loud which of three comparison lines matched it (right).

![Reference line and comparison lines](image)

2. The five confederates deliberately gave the wrong answer in 12 out of 18 trials (the real participant is in the middle of the photos below, with glasses).

![Participants](image)

The real participant hears the answer given by the confederates. He has a hard time believing their wrong answers. But he starts to doubt his own eyes.

**Results:** When confederates gave false answers first, three-quarters of the real participants conformed by giving the wrong answer at least once.

**Conclusion:** People tend to conform to social norms, even when those norms are obviously wrong.
Research consistently has demonstrated that people tend to conform to social norms. This effect can be seen outside the laboratory as well: Adolescents conform to peer pressure to smoke; jury members go along with the group rather than state their own opinions; people stand in line to buy tickets. But when do people reject social norms? In a series of follow-up studies, Asch and others identified factors that decrease the chances of conformity. One factor is group size. If there are only one or two confederates, a naive participant usually does not conform; as soon as the confederates number three or more, the participant conforms. However, conformity seems to level off at a certain point. Subsequent research has found that even groups as large as 16 do not lead to greater conformity than groups of 7.

Asch found that lack of unanimity is another factor that diminishes conformity. If even one confederate gives the correct answer, conformity to the group norm decreases a great deal. Any dissent from majority opinion can diminish the influence of social norms. But dissenters are typically not treated well by groups. In 1951, Stanley Schachter conducted a study in which a group of students debated the fate of a juvenile delinquent, Johnny Rocco. A confederate deviated from the group judgment of how Johnny should be treated. When it became clear that the confederate would not be persuaded by group sentiment, the group began to ostracize him. When group members subsequently were given the opportunity to reduce group size, they consistently rejected the “deviant” confederate. The bottom line is that groups enforce conformity, and those who fail to go along are rejected. The need to belong, and the anxiety associated with the fear of social exclusion, gives a group powerful influence over its members. Indeed, a brain imaging study that used a conformity test similar to Asch’s found activation of the amygdala, perhaps a fear response, in participants whose answers did not conform to the group’s incorrect answer (Beres et al., 2005).

Universities across North America have tried to harness the power of social norms to reduce binge drinking on campus. They have used social norms marketing in attempts to correct faulty misperceptions regarding peer drinking: proponents might put up posters saying, for example, “Most students have fewer than four drinks when they party.” Unfortunately, social norms marketing may inadvertently increase drinking among light drinkers, whose behavior is also susceptible to social norms (Russell, Clapp, & Dejong, 2005); students who usually have only one drink at a time might interpret the posters as suggesting that the norm is to have two or three drinks, and they might adjust their behavior accordingly. One team of researchers demonstrated that simply providing descriptive norms (i.e., the frequency of behavior) can cause this sort of backlash effect. They found that adding a message that the behavior is undesirable might help prevent social norms marketing from increasing the behavior it is meant to reduce (Schultz, Nolan, Cialdini, Goldstein, & Griskevicius, 2007).

**We Are Compliant**

Often people influence the behavior of others simply by asking them to do things. If the others do the requested things, they are exhibiting compliance. A number of factors increase compliance. For instance, Joseph Forgas (1998) has demonstrated that people in good moods are especially likely to comply. This tendency may be the basis for “buttering up” others when we want things from them. According to Robert Cialdini (2008), people often comply with requests because, failing to pay attention, they respond without fully considering their options; they are following a standard mental shortcut to avoid conflict. For instance, if you give people a reason for a request, they will much more likely comply, even if the reason makes little sense.
People can use a number of powerful strategies to influence others to comply. For instance, because of the foot-in-the-door effect, people will more likely comply with a large and undesirable request if earlier they have agreed to a small request. Jonathan Freedman and Scott Fraser (1966) asked homeowners to allow a large, unattractive “DRIVE CAREFULLY” sign to be placed on their front lawns. As you might imagine, fewer than one in five people agreed to do so. However, another group of homeowners first was asked to sign a petition supporting legislation that would reduce traffic accidents. A few weeks later, these same people were approached about having the large sign placed on their lawns, and more than half agreed. Once people commit to a course of action, they behave in ways consistent with that course.

The opposite influence technique is the door in the face, thanks to which people will more likely agree to a small request after they have refused a large request, because the second request seems modest in comparison and they want to seem reasonable. Salespeople often use this technique. Another favorite among salespeople is the low-ball strategy, which begins when a salesperson offers a product—for example, a car—for a very low price. Once the customer agrees, the salesperson may claim that the manager did not approve the price or that there will be additional charges. Whatever the reason, a person who has agreed to buy a product will often agree to pay the increased cost.

We Are Obedient to Authority

One of the most famous and most disturbing psychology experiments was conducted in the early 1960s by Stanley Milgram, who wanted to understand why apparently normal German citizens willingly obeyed orders to injure or kill innocent people during World War II (FIGURE 12.20). Milgram was interested in the determinants of obedience—that is, the factors that influence people to follow orders given by an authority. Try to imagine yourself as a participant in Milgram’s experiment. You have agreed to take part in a study of learning. On arriving at the laboratory, you meet your fellow participant, a 60-year-old grandfatherly type. The experimenter describes the study as consisting of a teacher administering electric shocks to a learner engaged in a simple memory task involving word pairs. Your role as the teacher is determined by an apparently random drawing of your name from a hat. On hearing that he may receive electric shocks, the learner reveals that he has a heart condition and expresses minor reservations. The experimenter says that although the shocks will be painful, they will not cause permanent tissue damage. You help the experimenter take the learner to a small room and hook him up to the electric shock machine. You then proceed to a nearby room and sit at a table in front of a large shock generator with switches from 15 to 450 volts. Each voltage level carries a label, ranging from “slight” to “danger—severe shock” to, finally, an ominous “XXX.”

You perform your task, giving the learner a shock each time he makes a mistake and increasing the voltage with each subsequent error. When you reach 75 volts, over the intercom you hear the man yelp in pain. At 150 volts, he screams, bangs on the wall, and demands that the experiment be stopped. The
man is clearly in agony as—at the experimenter’s command—you apply additional, stronger shocks. Each time you say you are quitting and try to stop the experiment, the experimenter replies, “The experiment requires that you continue,” “It is essential that you go on,” “There is no other choice; you must go on!” So you do. At 300 volts, the learner refuses to answer any more questions. After 330 volts, the learner is silent. All along you have wanted to leave, and you severely regret participating in the study. You might have killed the man, for all you know.

Does this scenario sound crazy to you? If you really were the teacher, at what level would you stop administering the shocks? Would you quit as soon as the learner started to complain? Would you go up to 450 volts? The various people Milgram asked predicted that most participants would go no higher than 135 volts and that fewer than one in a thousand would administer the highest level of shock. But that is not what happened. What did happen changed how people viewed the power of authority.

Milgram found that although almost all the participants tried to quit, nearly two-thirds completely obeyed all the experimenter’s directives (Figure 12.21), despite believing they were administering 450 volts to an older man with a heart condition (actually a confederate). These findings have been replicated by Milgram and others around the world. The conclusion of these studies is that ordinary people can be coerced into obedience by insistent authorities, even when what they are coerced into goes against the way they usually would behave. At the same time, these results do not mean all people are equally obedient. Indeed, some aspects of personality seem related to being obedient, such as the extent to which people are concerned about how others view them (Blascovich, 1991). As discussed in the next chapter, both situation and personality influence behavior.

Surprised by the results of his study, Milgram next set out to study how to reduce obedience. He found that some situations produced less compliance. For instance, if the teacher could see or had to touch the learner, obedience decreased.

When the experimenter gave the orders over the telephone and thus was more removed from the situation, obedience dropped dramatically.

Throughout these studies, Milgram was highly concerned with his participants’ mental states. In systematic debriefings, he carefully revealed the true nature of the experiments to the participants, and he made sure that the teachers met the confederate learners and that the teachers could see that the learners were not hurt in any way. Milgram also followed his participants over time to ensure that they experienced no long-term negative effects. Actually, many people were glad they had participated, feeling that they had learned something about themselves and about human nature. Most of us assume that only sadistic miscreants would willingly inflict injury on others when ordered to do so. Milgram’s research, and studies that followed up on it, demonstrated that ordinary people may do horrible things when ordered to do so by an authority (Figure 12.22). Although some people speculate that these results would not be true today, a recent replication found that 70 percent of the participants were obedient up to the maximum voltage in the experiment (Burger, 2009).

All the background data available on the prison guards at Abu Ghraib (see the discussion at the opening of this chapter), for example, suggest they were ordinary people. Investigators do not know exactly what the guards were ordered to do, but a number of social factors, from deindividuation to social facilitation to inappropriate norms and conformity, contributed to the situation and likely played prominent roles in the mistreatment of Abu Ghraib prisoners. As noted earlier, all of us need to be aware of situational influences when we evaluate our own behavior and that of others, particularly when our core beliefs and values are at risk.
FIGURE 12.22 Scientific Method: Milgram’s Shock Experiments on Obedience

**Hypothesis:** People are obedient to authority figures.

**Research Method:**

1. **In one condition,** each participant was instructed to “shock” from another room, a participant (learner) who was secretly in league with the experimenter.

2. **In another condition,** each participant was instructed to touch and “shock” a learner sitting next to the participant. In both conditions, the experimenter would instruct the participant to give the learner increasingly severe shocks.

3. **After the experiment,** each participant was introduced to the confederate learner and could see that the learner had not been harmed.

**Results:** In the first condition, almost all the participants tried to quit, but nearly two-thirds obeyed the experimenter’s directives. In the “touch” condition, fewer than one-third of the participants obeyed the experimenter’s orders.

**Conclusion:** Most people will obey even hideous orders given by insistent authority figures, but this willingness is lessened when people are made more personally responsible.

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**SUMMING UP**

**How Do Others Influence Us?**

For the most part, people follow group norms, are influenced by others’ opinions, and are obedient to authority. Most people underestimate the power of these effects or do not believe that they themselves are affected by social influence. Yet the evidence is overwhelming that in many situations people will engage in behaviors quite inconsistent with their own standards. Sometimes, for example, people in a state of deindividuation lose awareness of the values and beliefs they hold. Those who are aware of the power of social influence often use specific strategies to manipulate others’ behavior, such as by using foot-in-the-door, door-in-the-face, and low-ball techniques. The more each of us is aware of our own values and beliefs, the more capable we are of upholding our own standards.

**MEASURING UP**

1. Label each of the following scenarios as an example of conformity, compliance, or obedience.
   a. Bettina decides to join Facebook because all her friends have already created profiles.
   b. Elisa says to her son, “Wash the dishes before you go outside to play.” He does so.
   c. Randall goes into an office supply store to make photocopies. There are long lines at each copier. As a woman steps up to one of the machines to take her turn, he approaches her and asks, “Do you mind if I go next? I need to make a copy.” She says yes.
2. Match each of the following social influence constructs with the correct definition: deindividuation, group polarization, social facilitation, and social loafing.
   a. A lack of self-awareness has a disinhibiting effect, allowing people to act in ways that are inconsistent with the beliefs and values they hold.
   b. People make less individual effort when their efforts are pooled than when they work alone.
   c. Over the course of group discussion, individuals become increasingly committed to attitudes they held before the group discussion.
   d. The presence of others enhances performance of simple tasks that are well learned.

When Do We Harm or Help Others?

Although obedience can lead people to commit horrible acts, the need to belong to a group also can lead us to acts of altruism and of generosity. Events of the last few years have revealed the human capacities for harming and helping others. We have seen terrorists killing civilians in Mumbai, guards abusing prisoners at Abu Ghraib, and tribal warfare in the Darfur region of Sudan. Yet people also can be kind, compassionate, and giving, as evidenced by the outpouring of support to the victims of the 2004 tsunami (noted earlier in this chapter). Similarly, members of the group Doctors Without Borders travel to dangerous regions around the globe to care for those in need. This tension between our aggressive and altruistic sides is at the core of who we are as a species. Psychological scientists working at all levels of analysis have provided much insight into the roles that nature and nurture play in these fundamental human behaviors.

Aggression Can Be Adaptive

**Aggression** can be expressed through countless behaviors, all involving the intention to harm someone else. Among nonhuman animals, it often occurs in the context of fighting over a mate or defending territory from intruders, though in the latter case just the threat of aggressive action may be sufficient to dissuade. Among humans, physical aggression is common among young children but relatively rare in adults; adults’ aggressive acts more often involve words, or other symbols, meant to threaten, intimidate, or emotionally harm others. Aggression can be considered across the levels of analysis, from basic biology to cultural context.

**BIOLOGICAL FACTORS** At the biological level of analysis—largely involving research with nonhuman animals—we see that stimulating certain brain regions or altering neurochemicals can lead to substantial changes in behavior. Stimulating or damaging the septum, amygdala, or hypothalamus regions in the brain (see Figure 3.28) leads to corresponding changes in the level of aggression displayed. For example, stimulating a cat’s amygdala with an electric probe causes the animal to attack, whereas damaging the amygdala leads to passive behavior. In 1937, researchers Heinrich Kluver and Paul Bucy produced a striking behavioral change by removing the amygdalas of normally very aggressive rhesus monkeys. Following the surgery, the monkeys were tame, friendly, and easy to handle. They began to approach and explore normally feared objects, such as snakes. They also showed unusual oral behavior, putting anything within reach into their mouths, including snakes, matches, nails, dirt, and feces. The behavior associated with damage to this region is now referred to as Kluver-Bucy syndrome.
In terms of neurochemistry, several lines of evidence suggest that serotonin is especially important in the control of aggressive behavior (Caramaschi, de Boer, & Koolhaas, 2007). In a study using monkeys, drugs that enhance the activity of serotonin lowered aggression, whereas those that interfere with serotonin increased aggression (Raleigh, McGuire, Brammer, Pollack, & Yuwiler, 1991; Figure 12.23). In humans, low levels of serotonin have been associated with aggression in adults and hostility and disruptive behavior in children (Kruese et al., 1992). In a large sample of men from New Zealand, low serotonin levels were associated with violence but not with criminal acts in general (Moffitt et al., 1998). Additionally, postmortem examinations of suicide victims have revealed extremely low serotonin levels. Although suicide may seem very different from aggression, many psychologists believe suicide and violence toward others are manifestations of the same aggressive tendencies. Indeed, low serotonin levels were found among those who had killed themselves violently (such as by shooting themselves) but not among those who had done so nonviolently (such as by taking drug overdoses; Asberg, Shally, Traskman-Bendz, & Wagner, 1987).

Decreased serotonin levels may interfere with good decision making in the face of danger or of social threat. For instance, monkeys with the lowest serotonin levels are the least socially skilled (Higley et al., 1996). This lack of social competence often leads the other monkeys to attack and kill them. Monkeys with low serotonin also likely will pick fights with much larger monkeys. Do these findings have implications for humans? Possibly. In one study, participants given a drug that enhances serotonin activity were found to be less hostile and more cooperative over time, compared with the control group (Knutson et al., 1998).

**INDIVIDUAL FACTORS** In the 1930s, John Dollard and his colleagues proposed the first major psychological model of aggression. According to their frustration-aggression hypothesis, the extent to which people feel frustrated predicts the likelihood that they will be aggressive. The more people’s goals are blocked, the greater their frustration and therefore the greater their aggression. Slow traffic is frustrating, for example, and if it impedes you from getting somewhere you really want or need to go, you may feel especially frustrated. If another driver then cuts in front of you, you may feel especially angry and perhaps make an aggressive hand gesture, shout, or otherwise express yourself (Figure 12.24).

According to Leonard Berkowitz’s cognitive-neoassociationistic model (1990), frustration leads to aggression by eliciting negative emotions. Similarly, any situation that induces negative emotions, such as being insulted, afraid, overly hot, or in pain, can trigger physical aggression even if it does not induce frustration. Berkowitz proposed that negative emotion leads to aggression because it primes cognitive knowledge associated with aggression; in other words, negative events activate thoughts related to escaping or fighting, and those thoughts prepare a person to act aggressively. Whether someone behaves aggressively depend on the situational context. If the situation also cues violence—for example, if the person has recently watched a violent movie or been in the presence of weapons—the person more likely will act aggressively.

**Aggression Has Social and Cultural Aspects**

An evolutionary approach to aggression would call for similar patterns of aggressive behavior to exist in all human societies. After all, if aggression provided a selective advantage for human ancestors, it should have done so for all humans. But the
data show that violence varies dramatically across cultures and even within cultures at different times. For example, over the course of 300 years, Sweden went from being one of the most violent nations on Earth to being one of the most peaceable, a change that did not correspond with a change in the gene pool. Moreover, murder rates are far higher in some countries than in others (FIGURE 12.25). Analysis of crime statistics in the United States reveals that physical violence is much more prevalent in the South than in the North. Aggression may be part of human nature, but culture influences people’s tendencies to commit acts of physical violence.

Some cultures may be violent because they subscribe to a culture of honor, a belief system in which men are primed to protect their reputations through physical aggression. Men in the southern United States, for example, traditionally were (and perhaps still are) raised to be ready to fight for their honor and to respond aggressively to personal threats. To determine whether southern males are more likely to be aggressive than northern males, researchers conducted a series of studies at the University of Michigan (Cohen, Nisbett, Bowdle, & Schwarz, 1996). In each study, a male participant walking down a narrow hallway had to pass a male confederate who was blocking the hallway at a filing cabinet. As the participant tried to edge past the confederate, the confederate responded angrily and insulted the participant. Compared with participants raised in the North, those raised in the South became more upset and were more likely to feel personally challenged, more

![Figure 12.25: Aggression Varies across Cultures](image-url)
Physiologically aroused (measured by cortisol and testosterone increases), more cognitively primed for aggression, and more likely to act in an aggressive and dominant manner for the rest of the experiment—for instance, by vigorously shaking the experimenter’s hand (Figure 12.26). The culture-of-honor theory of violence supports Bandura’s social learning theory (discussed in Chapter 6, “Learning”), according to which much aggressive behavior is learned through vicarious social observation of both reward and punishment. The theory also suggests that our attitudes toward violence are determined by our societies’ cultural norms.

Many Factors May Influence Helping Behavior

People inflict harm on one another in many situations, but they also behave in prosocial ways, meaning they act for the benefit of others. Prosocial behaviors include doing favors, offering assistance, paying compliments, subjugating egocentric desires or needs, resisting the temptation to insult or throttle another person, or simply being pleasant and cooperative. By providing benefits to others, prosocial behaviors promote positive interpersonal relationships. Group living, in which people necessarily engage in prosocial behaviors such as sharing and cooperating, may be a central human survival strategy. After all, a group that works well together is a strong group, and belonging to a strong group benefits the individual members.

Why are humans prosocial? Theoretical explanations range from selflessness to selfishness, and from the biological to the philosophical. For instance, Daniel Batson and his colleagues (1988; 1995) argue that prosocial behaviors are motivated by empathy, in which people share others’ emotions. Conversely, Robert Cialdini and his colleagues (1987; Maner et al., 2002) argue that most prosocial behaviors have selfish motives, such as wanting to manage one’s public image or relieve one’s negative mood. Others have proposed that people have an inborn disposition to help others. Young infants become distressed when they see other infants crying (Zahn-Waxler & Radke-Yarrow, 1990), and although children’s early attempts to soothe other children generally are ineffective (for instance, they tend initially to comfort themselves rather than the other children), this empathic response to others’ suffering suggests that prosocial behavior is hardwired.
**Altruism** is the providing of help when it is needed, without any apparent reward for doing so. The fact that people help others, and even risk personal safety to do so, may seem contrary to evolutionary principles; after all, those who protect themselves first would appear to have an advantage over those who risk their lives to help others. During the 1960s, the geneticist William Hamilton offered an answer to this riddle; he proposed that natural selection occurs at the genetic level rather than at the individual level. As discussed in Chapter 1, the “fittest” animals pass along the most genes to future generations, through the survival of their offspring. Hamilton’s concept of _inclusive fitness_ describes the adaptive benefits of transmitting genes rather than focusing on individual survival. According to this model, people are altruistic toward those with whom they share genes, a phenomenon known as _kin selection_. A good example of kin selection occurs among insects, such as ants and bees, whose workers feed and protect the egg-laying queen but never reproduce. By protecting the group’s eggs, they maximize the number of their common genes that will survive into future generations (Dugatkin, 2004).

Of course, sometimes animals help nonrelatives: For example, dolphins and lions will look after orphans within their own species. Similarly, a person who jumps into a lake to save a drowning stranger is probably not acting for the sake of genetic transmission. Robert Trivers (1971) proposed the idea of _reciprocal helping_ to explain altruism toward nonrelatives. According to Trivers, one animal helps another because the other may return the favor in the future. Consider grooming, in which primates take turns cleaning each other’s fur: “You scratch my back, and I’ll scratch yours.” For reciprocal helping to be adaptive, benefits must outweigh costs, and indeed people will less likely help when the costs of doing so are high. Reciprocal helping will also much more likely occur among animals, such as humans, that live in social groups because their species survival depends on cooperation. Thus, as discussed above, people will more likely help members of their ingroups than those of outgroups. From an evolutionary perspective, then, altruism confers benefits, either by increasing the transmission of genes or by increasing the likelihood that others in the social group will reciprocate when needed.

**Some Situations Lead to Bystander Apathy**

In 1964, a young woman named Kitty Genovese was walking home from work in a relatively safe area of New York City. An assailant savagely attacked her for half an hour, eventually killing her. At the time, a newspaper reported that none of the 38 witnesses to the crime tried to help or called the police (FIGURE 12.27). As you might imagine, most people who followed the story were outraged that 38 people could sit by and watch a brutal murder. That story appears to have been wrong, however, as none of the few witnesses was in a position to observe what was happening to Genovese (Manning, Levine, & Collins, 2007).

Yet the idea of 38 silent witnesses prompted researchers to undertake important research on how people react in emergencies. Shortly after the Genovese murder, social psychologists Bibb Latané and John Darley examined situations that produce the _bystander intervention effect_, or the failure to offer help to someone observed to be in need. Although common sense might suggest that the more people there are available to help, the more likely it is that a victim will be helped, Latané and Darley made the paradoxical claim that a person will less likely help if other bystanders are around.

To test their theory, Latané and Darley conducted studies in which people were placed in situations that indicated they should seek help. In one of the first situations (Latané & Darley, 1968), male college students filling out questionnaires in a
When smoke started to fill the room, those who were on their own went for help quickly.

**FIGURE 12.28 The Bystander Intervention Effect.** Participants waited with two apathetic confederates, with two other naive participants, or alone. This chart records their reactions to smoke filling the room.

Room were exposed to pungent smoke puffing in through the heating vents. Some participants were alone, some were with two other naive participants, and some were with two confederates, who noticed the smoke, shrugged, and continued filling out their questionnaires. When participants were on their own, most went for help. However, when three naive participants were together, few initially went for help. With the two calm confederates, only 10 percent of participants went for help in the first six minutes (Figure 12.28). The other 90 percent “coughed, rubbed their eyes, and opened the window—but they did not report the smoke” (p. 218). Similar results were obtained in subsequent studies, in which people were confronted with mock crimes, apparent heart attack victims in subway cars, and people passed out in public places. The bystander intervention effect, also called bystander apathy, has been shown to occur in a wide variety of contexts. Even divinity students, while rushing to give a lecture on the Good Samaritan, failed to help a person in apparent need of medical attention (Darley & Batson, 1973).

Years of research have indicated four major reasons for the bystander intervention effect. First, a diffusion of responsibility occurs, such that people expect other bystanders to help. Thus the greater the number of people who witness someone in need of help, the less likely it is that any of them will step forward. Second, people fear making social blunders in ambiguous situations. All the laboratory situations had some degree of ambiguity; and people may have worried that they would look foolish if they sought help that was not needed. Evidence indicates that people feel less constrained from seeking help as the need for help becomes clearer. In the Genovese murder case, the few witnesses found the situation unclear and therefore might have been reluctant to call the police. Third, people will less likely help when they are anonymous and can remain so. Therefore, if you need help, it is often wise to point to a specific person and request his or her help by saying something like, “You, in the red shirt, call an ambulance!” Fourth, people weigh how much harm to themselves they risk by helping against what benefits they may have to forgo if they help. Imagine you are walking to a potentially dull class on a beautiful day, and in front of you someone falls down, twists an ankle, and needs transportation to the nearest clinic. You probably would be willing to help. Now imagine you are running a final exam that counts for 90 percent of your grade. In this case, you probably would be much less likely to offer assistance.

**SUMMING UP**

When Do We Harm or Help Others?

Humans in all cultures engage in aggressive acts. Frustration can lead to aggression, as can other factors that induce negative affect. This effect may occur because negative emotion primes aggressive thoughts. Beliefs and cultural norms can alter the expression of aggressive behavior. People often are willing to offer help to others, especially if the person needing help is a relative. However, people will less likely offer help when there are personal risks involved and when responsibility is diffused.
**MEASURING UP**

1. Indicate whether each of the following statements supports a biological, individual-differences, or sociocultural explanation for aggression.
   a. Drugs that enhance serotonin activity decrease aggressive behaviors.
   b. If some people recently watched a violent movie, they will more likely act aggressively.
   c. Levels and types of violence vary across cultures.
   d. Levels and types of violence vary within cultures across time.
   e. Physical violence is more prevalent in the southern United States than in the northern United States.
   f. Postmortem examinations of people who committed suicide reveal extremely low serotonin levels.
   g. Removing the amygdala in a rhesus monkey tames this normally aggressive creature.
   h. Stimulating a cat’s amygdala with an electric shock causes the animal to attack.
   i. The more an individual’s goals are blocked, the greater his or her frustration and aggression.

2. For each of the following scenarios, indicate whether the individuals are likely to evidence bystander apathy. Briefly explain why or why not.
   a. A college student is in an academic building late one Friday afternoon, when almost everyone has gone home for the weekend. She sees one of her professors lying in the hallway; his breathing is shallow, and he is grasping his chest.
   b. A driver hurrying to a meeting sees a man hovering over a woman sitting on a park bench. The man is shaking his fist violently, and the woman is looking up at him with terror in her eyes.
   c. College students are walking across campus after a night on the town. They come across a person who appears to be homeless, curled up on the sidewalk. His eyes and mouth are open, but he does not seem alert.

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**What Determines the Quality of Relationships?**

You might expect that studying relationships—how people select their friends and romantic partners—would be a high priority for psychological scientists. But until the last decade or so, the topic was given little attention, perhaps because of the difficulty of developing rigorous experiments to test complex and fuzzy concepts such as love, a mysterious state that some think is more appropriate for consideration by poets than by scientists. However, researchers have made considerable progress in identifying the factors that lead us to form friendships and other close relationships (Berscheid & Regan, 2005). Many of these findings consider the adaptiveness of forming lasting affiliative bonds with others. As discussed in Chapter 9, humans have a strong need for social contact, and various factors influence how people select mates. The following section considers the factors that determine the quality of human relationships: how friendships develop, why people fall in love, and why love relationships sometimes fail. As you will see, many of the same principles are involved in choosing our friends and choosing our lovers.
Situational and Personal Factors Influence Friendships

Psychological scientists have discovered a number of factors that promote friendships. In 1950, Leon Festinger, Stanley Schachter, and Kurt Back examined friends in a college dorm. Because room assignments were random, the researchers were able to examine the effects of proximity, or how often people come into contact, on friendship. They found that the more often students came into contact, the more likely they would become friends. Indeed, friendships often form among people who belong to the same groups, clubs, and so on.

Proximity might have its effects because of familiarity: People like familiar things more than unfamiliar ones. In fact, humans generally fear anything novel, a phenomenon known as neophobia. As discussed earlier, repeatedly being exposed to something leads to increased liking—the mere exposure effect. This effect has been demonstrated in hundreds of studies using various objects, including faces, geometric shapes, Chinese characters, and nonsense words (Zajonc, 2001). However, familiarity can breed contempt rather than liking, as when the more we get to know someone, the more aware we become of how different that person is from us (Norton, Frost, & Ariely, 2007).

BIRDS OF A FEATHER Another factor that increases liking is similarity. Birds of a feather really do flock together. People similar in attitudes, values, interests, backgrounds, and personalities tend to like each other. In high school, people tend to be friends with those of the same sex, race, age, and year in school. College roommates who are most similar at the beginning of the school year are most likely to become good friends. The most successful romantic couples also tend to be the most physically similar, a phenomenon called the matching principle (Bentler & Newcomb, 1978; Caspi & Herbener, 1990). Of course, people can and do become friends with, become romantic partners with, and marry people of other races, people who are much older or younger, and so on, but such friendships and relationships tend to be based on other important similarities—values, education, socioeconomic status, and so on.

PERSONAL CHARACTERISTICS People tend especially to like those who have admirable personality characteristics and who are physically attractive, both as friends and as lovers. In a now-classic study conducted in the 1960s, Norman Anderson asked college students to rate 555 trait descriptions by how much they would like others who possessed those traits. As you might guess from the earlier discussion of who is rejected from social groups, people dislike cheaters and others who drain group resources. Indeed, as shown in Table 12.1, the least likable characteristics are dishonesty, insincerity, and lack of personal warmth. Conversely, people especially like those who are kind, dependable, and trustworthy. Generally, people like those who have personal characteristics valuable to the group. For example, people like those whom they perceive to be competent much more than those they perceive to be incompetent or unreliable, perhaps because competent people make valuable group members. However, people who seem overly competent or too perfect make others feel uncomfortable or inadequate, and small mistakes can make a person seem more human and therefore more likable. In one study, a highly competent person who spilled a cup of coffee on himself was rated more highly than an equally competent person who did not perform this clumsy act (Helmreich, Aromson, & LeFan, 1970).

PHYSICAL ATTRACTIVENESS What determines physical attractiveness? Although some standards of beauty, such as preferences for particular body types,
appear to change over time and across cultures, how people rate attractiveness is generally consistent across all cultures (Cunningham, Roberts, Barbee, Druen, & Wu, 1995). In a cleverly designed study of what people find attractive, Langlois and Roggman (1990) used a computer program to combine (or “average”) various faces without regard to individual attractiveness. They found that as more faces were combined, participants rated the “averaged” faces as more attractive (FIGURE 12.29). People may view averaged faces as attractive because of the mere exposure effect, in that such faces may be more familiar than unusual faces (FIGURE 12.30). However, other researchers contend that although averaged faces might be attractive, averaged attractive faces are rated more favorably than averaged unattractive faces (Perrett, May, & Yoshikawa, 1994).

Most people find symmetrical faces more attractive than asymmetrical ones. This preference may be adaptive, in that a lack of symmetry could indicate poor health or a genetic defect. There are no racial differences in the extent to which faces are symmetrical, but biracial people tend to have more symmetrical facial features and correspondingly are rated as more attractive than those who are uniracial (Phelan, 2002). It does not seem to matter which two races comprise the genetic makeup. (We do not yet have data on the attractiveness of multiracial people.)

Attractiveness can bring important social benefits. Most people are drawn to those they find physically attractive. Attractive people are typically judged to be happier, more intelligent, more sociable, more successful, and less socially deviant. Taken together, these findings point to what Karen Dion and her colleagues (1972) dubbed

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**FIGURE 12.30 Try for Yourself: Which Average Is More Attractive?**

Which face do you find most attractive?

- (a)
- (b)
- (c)

Image (a) represents the averaging of 60 women. Image (b) is the composite of the 15 most attractive faces out of that 60. Given a choice between (a) and (b), most people prefer (b). Image (c) exaggerates the subtle differences between (a) and (b). Given a choice between (b) and (c), 7 out of 10 people prefer (c).

**Explanation:** Female faces that have stereotypically feminine features, such as larger eyes, a smaller nose, plumper lips, and a smaller chin, tend to be rated most attractive.
the “what is beautiful is good” stereotype. A meta-analysis of many hundreds of research studies of the effects of attractiveness on interpersonal evaluation and behavioral outcomes found that being attractive confers numerous benefits (Langlois et al., 2000). Physically attractive people are less likely to be perceived as criminals, are given lighter sentences when convicted of crimes, are rated as more intelligent and capable and gifted, are paid more for doing the same work, and have greater career opportunities. The preference for physical attractiveness begins early. Children as young as six months prefer to look at attractive faces, and young children prefer attractive over unattractive playmates (Rubenstein, Kalakanis, & Langlois, 1999). Even mothers treat attractive children differently from unattractive children. In one study, researchers observed more than 100 mothers feeding and playing with their just-born babies (while still in the hospital) and then again three months later (Langlois, Ritter, Casey, & Savin, 1995). Mothers of attractive infants were much more affectionate and playful than mothers of unattractive children, who attended to other people more than to their infants. Mothers of attractive infants also expressed slightly more positive attitudes about those infants.

Given such preferential treatment, do physically attractive people actually possess characteristics consistent with the “what is beautiful is good” stereotype? The evidence on this issue is mixed. Attractive people tend to be more popular, more socially skilled, and healthier, but they are not necessarily smarter or happier. Among studies of college students, the correlation between objective ratings of attractiveness and other characteristics appears small. In one study that examined physical attractiveness, objectively rated by multiple judges, the researchers did not find any relation between appearance and grades, number of personal relationships, financial resources, or just about anything (Diener, Wohlc, & Fujita, 1995). In addition, attractive people are similar to less attractive people in intelligence, life satisfaction, and self-esteem. Why does having all the benefits of attractiveness not lead to greater happiness? Possibly, attractive people learn to distrust attention from others, and especially from the opposite sex, because they assume people like them simply for their looks. Believing that good things happen to them primarily because they are good looking may leave people feeling insecure, given that looks can fade or change with age.

Love Is an Important Component of Romantic Relationships

As noted above, psychological scientists long have neglected the study of love, in part because love seems to be a mysterious state that defies sensible comprehension. Thanks to the pioneering work of Elaine Hatfield and Ellen Berscheid, researchers now can use scientific methods to examine this important interpersonal bond. Hatfield and Berscheid have drawn an important distinction between passionate love and companionate love. Passionate love is a state of intense longing and sexual desire, the kind of love often portrayed stereotypically in the movies. In passionate love, people fall head over heels for each other, feel an overwhelming urge to be together, and are continually sexually aroused in each other’s presence (Figure 12.31A). Brain imaging studies show that passionate love is associated with activity in dopamine reward systems, the same ones involved in drug addiction (Fisher, Aron, & Brown, 2006; Ortigue, Bianchi-Demicheli, Hamilton, & Grafton, 2007; on brain imaging, see Chapter 2, “Research Methodology”; on brain chemistry, see Chapter 3, “Biological Foundations”). Companionate love is a strong commitment to care for and support a partner that develops slowly over time. It is based on friendship, trust, respect, and intimacy (Figure 12.31B). Although people experience passionate love early in relationships, in most enduring relationships it evolves into a more companionate love, in which intimacy and commitment dominate (Sternberg, 1986).
One theory of love is based on attachment theory. As discussed in Chapter 11, infants can form different levels of attachment with their parents. According to Cindy Hazan and Phillip Shaver (1987), adult relationships, especially romantic relationships, also vary in their attachment styles. The types of attachment styles people have as adults are assumed to relate to how their parents treated them as children (Fraley & Shaver, 2000). Those who believe their parents were warm, supportive, and responsive report having secure attachments in their relationships. They find it easy to get close to others and do not fear being abandoned. Just under 60 percent of adults report having this attachment style (Mickelson, Kessler, & Shaver, 1997). Those who believe their parents were cold and distant, about 25 percent of the population, report having avoidant attachments. They find it hard to trust or depend on others, and they are wary of those who try to become close to them. Relationship partners make them uncomfortable. Those whose parents treated them inconsistently—sometimes warm and sometimes not—have anxious/ambivalent attachments. This 11 percent of the population is best described as clingy. They worry that people do not really love them and are bound to leave them. However, these findings are based partly on people’s recollections of how their parents treated them, and it is possible that their memories are distorted.

Most people enter into romantic relationships of one form or another. As discussed in Chapter 10, people in long-term, committed relationships tend to live longer, healthier lives. But love, which is so important to so many people, can be elusive. Many people struggle to find their “one true love,” as they date and reject potential partners who fall short of their ideals. As mentioned in Chapter 11, people now tend to marry much later than they did in the past. Even people in loving, committed relationships encounter challenges to their relationships. What can social psychology tell us about the factors that make relationships successful?

Making Love Last Is Difficult

Many contemporary Western marriages fail. In North America, approximately half of marriages end in divorce or separation, often within the first few years. In addition, many couples who do not get divorced live together unhappily, in a constant state of tension or as strangers sharing a home. The social psychologist Rowland Miller notes that “married people are meaner to each other than they are to total strangers” (1997, p. 12). People often take their relationship partners for granted, openly criticize them, and take out their frustrations on them by being cruel or cold. Perhaps unsurprisingly, then, relatively few marriages meet the blissful ideals that newlyweds expect.
As noted above, passion typically fades over time. The long-term pattern of sexual activity within relationships shows a rise and then a decline. Typically, for a period of months or even years, the two people experience frequent, intense desire for one another and have sex as often as they can arrange it. Past that peak, however, their interest in sex with each other wanes. Frequency of sex declines by about half from the first year of marriage to the second, for example, and it continues to decline, although more gradually, thereafter. Not only does frequency of sex decline, but people typically experience less passion for their partners over time. Unless people develop other forms of satisfaction in their romantic relationships, such as friendship, social support, and intimacy, the loss of passion leads to dissatisfaction and often to the eventual dissolution of the relationship (Berscheid & Regan, 2005).

JEALOUSY AND POSSESSIVENESS Even when people lose some of their sexual desire for one another, they generally do not want their mates to have sex with other people. Some degree of sexual possessiveness and jealousy is found in all cultures, although with variation as to what makes people jealous and how they express the feeling. Although people may disapprove of sexual infidelity, many eventually engage in it. Even so, infidelity is far less frequent than many people think. The best estimates are that one out of four husbands and one out of nine wives have extramarital sex. Earlier estimates suggesting that half of married men and almost as many women were unfaithful may have reflected the more permissive patterns of the then ongoing “sexual revolution” of the 1960s and 1970s, and people may well be more faithful now than they were a couple of decades ago.

DEALING WITH CONFLICT Even in the best relationships, some conflict is inevitable, and couples continually need to resolve strife. Confronting and discussing important issues is clearly an important aspect of any relationship. The way a couple deals with conflict often determines whether the relationship will last. John Gottman (1994) describes four interpersonal styles that typically lead couples to discord and dissolution, and he calls these patterns of interacting the “Four Horsemen of the Apocalypse” to reflect their threats to relationships. These maladaptive strategies are being overly critical, holding the partner in contempt, being defensive, and mentally withdrawing from the relationship. For example, when one partner voices a complaint, the other responds with his or her own complaint(s) and often raises the stakes by recalling all of the other person’s failings. People use sarcasm and sometimes insult or demean their partners. Inevitably, any disagreement, no matter how small, escalates into a major fight over the core problems, which often center around a lack of money or of sex or of both. More satisfied couples tend to express concern for each other even while disagreeing, try to see each other’s point of view, and manage to stay relatively calm. Delivering criticism lightheartedly and playfully is also a strategy for relationship satisfaction (Keltner, Young, Heerey, Oenig, & Monarch, 1998). In addition, optimistic people are more likely to use cooperative problem solving; as a result, optimism is linked to having satisfying and happy romantic relationships (Asad, Donnellan, & Conger, 2007; Srivaseva, McGonigal, Richards, Butler, & Gross, 2006).

ATTRIBUTIONAL STYLE AND ACCOMMODATION Unhappy couples also differ from happy couples in attributional style, or how one partner explains the other’s behavior (Bradbury & Fincham, 1990). Essentially, happy couples attribute good outcomes to one another and bad outcomes to situations, whereas distressed couples do the opposite. Happy couples make partner-enhancing attributions in which they overlook bad behavior or respond constructively, a process called accommodation.
tion (Rusbult & Van Lange, 1996). In contrast, unhappy couples make distress-maintaining attributions, in which they view one another in the most negative ways possible. In unhappy couples, if one partner comes home with flowers, for example, the other partner wonders what ill deed the first partner committed rather than reflecting on that partner’s generosity and sweetness.

Over the past two decades, a number of psychological scientists have conducted research on healthy and unhealthy relationships. Among the foremost of these researchers is John Gottman, who has studied thousands of married couples to understand what predicts marital outcomes (Gottman, 1998). In his 1994 book, Why Marriages Succeed or Fail and How You Can Make Yours Last, Gottman outlines numerous differences between couples who are happy and those who are not. He also dispels some common myths about couples—for instance, that couples who have the most sex are the happiest. Actually, couples who agree on the frequency of sex are happiest. No matter the frequency, if one person thinks it is too often and the other thinks it is not often enough, that spells conflict. Furthermore, many people believe that conflict is a sign of a troubled relationship and that couples who never fight must be the happiest, but these ideas are not true either. According to research by Gottman and others, fighting, especially when it allows grievances to be aired, is one of the healthiest things a couple can do for their relationship. Conflict is inevitable in any serious relationship, but resolving conflict positively is the key to happiness as a couple.

Gottman asserts that the most successful type of couple is what he calls a validating couple, in which partners may disagree—may respond to particular situations by having different opinions and feeling different emotions—but each partner considers the other partner’s opinions and emotions valid. People in such relationships make statements like “I know that it makes you angry when I hang the toilet paper the wrong way, but it was never a big deal to me which way it should hang.” Validating couples try to compromise and to demonstrate mutual respect.

Quite simply, they do the hard work of working things out.

Based on his research, Gottman believes that as long as there are about five positive interactions for every negative one in a relationship, chances are good that the relationship will be stable. Couples headed for breakup fall below this level, and if there are as many negatives as positives in a relationship, the prognosis is pretty bleak. Therefore, the task for any couple is to seek opportunities for positive feelings within the relationship. According to Gottman and others, the same principles apply to all long-term, committed relationships, heterosexual or homosexual:

- Show interest in your partner. Listen to him or her describe the events of the day. Pay attention while he or she is speaking and maintain eye contact. Try to be empathetic; show that you really understand and can feel what your partner is feeling. Such empathy and understanding cannot be faked, but saying, for example, “That must have been really annoying” conveys that you understand your partner’s feelings.
- Be affectionate. You can show love in very quiet ways, such as simply touching the person once in a while. Reminisce about happy times together. Appreciate the benefits of the relationship. A couple who talk about the joys of their relationship, including comparing their partnership favorably to those of other people, tend to be happier with their relationship.
- Show you care. Many people take their partners for granted. Try to do spontaneous things such as buying flowers or calling your partner at an
unexpected time just to see how he or she is doing (FIGURE 12.32A). Such actions let your partner know you think about him or her, even when you are not together. When we are dating people, we flirt with them, give them compliments, and display our best manners. Being in a committed relationship does not mean you do not have to do any of these things. Be nice to your partner and try to make him or her feel that you value your mutual companionship. Praise your partner whenever possible. In turn, he or she will feel free to act in kind, which will help you feel good about yourself.

- Spend quality time together. It is easy for a couple to drift apart and develop separate lives. Find time to explore joint interests, such as hobbies or other activities (FIGURE 12.32B). Partners should pursue independent interests, but having some activities and goals in common helps bring a couple closer. Having fun together is an important part of any relationship. Share private jokes, engage in playful teasing, be witty. Enjoy each other.

- Maintain loyalty and fidelity. Outside relationships can be threatening to an intimate partnership. Believing your partner is emotionally or physically involved with another person can pose harm to even the healthiest relationship, as can being distrustful or jealous for no reason. At their core, relationship partners have to trust one another. Anything that threatens that basic sense of trust will harm the relationship.

- Learn how to handle conflict. Do not avoid it and pretend you have no serious issues. Rather, calm down, try to control your anger, and avoid name-calling, sarcasm, or excessive criticism. Validate your partner’s feelings and beliefs even as you express your own feelings and beliefs. Look for areas of compromise.

Although much of this advice seems like common sense, many couples lose sight of how to express their love and commitment. Partners can get so caught up in everything else in their lives, from work to raising children, that it becomes easier to focus on what is wrong in a relationship than on what is right. When that happens, the relationship has taken a wrong turn. To make a relationship stronger, partners must put considerable effort into recognizing and celebrating all that is good about the relationship. Those affirming experiences make relationships succeed.

**SUMMING UP**

**What Determines the Quality of Relationships?**

People form friendships based on proximity, familiarity, similarity, and personal characteristics, such as personality traits and attractiveness. Love is an important component of romantic relationships. Relationships based solely on sexual passion may fail when that passion starts to wane, as it often does over time. How a couple deals with conflict is an important determinant of whether the relationship will endure. Happy couples tend to make positive attributions for the partners’ behaviors, whereas unhappy couples tend to make negative attributions.

**MEASURING UP**

1. Label each of the following characteristics as an attribute of passionate love or compassionate love.
   a. longing to be together
   b. associated with dopamine reward systems
CONCLUSION

Even as we feel in control of our own behavior and believe we can make sense of others’ actions, we often fail to take into account how powerfully social situations can influence behavior, attitudes, and beliefs. Moreover, much of how we think about ourselves and others occurs automatically and is based on minimal information. These judgments are often biased in ways that make us feel good about ourselves, frequently at others’ expense. Research crossing levels of analysis has shown that stereotypes alter the way people perceive and process information about others. Brain activity often indicates that people do not report, or perhaps even know about, attitudes they hold, such as negative ones about ethnic minorities. Using only some of their mental resources, human minds automatically categorize others, with the outcome that people fail to treat others individually and with respect. People easily develop ingroups and outgroups; a group can consist of as few as three people. Yet social psychologists have discovered that cooperative learning systems can benefit the self and society. The challenge now is to adapt these systems to larger groups in society and to motivate these groups to use them.

Much of the strength of the social situation comes from the human need to belong. People favor their groups, go along with their leaders, and are motivated to avoid conflict to maintain group harmony. However, pressure to conform to the group leaves people susceptible to social influence and causes them to act in ways that conflict with their personal standards. Understanding the power of social situations allows us to at least partially understand humans’ inhumane acts and to more fully understand humans’ everyday behavior.
CHAPTER SUMMARY

How Do Attitudes Guide Behavior?
- We Form Attitudes through Experience and Socialization: Attitudes are influenced by familiarity (the mere exposure effect) and can be shaped by conditioning and through socialization.
- Behaviors Are Consistent with Strong Attitudes: Implicit attitudes (those that are automatic and easily activated from memory) can influence behavior and may differ from explicit attitudes (those we profess).
- Discrepancies Lead to Dissonance: A mismatch between attitudes or between an attitude and a behavior causes cognitive dissonance, which is usually resolved by a change in attitude. A behavioral change is possible but more difficult to accomplish. To justify behavior that does not reflect attitudes, people often inflate positive aspects of the experience.
- Attitudes Can Be Changed through Persuasion: Persuasion often works by focusing on either the message (the central route) or the feelings the message generates (the peripheral route).

How Do We Form Our Impressions of Others?
- Nonverbal Actions and Expressions Affect Our Impressions: Nonverbal behavior (body language) is interpreted quickly and provides valuable information.
- We Make Attributions about Others: We use personal dispositions and situational factors to explain others’ behavior. Fundamental attribution error occurs when personal attributions are favored over situational attributions in explaining others’ behavior.
- Stereotypes Are Based on Automatic Categorization: Stereotypes are cognitive schemas that allow for fast, easy processing of social information; they can lead to bias and illusory correlations. Self-fulfilling prophecies occur when people behave in ways that confirm the biases of stereotypes.
- Stereotypes Can Lead to Prejudice: Prejudice occurs when the attitude associated with a stereotype is negative. Having a negative bias can lead to discriminatory action. We show a preference for members of our ingroup versus those in outgroups.
- Cooperation Can Reduce Prejudice: Sharing superordinate goals that require cooperation leads to reduced prejudice and discrimination.

How Do Others Influence Us?
- Groups Influence Individual Behavior: The presence of others can improve performance (social facilitation) or create laziness (social loafing). Loss of personal identity and of self-awareness (deindividuation) can occur in groups. Group decisions can be extreme.
- We Conform to Social Norms: Socially determined influences on behavior occur through awareness of social norms. Lack of unanimity diminishes conformity.
- We Are Compliant: Various factors influence the likelihood of compliance, among them what mood we are in and whether we have previously agreed to a lesser request (foot-in-the-door effect).
- We Are Obedient to Authority: People readily behave in ways directed by authorities, even to the extent of harming others.

When Do We Harm or Help Others?
- Aggression Can Be Adaptive: Brain structures, neurochemistry, and hormones influence aggression. Biologically based responses can be adaptive. Frustration can lead to aggression.
- Aggression Has Social and Cultural Aspects: Aggression is not entirely adaptive and is influenced by our social and cultural experiences.
- Many Factors May Influence Helping Behavior: Prosocial behaviors maintain social relations. Altruism toward kin may favor inclusive fitness. Reciprocal helping is more likely in social groups in which survival depends on cooperation.
- Some Situations Lead to Bystander Apathy: The presence of others in an emergency may diffuse responsibility and lead to individual inaction.

What Determines the Quality of Relationships?
- Situational and Personal Factors Influence Friendships: People affiliate with others who are similar to themselves and who possess valued characteristics, such as attractiveness.
- Love Is an Important Component of Romantic Relationships: In successful romantic relationships, passionate love tends to evolve into companionate love.
- Making Love Last Is Difficult: As passion fades, couples must develop other areas of satisfaction. Jealousy arises out of fears of infidelity. How a couple deals with conflict influences the stability of the relationship. Generally, in a happy couple the partners have positive views of each other and their relationship.

KEY TERMS
- aggression, p. 553
- altruism, p. 557
- attributes, p. 525
- attributions, p. 533
- bystander intervention effect, p. 557
- cognitive dissonance, p. 527
- compliance, p. 549
- conformity, p. 547
- deindividuation, p. 545
- discrimination, p. 538
- elaboration likelihood model, p. 529
- explicit attitudes, p. 526
- frustration-aggression hypothesis, p. 554
- fundamental attribution error, p. 534
- implicit attitudes, p. 526
- in-group favoritism, p. 539
- nonverbal behavior, p. 533
- nonverbal attributions, p. 534
- personal attributes, p. 528
- prejudice, p. 538
- prosocial, p. 556
- self-fulfilling prophecy, p. 537
- situational attributions, p. 534
- social facilitation, p. 545
- social loafing, p. 545
- social norms, p. 547
- stereotypes, p. 536

PRACTICE TEST

1. Which of the following scenarios illustrates postdecisional dissonance?
   a. Josh has always wanted to attend College A. During his senior year of high school, he applies to College A and College B. Although he receives acceptance letters from both institutions, he decides to attend College A. When asked to explain why he wants to attend College A, he says, “I like that I can live on campus. There’s a great community vibe here. Plus I can major in international business. None of these things are true of the other school.”

The answer key for all the Measuring Up exercises and the Practice Tests can be found at the back of the book.
b. Adrianna wants to go on a community service trip during her spring break. After struggling for weeks to decide between two options, she opts to build houses in rural Mexico instead of doing hurricane cleanup in Louisiana. When asked to explain why she made this decision, she says, “The Mexico trip will give me a chance to travel outside the United States, which I’ve always wanted to do. Plus, the Louisiana trip sounded pretty stale.”

2. Which of the following scenarios illustrates justification of effort?
   a. David’s boss regularly asks him to do a lot of extra tasks around the office, but David’s pay does not reflect the extra effort he puts into emptying the recycling bin, washing out coffee mugs, or refilling the printer paper. When asked why he does all these extra tasks, David replies, “I’m happy to do whatever it takes to make our office as welcoming and efficient as possible.”
   b. Sasha elects to attend an intensive, summer-long math program. When asked why she gave up her summer vacation for this program, Sasha says, “I’ll be able to get college credit for the courses I took there, plus I got a scholarship that paid for my tuition, room, and board. It was a deal I couldn’t refuse.”

3. Some of the following statements illustrate cognitive or behavioral outcomes of stereotyping. As appropriate, label those statements as examples of illusory correlation, ingroup favoritism, outgroup homogeneity, and self-fulfilling prophecy. Not all response options will be used.
   a. A first-year college student states, “Students at our college are so unique! Each person has his or her own passions and aptitudes.”
   b. A professor mistakenly comments to a colleague, “The athletes in my class always seem to ask for extensions on their homework; none of my other students ever ask for extensions.”
   c. A senior College A tells her friend, “Whatever you do, don’t go to parties at College B. They all drink way too much, and the guys can’t keep their hands off the women at their parties.”

4. Dorm A and Dorm B have a long-standing rivalry. Recently, the rivalry has intensified, resulting in destructive acts of property and harassment of outgroup members. A couple students from each dorm encourage the students to get together to brainstorm possible strategies for easing the tension. According to the ideas presented in this chapter, which suggestion would be most effective?
   a. “Let’s hold a series of dorm dinners. Dorm A can invite people from Dorm B over one week, and Dorm B can invite people from Dorm A over the following week.”
   b. “Since people in Dorm A are such strong math students, we could have Dorm A offer math tutoring to students from Dorm B.”
   c. “The administration should hold a meeting with the dorm presidents to let them know that funding for dorm activities will be cut unless the interdorm tension subsides.”
   d. “We can hold an all-campus competition, where teams of dorms would compete for prizes. Dorm A and Dorm B could be on one team; Dorm C and Dorm D could be on the other team.”

5. Which of the following examples of social norms marketing would most likely be most effective?
   a. 80 percent of the residents in your neighborhood recycle.
   b. 80 percent of the residents in your neighborhood recycle. Keep up the great work!
   c. Recycle!
   d. Recycle! It’s the right thing to do!

6. Some of the following scenarios illustrate compliance strategies discussed in this chapter. As appropriate, label each scenario as an example of a: (a) foot in the door; (b) bait and switch; (c) low-ball; (d) all-response options; (e) inappropriately labeled. Not all response options will be used, and not every example will have an appropriate label.
   a. After a grueling series of abdominal crunches, a fitness instructor tells her class, “C’mon, just eight more!” Then, after the eighth crunch, she says, “OK, now crunch up and hold for eight counts!”
   b. A professor tells her students, “As you know, we’re going on a class field trip this Saturday. I’d like us to all meet up at 8:00 A.M. Will that time work for everyone?” Then, upon encountering much resistance from the class, she says, “Okay, okay. Instead of 8:00, let’s meet at 9:00.”
   c. You see an informal notice for a collection of fancy knives. A countdown timer appears in the corner of the screen, reminding you the deal will be available for only three more minutes.

7. Which of the following examples most accurately describes the relationship between relationship length and frequency of sex?
   a. After an initial period of frequent sex, there is a negative correlation between relationship length and frequency of sex.
   b. There is a near-zero correlation between relationship length and frequency of sex.
   c. There is a negative correlation between relationship length and frequency of sex.
   d. There is a positive correlation between relationship length and frequency of sex.

8. Match each definition below with the appropriate term: altruism, inclusive fitness, kin selection, reciprocal helping.
   a. a process in which individuals behave helpfully toward those with whom they share genes
   b. providing help without any apparent reward for doing so
   c. the tendency for one animal to help another because the other can return the favor in the future
   d. the adaptive benefits of transmitting genes rather than focusing on individual survival

9. Which statement below about Shelly, who is very attractive, is most consistent with the “what is beautiful is good” stereotype?
   a. “Shelly is a total ditz!”
   b. “Shelly is easily the happiest person I know!”
   c. “Shelly’s sure knows how to manipulate other people with her looks!”
   d. “Shelly’s parents are really attractive, too!”

**Psychology and Society**

1. Seek out examples of public service announcements. You can find them on television, in print, or on the Internet (for example, check out adcouncil.org). Analyze the ads using ideas from the elaboration likelihood model. Make clear whether the ads use the central or peripheral routes to persuasion, identify cues (source, content, receiver) likely to influence the persuasiveness of the message, and note whether the ads use a social norms marketing approach.

2. Our social worlds are full of norms: how to act, how to dress, when to eat, what to say, how to say it, and so on. For one 24-hour period, write down as many social norms as you can identify. You might find it helpful to ask, “How would others react if I ______?” In the blank, fill in any nonstandard behavior. Would people laugh at you or give you a dirty look? If so, you probably would be violating a norm. After listing the observed norms, write a brief essay reflecting on what you learned as a result of engaging in this activity.