Chapter 10

Attraction and Relationships

From Initial Impressions to Long-Term Intimacy

Chapter Outline and Learning Objectives

What Predicts Attraction?

LO 10.1 **Describe how people decide whom they like and want to get to know better.**

The Person Next Door: The Propinquity Effect
Similarity
Reciprocal Liking
Physical Attractiveness
Evolution and Mate Selection

Making Connections in the Digital World

LO 10.2 **Explain how new technologies shape attraction and social connections.**

Attraction 2.0: Mate Preference in an Online Era
The Promise and Pitfalls of Meeting People Online

Love and Close Relationships

LO 10.3 **Examine the cultural, personality, and biological factors that are associated with different types of love.**

Defining Love: Companionship and Passion
Culture and Love
Attachment Styles in Intimate Relationships
Your Body and Brain in Love

Assessing Relationships: Satisfaction and Breaking Up

LO 10.4 **Analyze different theories of measuring relationship satisfaction and research regarding romantic breakups.**

Theories of Relationship Satisfaction
The Process and Experience of Breaking Up

WHAT DO YOU THINK?

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Survey **What Do You Think?**

SURVEY | RESULTS

Have you ever dated, hooked-up with, or had a relationship with someone you first met online or using a mobile app?

- ○ Yes
- ○ No

Janie Egan and Chris George are both huge basketball fans. So it comes as no surprise to friends who know the young couple that their first date was going to see second-round NCAA tournament games in nearby Salt Lake City. Janie had gotten tickets from a friend and, in an emoji-filled texting session, she convinced Chris to change his existing plans and go watch basketball with her instead. In truth, it didn't take that much convincing. Two days later they returned to the same arena to see third-round games. Within 7 months they were engaged.

There was one bump in the road of this whirlwind romance, however. The first time Chris met Janie's dad, he lied to the man who would eventually become his father-in-law. In fact, Janie asked him to. Because there was one aspect about the past that Janie wanted Chris to hide at all costs from her own parents. One skeleton in Chris's closet that she thought would be too much for her father to bear. What was it that Janie asked Chris to keep secret from her family? That the couple had met on Tinder.

Tinder is a mobile app that "hooks people up." A Tinder user is shown a series of photos of other users. You simply "swipe" your screen to the right for someone you might be interested in; you "swipe" left if you're not interested. Meanwhile, other users in your area are seeing your photo as well, and if someone whom you've right-swiped does the same to you, the app notifies you both of the match. Whether, where, and how far you take things from there is then up to the two of you.

Chris and Janie aren't the only couple out there to have met on Tinder. According to the app's website, by early 2017, 26 million matches were offered to users per day—the result of 1.6 billion daily swipes—with more than 20 billion matches across more than 190 countries since its inception. Still, Janie didn't want her parents to know any of this. It wasn't that they wouldn't understand what Tinder was. Quite the contrary: they were all too familiar with the app. They had been on her case for how much time she spent on it, and they didn't care for some of the other men she had met while using it. Indeed, when Chris showed up to the house that night for their first date, Janie's dad greeted him with, "You aren't one of those Tinder boys, are you?" And so, heeding the warnings of the woman who would one day become his wife, the very first words Chris uttered to his future father-in-law were a lie: "No, sir." Janie and Chris have since come clean with Mr. Egan. With the whole world, in fact, via their blog titled "Right Swiped: The Ultimate Tinder Success Story."

As the couple's backstory illustrates, attraction takes many forms and emerges from many places. A college dormitory or party. Happy hour at the local bar. A library, the gym, a work meeting, the grocery store … and, increasingly these days, online, whether in the form of dating websites—like OkCupid, Match.com, or eHarmony—or mobile apps like Tinder, Grindr, Hinge, PlentyOfFish, and others. Clearly, interpersonal attraction is something that's often on our minds (and tablets and phones). And like much of human nature, it can also be studied scientifically.

This is a good thing, because many of our assumptions about attraction and falling in love turn out to be false. One example is the belief that opposites attract: Research offers the clear conclusion that similarity is a stronger predictor of who we're drawn to (Heine, Foster, & Spina, 2009; West et al., 2014). How about the idea that women

are pickier than men in selecting mates? This is often true, but not for the reasons you might assume (Finkel & Eastwick, 2009). In this chapter, we will explore what makes us feel attracted to other people, whether as friends or lovers, and how relationships develop and progress, both face-to-face and online.

What Predicts Attraction?

LO 10.1 Describe how people decide whom they like and want to get to know better.

When social psychologist Ellen Berscheid asked people of various ages what made them happy, at or near the top of their lists were making friends and having positive, warm relationships (Berscheid, 1985; Berscheid & Reis, 1998). The absence of meaningful relationships with others makes people feel lonely, worthless, hopeless, helpless, and powerless (Baumeister & Leary, 1995; Cacioppo & Patrick, 2008; Hartup & Stevens, 1997). In fact, social psychologist Arthur Aron has suggested that a central human motivation is "self-expansion." This is the desire to overlap or blend with another person, so that you have access to that person's knowledge, insights, and experience and thus broaden and deepen your own experience of life (Aron, Aron, & Norman, 2004; Fivecoat et al., 2014). We will begin this chapter by discussing the antecedents of attraction, from the initial liking of people meeting for the first time to the love that develops in close relationships.

The Person Next Door: The Propinquity Effect

One of the simplest determinants of interpersonal attraction is *propinquity* (also known as proximity). The people who, by chance, are the ones you see and interact with the most often are the most likely to become your friends and lovers (Berscheid & Reis, 1998).

Propinquity Effect
The finding that the more we see and interact with people, the more likely they are to become our friends

Now, this might seem obvious. But the striking thing about the positive relationship that exists between proximity and attraction, or the **propinquity effect**, is that it works in a very narrow sense. For example, consider a classic study conducted in a housing complex for married students at MIT. Leon Festinger, Stanley Schachter, and Kurt Back (1950) tracked friendship formation among the couples in the various apartment buildings. One section of the complex, Westgate West, was composed of 17 two-story buildings, each having 10 apartments. Residents had been assigned to apartments at random, and nearly all were strangers when they moved in. The researchers asked residents to name their three closest friends in the complex. Just as the propinquity effect would predict, 65% of the friends mentioned lived in their same building, even though the other buildings were not far away.

Close friendships are often made in college, in part because of prolonged propinquity.

Even more striking was the pattern of friendships *within* a building. Each Westgate West building was designed with front doors only 19 feet apart, and the greatest distance between apartment doors was only 89 feet. The researchers found that 41% of the next-door neighbors indicated that they were close friends, 22% of those who lived two doors apart said so, and only 10% of those who lived on opposite ends of the hall indicated that they were close friends.

Festinger and his colleagues (1950) demonstrated that attraction and propinquity rely not only on actual physical distance but also on "functional distance," which refers to aspects of architectural design that determine which people you cross paths with most often. For example, living at the foot of the stairs or near the

MERE EXPOSURE AND LIKING

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One of the earliest and most famous demonstrations of the mere exposure effect was conducted by Robert Zajonc (1968) who asked American participants to guess the meaning of a series of Chinese characters. The more frequently a character was shown to them, the more positive a meaning people guessed for it, demonstrating that mere exposure tends to predict positive attitudes.

Advertising also capitalizes on the mere exposure effect. From the effectiveness of product placement to the catchiness of a commercial jingle, the idea is that the more times consumers see or hear about a product, they more they will like it and be willing to spend money on it.

One demonstration of the power of mere exposure to shape our feelings about people is provided by Moreland and Beach (1992). In their study, female students who were not registered for a class sat in a classroom 5, 10, or 15 times during the semester, never actually interacting with anyone else. When students were later asked to rate how attractive a series of faces were, their ratings of these women were higher the more times the individual had visited their classroom.

Mere exposure is about more than physical attractiveness and romantic attraction. It can also facilitate prejudice reduction. In one recent study, participants expressed less prejudice after reading a vignette about transgender people and seeing images of associated faces (Flores et al., 2017). Mere exposure would seem to have the potential to draw people to one another as well as bridge gaps that otherwise might exist between them.

mailboxes meant that one would see upstairs residents quite often. Sure enough, throughout the complex, residents in such apartments had more upstairs friends than did those who lived in the other first-floor apartments.

Propinquity works because of familiarity, or the **mere exposure effect**: The more exposure we have to a stimulus, the more apt we are to like it (Kawakami & Yoshida, 2014; Moreland & Topolinski, 2010; Zajonc, 1968). In reality, familiarity doesn't usually breed contempt; it breeds liking. We typically associate positive feelings with things that are familiar, like comfort food, songs we remember from childhood, and even certain corporate logos. The same is true for the people we encounter. The more often we see certain people, and the more familiar they become, the more friendship blooms. However, there is a caveat: If the person in question is obnoxious, then, not surprisingly, the more exposure you have, the greater your dislike becomes (Norton, Frost, & Ariely, 2007). But in the absence of negative qualities, familiarity tends to breed attraction and liking (Bornstein, 1989; Montoya et al., 2017; Reis et al., 2011).

Mere Exposure Effect
The finding that the more exposure we have to a stimulus, the more apt we are to like it

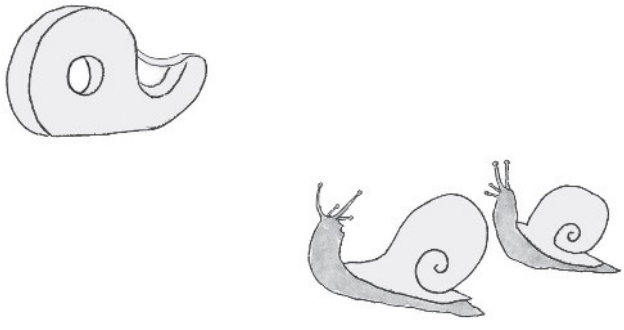
Similarity

As we saw, propinquity increases familiarity, which leads to liking. But more than that is needed to fuel a growing friendship or a romantic relationship. (Otherwise, every pair of roommates would be best friends!) That "fuel" is often *similarity*—a match between interests, attitudes, values, background, or personality. Folk wisdom captures this idea in the expression "Birds of a feather flock together" (the concept of *similarity*). But folk wisdom also has another saying, "Opposites attract" (the concept of *complementarity*). Luckily, we don't have to remain forever confused by contradictory advice from old sayings; research evidence demonstrates that it is overwhelmingly similarity and not complementarity that draws people together (Heine et al., 2009; McPherson, Smith-Lovin, & Cook, 2001; Montoya & Horton, 2013).

OPINIONS AND PERSONALITY A large body of research indicates that the more similar someone's opinions are to yours, the more you will like the person (Byrne & Nelson, 1965; Lutz-Zois et al., 2006; Tidwell, Eastwick, & Finkel, 2013). For example, in a classic study, Theodore Newcomb (1961) randomly assigned male students at the University of Michigan to be roommates in a particular dormitory at the start of the school year. Would similarity predict friendship formation? The answer was yes: Men became friends with those who were demographically similar (e.g., shared a rural background), as well as with those who were similar in attitudes and values (e.g., were also engineering majors or also held comparable political views). It's not just attitudes or demographics that are important. Similar personality characteristics also promote liking and attraction. For example, in a study of gay men's relationships, those who scored high on a test of stereotypically male traits desired most of all a partner who was logical—another stereotypically masculine trait. Gay men who scored high on a test of stereotypically female traits desired most of all a partner who was expressive—another stereotypically feminine trait (Boyden, Carroll, & Maier, 1984). Similar personality characteristics are important for heterosexual couples and for friends as well (Gonzaga, Campos, & Bradbury, 2007; Smith et al., 2014; Weaver & Bosson, 2011).

INTERESTS AND EXPERIENCES The situations you choose to be in are usually populated by people who have chosen them for similar reasons. You're sitting in a social psychology class, surrounded by people who also chose to take social psychology this semester. You sign up for salsa dance lessons; the others in your class also want to learn Latin dancing. Thus, we choose to enter into certain social situations where we then find similar others. For example, in a study of academic "tracking" (when schools group students by academic ability), researchers found that students were significantly more likely to choose friends from inside their track than from outside it (Kubitschek & Hallinan, 1998; Whyte & Torgler, 2017). Clearly, propinquity and initial similarity play a role in the formation of these friendships. However, the researchers add that similarity plays yet another role: Over time, students in the same academic track share many of the same experiences, which are different from the experiences of those in other tracks. Thus, new similarities are created and discovered, fueling the friendships. In short, shared experiences promote attraction (Pinel et al., 2006; Pinel & Long, 2012).

"I don't care if she is a tape dispenser. I love her."



Sam Gross/The New Yorker Collection/The Cartoon Bank

APPEARANCE Similarity also operates when it comes to more superficial considerations. Sean Mackinnon, Christian Jordan, and Anne Wilson (2011) conducted a series of studies examining physical similarity and seating choice. In one study, they simply analyzed the seating arrangement of college students in a library computer lab, making observations multiple times over the course of several different days. Results indicated that, for instance, students who

wore glasses sat next to other students with glasses far more often than random chance alone would predict. A second study found the same pattern by hair color.

In a third study, participants arrived at a psychology lab and were introduced to a partner who was already sitting. Handed a chair, they were told to have a seat, at which point the research team secretly measured how close to the partner's chair they put down their own chair. A separate set of researchers later evaluated photos of both the participant and the partner. Pairs judged as more physically similar had sat, on average, closer to each other. Without even realizing it, we are often drawn to those who look like us, to the point where people are even more likely to ask out on dates others who are similar to them in terms of attractiveness level (Taylor et al., 2011; Walster et al., 1966).

Watch ATTRACTION AND THE MATCHING HYPOTHESIS

GENETICS People also tend to be drawn to others who are genetically similar to them. That is, friends tend to have more similar DNA than do strangers. This is the surprising conclusion of research conducted by Nicholas Christakis and James Fowler (2014). Their study included close to 2,000 participants, some of whom were friends and some of whom were strangers, and analyzed close to 1.5 million markers of gene variation. Christakis and Fowler (2014) found that participants shared more DNA with their friends than with strangers, to a degree that participants were as genetically similar to their average friend as they would be to someone who shared a great-great-great grandparent. Of course, these data do not prove that our genes *cause* friendships or that our DNA drives people toward certain others. As noted previously, people tend to make friends with others who live near them, and individuals of similar genetic ancestry may be more likely to share such geographical propinquity. And perhaps certain genetic predispositions—say, an athletic build and good lung capacity—make people more likely to select certain activities and frequent certain locales—say, joining a running club—which means that genetically similar individuals often end up doing the same thing at the same time in the same place. These and other possibilities provide intriguing explanations for Christakis and Fowler's provocative findings, which suggest interesting interactions between our genetic and social tendencies.

SOME FINAL COMMENTS ABOUT SIMILARITY Here are two additional points about similarity. First, although similarity is very important in close relationships, it is important to make a distinction between *actual* similarity and *perceived* similarity (Morry, 2007; Tidwell et al., 2013). In a meta-analysis, R. Matthew Montoya and his colleagues found that in long-term relationships, individuals' *beliefs* about how similar they were to another person predicted liking and attraction better than their *actual* similarity did. Thus, feeling similar to another is what's really important—so much so that we will sometimes create beliefs about the similarity between ourselves and intimate others even when they don't exist (Montoya, Horton, & Kirchner, 2008).

Second, similarity appears to be far more important when we want a serious, committed relationship, and less so when we just want a "fling" (Amodio & Showers, 2005). Indeed, in low-commitment relationships (i.e., "one-night stands" or "hook-ups"), we sometimes go out of our way to choose someone who is

We often prioritize different characteristics in a romantic partner when looking for a long-term relationship versus a fling. Can you think of specific examples?

#trending

"Hook-Up Culture" and Today's Youth

In America today, teenagers and young adults are having unprecedent levels of casual, quick, and commitment-free sexual encounters with a regularly rotating number of new partners.

Does this sound familiar? Have you heard claims like this about a newly emerging "hook-up culture" among young people on college campuses and elsewhere? The suggestion is often that the contemporary social landscape for sexual behavior stands in stark contrast to more traditional ideas of courtship, dating, and committed relationships that were more common in the past.

It's a compelling narrative, but is it accurate? Recent research suggests that "hook-up culture" may be more myth than reality. First, what does the term "hook-up" really even mean? Many seem to believe that the phrase implies sexual intercourse, but a recent survey of college women indicates that only about one-half of the encounters they describe in this manner involved any sort of genital contact, with closer to just one-fourth involving actual sexual intercourse (Fielder & Carey, 2010). Furthermore, these women reported that almost half of their "hook-ups" were with a familiar, repeat partner. So even if it were the case that increasing numbers of college students talk about "hooking up," only a small percentage of these encounters appear to consist of one-time sex with first-time partners.

But what about the claim that casual sexual encounters are more prevalent now than ever? Analysis of nationwide data from the U.S. General Social Survey indicates that between the years 1988 and 1996, 49% of young adults reported having two or fewer sex partners since the age of 18. From 2004 to 2012, in a more modern era of online dating, Tinder, and supposedly relaxed sexual norms, this rate has remained basically unchanged at 51% (Monto & Carey, 2014). The more recent sample did not report having more sex than young people did two to three decades ago, nor did they report a greater number of total sexual partners.

Findings such as these have led researchers to draw skeptical conclusions regarding any sort of explosion of casual sex, or "hooking-up," among today's young people. Indeed, the sex life of today's youth seems to be, in many respects, not that different from that of past generations, at least in terms of quantity of partners and encounters. Of course, young adults today have at their disposal a wider range of means for easily meeting new partners, from social media to mobile apps to dating websites—but so do middle-aged and older adults! The idea of "hook-up" culture seems to be an illustrative example of how expectations and common sense assumptions about human sexuality do not always align with scientific data and real behavior.

strikingly different from us. A relationship with this sort of person represents more of an adventure, but, as we'll see as we progress through this chapter, relationships based on differences, rather than similarities, can be difficult to maintain.

Reciprocal Liking

We like to be liked. In fact, just knowing that a person likes us fuels our attraction to that individual. Liking is so powerful that it can even make up for the absence of similarity. For example, in one experiment, when a young woman expressed interest in male research participants simply by maintaining eye contact, leaning toward them, and listening attentively, the men expressed great liking for her despite the fact that they knew she disagreed with them on important issues (Gold, Ryckman, & Mosley, 1984). Whether the clues are nonverbal or verbal, perhaps the most crucial determinant of whether we like person A is the extent to which we believe person A likes us (Berscheid & Walster, 1978; Luo & Zhang, 2009; Montoya & Insko, 2008).

Just how powerful is reciprocal liking? Powerful enough to neutralize our basic tendency to pay more attention to attractive faces. Nicolas Koranyi and Klaus Rothermund (2012) used a computer program to present a series of opposite-sex faces to German research participants. Immediately after each photo appeared, a geometrical shape was shown that required participants to respond quickly using a keyboard. This procedure also allowed the researchers to measure which faces elicited the most visual attention from the respondents, and the results indicated, as you might predict, that we have a tendency to linger and look longer at good-looking faces.

The finding that we like people who like us suggests that the strategy of "playing hard-to-get" can sometimes backfire. Research suggests that the strategy tends to decrease how much another person *likes* you, all the while potentially increasing how much that person *wants* to be with you (Dai, Dong, & Jia, 2014). Consider yourselves warned!

But not all respondents showed this bias to stare a bit longer at attractive faces. Who was able to break the spell of the pretty face? Participants who had previously been asked to imagine that they had just learned that someone whom they had a crush on also had feelings for them. As the researchers suggest, it makes sense that this type of interest from someone else would disrupt our otherwise default focus on the attractive alternatives out there. Think about it: If our attention were repeatedly hijacked by *every* pretty face that passed by, we'd never get the chance to turn initial interactions into more meaningful, sustained romantic relationships. Basking in the glow of reciprocated liking is enough to stop a wandering eye and convince you, at least for a while, that the grass may not be greener on the other side.

Physical Attractiveness

Speaking of pretty faces, propinquity, similarity, and reciprocal liking are not the only predictors of whom we come to like. How important is physical appearance to our first impressions? In field experiments investigating actual behavior (rather than simply what people *say* they will do), people overwhelmingly go for physical attractiveness. In one classic study, Elaine Walster Hatfield and her colleagues (Walster, et al., 1966) randomly matched 752 incoming students at the University of Minnesota for a blind date at a dance during freshman orientation week. Although the students had previously taken a battery of personality and aptitude tests, the researchers paired them up totally at random. On the night of the dance, the couples spent a few hours together dancing and chatting. They then evaluated their date and indicated the strength of their desire to see that person again. Of the many possible characteristics that could have determined whether they liked each other—such as their partner's intelligence, independence, sensitivity, or sincerity—the overriding determinant was physical attractiveness.

What's more, there was no great difference between men and women on this count. Indeed, several studies have found that men and women pay equal attention to the physical attractiveness of others (Eastwick et al., 2011; Lynn & Shurgot, 1984), but other studies have reported that men value attractiveness more than women do (Buss, 1989; Meltzer et al., 2014). A meta-analysis of many studies found that although both sexes value attractiveness, men value it a bit more (Feingold, 1990); however, this gender difference was greater when men's and women's attitudes were being measured than when their actual behavior was being measured. Thus, it may be that men are more likely than women to *say* that physical attractiveness is important to them, but when it comes to actual behavior, men and women are fairly similar in how they respond to physical attractiveness. Across multiple studies, both genders rated physical attractiveness as the single-most important characteristic that triggers sexual desire (Graziano et al., 1993; Regan & Berscheid, 1997), a finding that has been observed among straight as well as gay men and women (Ha et al., 2012; Sergios & Cody, 1985).

One indicator of just how important physical appearance is in attraction is our nearly chronic tendency to shift visual attention to attractive others in our immediate vicinity.

WHAT IS ATTRACTIVE? Okay, big surprise—attractiveness is important. But what makes someone attractive? Is physical attractiveness "in the eye of the beholder," or do we all share the same notions of what is beautiful? For now, let's focus on American culture; we'll get to potential cross-cultural differences in a moment. From early childhood, the media tell us what is attractive, and they tell us that beauty is associated with goodness. For example, illustrators of most traditional children's books, as well as Disney movies, have taught us that heroines—and the princes who woo and win them—have a specific look. The female protagonists have small, pert noses; big eyes; shapely lips; blemish-free complexions; and slim, athletic bodies—often rather like Barbie dolls.

Models represent standards of beauty for men and women.

Bombarded as we are with media depictions of attractiveness, it is not surprising to learn that we often share criteria for defining beauty (Fink & Penton-Voak, 2002; Yan & Bissell, 2014). Michael Cunningham (1986) designed a creative study to determine these standards of beauty. He asked college men to rate the attractiveness of 50 photographs of women, taken from a college yearbook and from an international beauty-pageant program. Cunningham then carefully measured the relative size of the facial features in each photograph. He found that high attractiveness ratings for female faces were associated with large eyes, a small nose, a small chin, prominent cheekbones, high eyebrows, large pupils, and a big smile. Researchers then examined women's ratings of male beauty in the same way (Cunningham, Barbee, & Pike, 1990). They found that male faces with large eyes, prominent cheekbones, a large chin, and a big smile received higher attractiveness ratings.

CULTURAL STANDARDS OF BEAUTY Are people's perceptions of beauty similar across cultures? The answer is a surprising yes (Coetzee et al., 2014; Rhodes et al., 2001; Zebrowitz et al., 2012). Even though racial and ethnic groups do vary in their specific facial features, people from a wide range of cultures agree on what is physically attractive in the human face. For example, one review of the literature that has compared how people from various countries, ethnicities, and racial groups rate attractiveness found that the correlations between participants' ratings were strong, ranging from 0.66 to 0.93 (Langlois & Roggman, 1990). A meta-analysis of several studies by Judith Langlois and her colleagues (2000) also found evidence for cross-cultural agreement in what constitutes an attractive face. In short, perceivers across cultural backgrounds think some faces are just better looking than others.

How can we explain these results? Researchers have suggested that humans came to find certain dimensions of faces attractive during the course of our evolution (Langlois & Roggman, 1990; Langlois, Roggman, & Musselman, 1994). For example, we know that even infants prefer the same photographs as adults do (Langlois et al., 1991). So what specific facial characteristics do people, including babies, tend to find attractive? One dimension that is preferred—in both men and women—is symmetry, where the size, shape, and location of the features on one side of the face match those on the other (Langlois et al., 2000; Little et al., 2008; Rhodes, 2006). Evolutionary psychologists suggest that we're attracted to symmetrical features because they serve as markers of good health and reproductive fitness—that is, facial symmetry is an indicator of "good genes" (Jones et al., 2001; Nedelec & Beaver, 2014).

A series of studies explored this preference by creating composite photographs of faces. Faces were morphed (i.e., combined digitally) to create the mathematical average of the features of multiple faces; ultimately, 32 faces were combined into a single composite. When shown to research participants, composite photographs were judged

Langlois and Roggman (1990) created composites of faces using a computer. Pictured here is the first step in the process: The first two women's photos are merged to create the "composite person" at the far right. This composite person has facial features that are the mathematical average of the facial features of the two original women. Research has shown that people typically find composite faces to be more attractive than the individual faces that comprise them.

as more attractive than were all the separate faces that had created them, and this held true for both male and female photographs (Langlois & Roggman, 1990; Langlois et al., 1994). The "averaged" composite face was more attractive because it had lost some of the atypical or asymmetrical variation that was present in the individual faces.

Does this mean that we find "average" faces the most attractive? Clearly not, for we respond to the physical appearance of movie stars and models and consider their looks to be "above average" compared to most humans. So by "average" here we don't mean "average looking," but features that appear to be of average size and dimension. David Perret and his colleagues made this point clear in the following study (Perret, May, & Yoshikawa, 1994). They created composite faces of two types: One composite was based on 60 photographs that had each been rated as average in attractiveness. The other composite was based on 60 photographs that had each been rated as highly attractive. Composites of these two types were made using photographs of Caucasian women, Caucasian men, Japanese women, and Japanese men. Research participants in Great Britain and Japan then rated all the composite faces for attractiveness. The composites of highly attractive faces were rated as significantly more attractive than the composites of average attractiveness faces. Japanese and British participants showed the same pattern when judging the faces, reinforcing the idea that similar perceptions of facial attractiveness exist cross-culturally (Perrett et al., 1994). Of course, it's also worth noting that this study only included two cultures, leaving unanswered the question of whether people from, say, Borneo or Egypt or El Salvador would respond the same way.

THE POWER OF FAMILIARITY In the end, the crucial variable on which much of interpersonal attraction hinges may be familiarity. We've seen that "averaging" faces together produces one face that looks typical, familiar, and physically attractive (see also Halberstadt & Rhodes, 2000). Research has also uncovered an even more startling familiarity effect: When participants rated the attractiveness of faces, they preferred those faces that most resembled their own! The researchers morphed a picture of each participant's face (without the participant's knowledge) with one of a person of the opposite sex. When presented with this photo of their opposite-sex "clone," participants gave it high ratings of attractiveness (Little & Perrett, 2002). Familiarity also underlies many of the other concepts we've discussed thus far: propinquity (people we see frequently become familiar through mere exposure), similarity (people who are similar to us will also seem familiar to us), and reciprocal liking (people who like each other get to know and become familiar with each other). All of these factors predicting attraction may be thought of as different examples of our basic preference for the comfortable, familiar, and safe over the unknown and unfamiliar.

ASSUMPTIONS ABOUT ATTRACTIVE PEOPLE It's important to realize that beauty matters—even when it shouldn't. We're attracted to that which is beautiful, and this can lead to inequity in everyday life. A particularly chilling example of the unfair benefit of beauty was discovered by Lina Badr and Bahia Abdallah (2001), who rated the facial attractiveness and health status of premature infants born in hospitals in Beirut, Lebanon. They found that physical attractiveness significantly predicted the health outcomes of these infants above and beyond factors such as their medical condition. The more attractive the infant, the more quickly he or she gained weight and the shorter his or her stay in the hospital. The neonatal nurses appeared to respond more to the "prettier" infants and gave them better care.

Physical attractiveness is associated with a variety of benefits. People of above-average looks tend to earn 10% to 15% more than those of below-average appearance (Judge, Hurst, & Simon, 2009; Mobius & Rosenblat, 2006). College professors perceived as attractive tend to receive higher student evaluation ratings (Rinolo et al., 2006). Attractiveness even helps win elections. Niclas Berggren and his colleagues (2010) presented photographs of Finnish political candidates to research participants in other countries (who would have no prior knowledge of these candidates) and asked them to rate

It's no coincidence that in children's movies, the hero is traditionally attractive and the villain ugly. In addition to finding it pleasing to look at attractive others, we also tend to assume that "what is beautiful is good."

Halo Effect

A cognitive bias by which we tend to assume that an individual with one positive characteristic also possesses other (even unrelated) positive characteristics

the politicians on a variety of attributes, including attractiveness. They found that the ratings of attractiveness were the best predictors of the actual number of votes each candidate had gotten in the real elections. A higher beauty rating predicted an increase of between 2.5 and 2.8 percentage points in the vote total for female candidates and between 1.5 and 2.1 percentage points for male candidates, amounts that could tip the balance of a close election (Berggren, Jordahl, & Poutvaara, 2010).

Many studies have found that physical attractiveness affects the attributions people make about others (and vice versa). This tendency provides a specific example of what psychologists refer to as the **halo effect** (Forgas, 2011; Thorndike, 1920). The halo effect is a cognitive bias in which the perception that an individual possesses one positive characteristic makes us more likely to believe that he or she also possesses other (even unrelated) positive characteristics. Specifically, when it comes to attractiveness, we tend to attribute to beautiful people other good qualities, including some that have nothing to do with their looks, buying into a "what is beautiful is good" stereotype (Dion et al., 1972; Lemay, Clark, & Greenberg, 2010; Zebrowitz & Franklin, 2014). Meta-analyses have revealed that physical attractiveness has its largest effect on attributions related to social competence: The beautiful are thought to be more sociable, extroverted, assertive, sexual, and popular than the less attractive (Eagly et al., 1991; Feingold, 1992b; Wertheim & Sommers, 2016). The "halo" provided by being good-looking extends to the online realm as well: One study of dating websites found that those users who posted more attractive photos were also rated as having written more attractive profile descriptions (Brand et al., 2012).

Do these stereotypes about the beautiful operate across cultures? The answer appears to be yes (Anderson, Adams, & Plaut, 2008; Chen, Shaffer, & Wu, 1997). For example, college students in South Korea were asked to rate a number of yearbook photographs (Wheeler & Kim, 1997). Both male and female participants thought the more physically attractive people would also be more socially skilled, friendly, and well adjusted—the same traits that North American participants thought went with physical attractiveness (see Table 10.1). But Korean and North American students differed in some of the other

Table 10.1 Culture and the "What Is Beautiful Is Good" Stereotype

The "what is beautiful is good" stereotype has been explored in both individualistic cultures (e.g., North America) and collectivistic cultures (e.g., Asia). Male and female participants in the United States, Canada, and South Korea rated photographs of people with varying degrees of physical attractiveness. Responses indicated that some of the traits that make up the stereotype are the same across cultures, while other traits associated with the stereotype are different in the two cultures. In both cultures, the physically attractive are seen as having more of the characteristics that are valued in that culture than do the less physically attractive.

Traits Shared in the Korean, American, and Canadian Stereotype		
sociable	extraverted	likable
happy	popular	well-adjusted
friendly	mature	poised
sexually warm/responsive		
Additional Traits Present in the American and Canadian Stereotype		
strong	assertive	dominant
Additional Traits Present in the Korean Stereotype		
sensitive	empathic	generous
honest	trustworthy	

(Based on Eagly et al., 1991; Feingold, 1992b; Wheeler & Kim, 1997)

traits they assigned to the beautiful, highlighting that there are some differences in what is considered important in each culture (Markus et al., 1996; Triandis, 1995). For the American and Canadian students—who live in more individualistic cultures that value independence, individuality, and self-reliance—the "beautiful" stereotype included traits of personal strength. These traits were not part of the Korean "beautiful" stereotype. Instead, for these students, who live in a more collectivistic culture that values harmonious group relations, the "beautiful" stereotype included integrity and concern for others (see Table 10.1).

Interestingly, the stereotype that the beautiful are particularly gifted in the area of social competence has some empirical support. That is, highly attractive people *do* actually develop good social interaction skills and report having more satisfying interactions with others than do less-attractive people (Feingold, 1992b; Langlois et al., 2000; Meier et al., 2010). Why does this "kernel of truth" emerge in the stereotype? A leading explanation is that because the beautiful, from a young age, receive a great deal of attention that in turn helps them develop good social skills. You probably recognize the self-fulfilling prophecy at work here: Our expectations of people can affect how they actually come to behave. If others always treat you as if they expect you to be socially proficient (whether because of your physical appearance or otherwise), this then provides you with ample opportunities to actually develop superior social skills.

Can a "regular" person be made to act like a "beautiful" one through the self-fulfilling prophecy? To find out, researchers gave college men a photo and a packet of information about a woman with whom they were about to have a phone conversation (Snyder, Tanke, & Berscheid, 1977). But the photograph was rigged; at random, the men were either given a photo that a previous group of raters had judged to be attractive or one that a previous group had rated as unattractive. In both cases, this photo was *not* of the actual woman they were about to speak with. The experimental purpose of the photograph was to invoke the men's stereotype that "what is beautiful is good"—to test the possibility that a woman would be more likable, poised, and fun to talk to if her male conversation partner believed she was attractive. Again, the prediction here was not just that the men would *perceive* the woman as more fun to talk to when they thought she was attractive, but that the men's beliefs about her appearance would actually change the reality of how the woman behaved.

Did the researchers find evidence of an attractiveness-based self-fulfilling prophecy? In short, yes! The men who thought they were talking to an attractive woman responded to her in a warmer, more sociable manner than the men who thought they were talking to an unattractive woman. And the men's behavior actually influenced how the women behaved: When independent observers listened to a tape recording of only the woman's half of the conversation (without knowing anything about the photo the men had seen), they rated the women whose male partners thought they were attractive as more confident, animated, and warmer. In other words, because the male partner thought he was talking to an attractive woman, he spoke to her in a way that brought out her most sparkling qualities. Subsequent studies have found similar results with the gender roles reversed (Andersen & Bem, 1981), reminding us that it is a myth that physical attractiveness only affects how men perceive women: both men and women are treated differently based on their physical appearance. (Eagly et al., 1991; Langlois et al., 2000; Zhang et al., 2014).

Evolution and Mate Selection

The poet Robert Browning asked, "How do I love thee? Let me count the ways." For psychologists, the question is "*Why* do I love thee?" Some researchers believe that the answer lies in an evolutionary approach to mate selection. The basic tenet of evolutionary biology is that an animal's "fitness" is measured by its reproductive success

(i.e., its capability to pass on genes to the next generation). Reproductive success is not just part of the game; it *is* the game. This biological concept has been applied to social behavior by some psychologists, who define evolutionary psychology as the attempt to explain social behavior in terms of genetic factors that have evolved over time according to the principles of natural selection. For example, as detailed earlier, one explanation for people's tendency to find symmetrical faces more attractive is that symmetry indicates positive health and "good genes."

EVOLUTION AND SEX DIFFERENCES Evolutionary psychology also makes some interesting (and controversial) predictions regarding sex differences in mate preference. Specifically, evolutionary psychologists argue that men and women have very different agendas when it comes to mate selection, due to their differing roles in producing (and raising) offspring. For females, reproduction is costly in terms of time, energy, and effort: They must endure the discomforts of pregnancy, the risks of childbirth, and, traditionally, the primary responsibility for caring for the infant until maturity. Reproducing, then, is serious business, so females, the theory goes, must consider carefully when and with whom to reproduce. In comparison, reproduction is a low-cost, short-term investment for males. The evolutionary approach to mate selection concludes that reproductive success for the two sexes translates into two very different behavior patterns: Throughout the animal world, males' reproductive success is measured by the *quantity* of their offspring. They pursue frequent pairings with many females in order to maximize their number of surviving progeny. In contrast, females' reproductive success lies in successfully raising each of their offspring to maturity. They pair less frequently and only with carefully chosen males, because the cost to them of raising and ensuring the survival of each offspring is so high (Griffith, Pryke, & Buettemer, 2011; Symons, 1979).

Now, what does all of this have to do with how people fall in love? David Buss and his colleagues argue that the evolutionary approach explains the different strategies and tendencies of men and women in romantic relationships (Buss, 1985, 1988a; Buss & Schmitt, 1993). Buss (1988b) argues that finding (and keeping) a mate requires one to display resources—the aspects of oneself that will appear attractive to potential mates. He proposes that, across millennia, human beings have been selected through evolution to respond to certain external cues in the opposite sex. Women, facing high reproductive costs, will look for a man who can supply the resources and support she needs to raise a child. Men will look for a woman who appears capable of reproducing successfully. More precisely, the argument goes, men will respond to the physical appearance of women because age and health denote reproductive fitness, and women will respond to the economic and career achievements of men because these variables represent resources they and their offspring need (Buss, 1988b).

Research has linked perceptions of attractiveness to reproductive concerns. For example, as ovulation nears, women tend to rate as more attractive men with highly masculine faces and body types (Gildersleeve et al., 2014).

Many studies have provided support for these predictions. For example, Buss and colleagues (Buss, 1989; Buss et al., 1990) asked thousands of adults in 37 countries how desirable various characteristics were in a marriage partner. In general, women valued ambition, industriousness, and earning capacity in a potential mate more than the men did. The men valued physical attractiveness in a mate more than the women did. It should be noted, however, that the top characteristics on both men's and women's lists were the same: honesty, trustworthiness, and a pleasant personality (Hatfield & Sprecher, 1995; Regan & Berscheid, 1997; Sprecher, Sullivan, & Hatfield, 1994). Further evidence for the importance of reproductive considerations in human attraction comes from more recent research that has examined the relationship between a woman's menstrual cycle, her perceptions of potential mates, and how potential mates view her. Kelly Gildersleeve and colleagues (2014) conducted a meta-analysis that examined 50 studies and found reliable support for the hypothesis that as they near ovulation and peak fertility, women tend to exhibit greater preference for men who exhibit outward signs of reproductive fitness:

a symmetrical face, a masculine face (e.g., sharp, pronounced jawline), and a muscular physique (Gildersleeve, Haselton, & Fales, 2014).

ALTERNATE PERSPECTIVES ON SEX DIFFERENCES The evolutionary approach to attraction and love has inspired its share of debate. For example, one could argue that evolutionary advantages to having multiple sexual partners should not be limited to men, but should also apply to women. With multiple partners, females would increase the odds of getting resources for their offspring, as well as benefit from genetic diversity. Females could choose an attractive male with "good genes" with whom to procreate and another male with whom to raise the offspring (Campbell, 2002; Gangestad & Simpson, 2000). It may also be the case that men value physical attractiveness in a partner not because of evolved tendencies, but simply because they have been taught by society to value it—that they have been conditioned by decades of advertising, media images, and other cultural messages to prioritize beauty in women and to have a more recreational approach to sex than women do (Hatfield & Rapson, 1993; Lefkowitz et al., 2014). Similarly, research has found that in some situations, women value physical attractiveness just as much as men—specifically, when they are considering a potential sexual partner as opposed to a potential marriage partner (Regan & Berscheid, 1997; Simpson & Gangestad, 1992).

Other researchers argue that the preference for different qualities in a mate can be explained without relying on evolutionary principles: Around the world, women typically have less power, status, wealth, and other resources than men do. Therefore, in many societies women need to rely on men to achieve economic security. To test this hypothesis, Steven Gangestad (1993) correlated the extent to which women in several countries had access to financial resources and the extent to which women reported male physical attractiveness as an important variable in a mate. He found that the more economic power women had in a given culture, the more highly women prioritized a man's physical attractiveness.

As you can see, when discussing human mate preference, it is often difficult to disentangle "nature" (inborn preferences) from "nurture" (cultural norms and gender roles). When we hear about sex differences related to mate selection and attraction, our first instinct is often to turn to biological or evolutionary explanations (Conley et al., 2011). But a closer look often reveals that many of these differences are also attributable to situational factors. Take, for instance, the proposition that women are pickier than men when it comes to selecting a mate. Indeed, whether you look at online dating, speed-dating events, or old-fashioned face-to-face date requests, research indicates that women are significantly more discriminating about who they'll go out with than men are (Clark & Hatfield, 1989; Hitsch, Hortaçsu, & Ariely, 2010; Schützwohl et al., 2009). This makes sense from the evolutionary perspective that women *have* to be picky because they can't afford to make mistakes; unlike men, their fertility window is relatively narrow across the life span, and each decision to reproduce requires more time and resources.

But consider the provocative results of a speed-dating study conducted by Eli Finkel and Paul Eastwick (2009). College students in this research had brief conversations with a dozen different opposite-sex individuals. In these speed-dating sessions, the women remained seated while the men rotated in a circle, spending 4 minutes with each prospective dating partner before moving on to the next person. After each of the 12 women had been visited by each of the 12 men, all participants completed a questionnaire assessing these potential mates. Women were, indeed, more selective than men, reporting lower levels of romantic desire and identifying fewer prospective mates that they'd like to get to know better.

Watch SPEED-DATING AND THE SCIENCE OF RELATIONSHIPS

But an interesting thing happened when the researchers made a minor tweak to the speed-dating situation. In a second set of dating events, they had men and women swap roles. Now the men remained seated and the women rotated around. Instead of women sitting still while men paraded in a circle, now the men remained stationary as women approached them. The "dates" themselves were still the same: 4-minute conversations after which both parties were asked for their impressions. But from a situational standpoint, this was traditional dating in reverse (Conley et al., 2011). And in this dating world where women did the approaching, women were no longer pickier than men. If anything, the female participants now reported more chemistry with their partners and identified more prospective mates that they wanted to see again. Finkel and Eastwick's (2009) results suggest that gender differences in mate selectivity do not simply reflect evolution or biology, but are also attributable to the established dating paradigm in most societies, in which men are the approachers and women the approachees. Being approached gives you control, regardless of sex or gender; being approached also means feeling in demand and having options. And so it is that, as with many aspects of human nature, we need both "nature" and "nurture" explanations to fully understand the psychology of attraction and mate selection.

Review Questions

1. Which of the following examples best illustrates how functional distance plays a role in the propinquity effect?
   - **a.** Bart doesn't like his next-door neighbor, primarily because of his habit of playing loud music that makes it difficult to get to sleep at night.
   - **b.** Marge, whose cubicle is right next to both the kitchen and the elevator, is one of the most popular people in the entire office.
   - **c.** Homer prefers to take the stairs rather than the elevator because it decreases his likelihood of running into people he finds annoying.
   - **d.** Lisa made more friends in her sophomore-year dorm than in her freshman-year dorm.
2. The _____ suggests that the more times we encounter someone or something, the more we tend to like it.
   - **a.** evolutionary perspective
   - **b.** halo effect
   - **c.** mere exposure effect
   - **d.** reciprocal liking effect
3. Similarity in terms of which of the following dimensions has been found to predict increased attraction?
   - **a.** attitudes
   - **b.** attractiveness level
   - **c.** genetics
   - **d.** All of the above
4. Which of the following statements about perceptions of physical attractiveness is true?
   - **a.** Asymmetrical faces are typically viewed as more attractive because they are so distinctive.
   - **b.** Large cross-cultural differences emerge in terms of what is seen as physically attractive in the human face.
   - **c.** The more someone looks like us, the less attractive we typically find him or her to be.
   - **d.** Perceivers tend to believe that someone who is attractive also possesses a range of other (unrelated) positive characteristics.
5. Which of the following is *not* identified as a major predictor of attraction in long-term romantic relationships?
   - **a.** similarity
   - **b.** reciprocity
   - **c.** complementarity
   - **d.** propinquity
6. Research indicates that a face's symmetry is a reliable predictor of how attractive it is seen to be. An evolutionary psychology explanation for this finding would be that
   - **a.** symmetrical faces remind us of ourselves and therefore elicit positive feelings.
   - **b.** symmetry is a sign of health and that a potential mate has good genes.
   - **c.** "Western" cultures place a greater emphasis on physical attractiveness than do "Eastern" cultures.
   - **d.** All of the above
7. You and your friends decide to hold a heterosexual "speed-dating" event on campus. At this event, male students sit at tables arranged in a circle and have 3-minute conversations with a series of women. After each 3-minute period has ended, the women rotate in a clockwise direction and sit down with a new male student. When asked about their "dating" experiences after the event, research suggests that
   - **a.** the men should be somewhat pickier in terms of rating which women they would like to see again.
   - **b.** the women should be somewhat pickier in terms of rating which men they would like to see again.
   - **c.** the men should focus less on facial symmetry in assessing their dates' attractiveness.
   - **d.** the women should focus less on facial symmetry in assessing their dates' attractiveness.

Making Connections in the Digital World

LO 10.2 Explain how new technologies shape attraction and social connections.

As amazing as the technologies are, mobile devices like smartphones can also impair our feelings of social connectedness to others during the course of face-to-face interaction.

A time-traveler from just 20 years ago would barely recognize much of what passes for social interaction today. It isn't unusual to see a group out to a meal, faces (and thumbs) buried in devices, perhaps all the while carrying on a conversation of sorts with others at the table, and taking pictures of their food to post on social media. The opportunities presented by these amazing handheld technologies are plentiful, but are there also social costs to being tethered to technology? Research suggests that there might be. Consider a field experiment in which researchers visited cafes in the Washington D.C. area, observed 100 real-life interactions between pairs of people, and then asked the individuals involved questions about the conversation they just had. Among pairs who had at least one mobile device (e.g., phone, laptop, tablet) present during the conversation, ratings of connectedness to and empathy for the other person were significantly lower than they were among pairs who interacted in the absence of such a device (Misra et al., 2016).

This finding is a correlational one, though. Perhaps you're saying to yourself, *I'm not like that; even when I have my phone, I'm engaged with the people around me.* Perhaps. But experiments have also demonstrated a causal link between the presence of a mobile device and decreased social connection. In one such experiment, Andrew Przybylski and Netta Weinstein (2013) brought pairs of strangers into their lab for a 10-minute conversation. Half of these conversations took place with a phone or tablet sitting on the small table between them; in another condition, there was no phone present. The researchers found that the mere presence of the device decreased participants' feelings of trust, closeness, and empathy with their conversation partner. These effects were particularly pronounced when the pairs were instructed to discuss a personally meaningful topic, a scenario that, in the absence of a phone, would be expected to foster a sense of closeness among strangers meeting for the first time (Przybylski & Weinstein, 2013).

These findings give pause for thought. If the mere presence of a phone that isn't even yours can impair aspects of social interaction, just imagine how distracting our own devices can be, even when they aren't ringing, chiming, or vibrating (Brown, Manago, & Tribble, 2016)! Technologies like these are here to stay, but social psychological research does provide additional support for the emerging movement to unplug once in a while and force ourselves to take periodic vacations from technology (Huffington, 2014).

Attraction 2.0: Mate Preference in an Online Era

One way to explore how our rapidly developing technological world affects processes of attraction and relationship formation is to revisit some of the classic findings regarding propinquity, similarity, and familiarity, examining how these factors operate in the internet age. For example, consider how propinquity operates in an era when physical distance no longer creates the same obstacles to interaction that it once did (Chan & Cheng, 2004; Dodds, Muhamad, & Watts, 2003; Leskovec & Horvitz, 2007). Research demonstrates empirically what many of us now take for granted: in the modern world, there aren't nearly as many degrees of separation between strangers as

Watch SMARTPHONES AND CONNECTEDNESS

there once were, putting a whole new spin on the relationship between propinquity and attraction that we discussed earlier.

Similarity continues to have value in technologically driven relationships. We have already discussed the tendency to be attracted to people of similar appearance, right down to people being attracted to others who are the same *level* of physical attractiveness as they are. Recent research indicates that this tendency to be drawn to comparable others who are "in our own league" is also evident when relationships go online. Lindsay Taylor and colleagues (2011) assessed the popularity of more than 3,000 heterosexual users of a dating website, testing the hypothesis that profiles would be most popular among other users who shared the same attractiveness level. They defined popularity as the number of opposite-sex individuals who sent unsolicited messages to a particular profile. To increase the validity of this measure, the researchers did not count messages sent in response to contact initiated by the user himself or herself (or subsequent messages sent during an ongoing exchange), meaning that there was no way for the users in the study to increase their own popularity count once they posted a profile.

Taylor and colleagues (2011) found that users who qualified as popular contacted other popular users at a rate greater than would be expected by chance—a finding that probably does not surprise you. After all, who wouldn't want to reach out to the popular potential mates? The less popular users of the site, that's who. The researchers also found that users lower in popularity contacted other low-popularity users more often. A follow-up study with over 1 million users produced a comparable result: People tend to select (and be selected by) others with similar levels of popularity, and this tendency to try to "match up" with mates of comparable popularity was no different for men than for women. As the researchers concluded, "one reason that established couples tend to be similar is that matching is at play from the earliest stages of dating" (Taylor et al., 2011, p. 952).

One question surrounding attraction is how tendencies regarding mate preference that have evolved over generations play out in the modern era of internet dating and apps, speed-dating events, and social media.

And what about familiarity? As you will recall, research has demonstrated that familiarity typically promotes attraction, to the point where even mere exposure to an object or person increases liking. But you may also recall that mere exposure works in the opposite direction when the additional encounters reveal negative characteristics of the object or person in question. Of course, this is a risk with any type of dating, but particularly with online dating when people sometimes come to learn that aspects of their initial impression (based on an ambiguous or less than honest website profile) turn out to be inaccurate. Actually meeting someone in person typically reveals additional information, some of which may highlight incompatibilities and dissimilarities that make a successful relationship less likely (Norton et al., 2007; see Finkel et al., 2015).

The Promise and Pitfalls of Meeting People Online

Participation on dating websites and apps is at an all-time high and attitudes toward internet dating have never been more positive than they are today. These developments are understandable, particularly given that dating websites advertise three primary services: (1) aggregating a large number of profiles for browsing, (2) providing opportunity for communication with potential mates, and (3) matching users based on analyses of compatibility (Finkel et al., 2012). Clearly, online dating services have a lot to offer those who are looking for love (Blackhart, Fitzpatrick, & Williamson, 2014), and social

psychologists are increasingly directing their attention to the study of dating websites and apps (Sevi, Aral, & Eskenazi 2017; Timmermans & De Caluwé, 2017).

Some of this research, though, is quick to point out that meeting people online is not always all that it's cracked up to be. As one example, Eli Finkel and colleagues (2012) reviewed data regarding online dating and concluded that although the practice has never been more popular, many of the promises made by websites and apps go unfulfilled. Specifically, the idea of mathematical algorithms that can point users toward ideally compatible mates finds little in the way of empirical support. Sure, more Americans than ever are pairing up online, but the success rate for dates facilitated in this manner is no higher than for dates engineered through more old-fashioned routes, like meeting at a party or getting fixed up by friends (Finkel et al., 2012).

The compatibility analyses of online dating services don't live up to their promises for a variety of reasons, according to Finkel and colleagues. First, as you read about in Chapter 5, sometimes we don't have a good sense of why we do what we do or what will make us happy. By the same token, we aren't always accurate when it comes to predicting the mate characteristics that will lead to a satisfying relationship. Second, most online dating algorithms focus on matching people by personality traits or other stable characteristics. But many of the best predictors of relationship satisfaction—like communication style and sexual compatibility—can't be assessed until people actually get to know each other (Finkel et al., 2012).

Another potential pitfall, as we alluded to earlier, is that online profiles aren't always accurate (Ellison, Hancock, & Toma, 2012)! For example, Catalina Toma and Jeffrey Hancock examined potential differences in how men and women describe themselves online. In one study, they interviewed 84 online daters, presenting them with a printout of their own dating profile and asking them how accurate they believed they were in describing their height, weight, and age (Toma, Hancock, & Ellison, 2008). The researchers were able to compare these self-assessments of accuracy to objective measures of participants' actual height, weight, and age. Results indicated that a full 81% of participants provided inaccurate information in their profile for at least one characteristic, with the most lies coming about weight, followed by age, then height. Interestingly, no gender differences emerged: Men and women were equally likely to try to stretch the truth. Participants' self-reported estimates of their profile accuracy were reasonably good predictors of actual accuracy, indicating that the discrepancies observed did not result from unconscious tendencies to view the self through rose-colored glasses, but rather intentional efforts to fudge facts.

A slightly different pattern emerges from analysis of photos used in dating profiles. Here, Hancock and Toma (2009) found that distortions are often less conscious, especially among women. Following a similar procedure to their previous study, the researchers interviewed online daters about how accurate they believed their profile photo to be. They then had a separate group of college students look at a series of two images side by side: (1) each participant's dating profile photo and (2) a photo taken of the participant during the recent interview. The college students were asked to evaluate how accurate a depiction the profile photograph was of the participant's current physical appearance. In total, 32% of profile photographs were judged to be deceptive or misleading, and females' photos were found to be less accurate than males'. Common inaccuracies included daters looking

"On the Internet, nobody knows you're a dog."
Peter Steiner/The New Yorker Collection/The Cartoon Bank

thinner in the profile photo than they currently do, having more hair in the profile photo than they do now, or using profile photos that were retouched or airbrushed. Unlike with written profiles, users' self-assessed accuracy ratings were not reliable predictors of the actual accuracy of their photo (as rated by the students), particularly among female daters.

In light of these inaccuracies—both intentional and unintentional—what's an internet dater to do? Luckily, the same research techniques that uncovered these inaccurate portrayals can also be used to identify which potential online mates are the most (and least) honest (Toma, 2017). Specifically, Toma and Hancock (2012) suggest three giveaways that the profile you're checking out online may not pass a reality check. First, deceptive profiles tend to have fewer first-person pronouns like *I* and *me*. The researchers explain that this is one way for those who lie or exaggerate to distance themselves psychologically from their half-truths. Second, deceptive profiles make more use of negations, or negative turns of phrase (e.g., "not judgmental" instead of "open-minded"; "not averse to taking risks" instead of "adventurous"). Third, deceptive profiles simply include fewer total words than accurate profiles. Stretching the truth is hard work and cognitively demanding; the fewer inaccurate statements you put in your profile, the fewer fabrications you have to remember later on when you meet someone in person. In short, online dating offers users a much larger pool of potential mates than do more traditional methods that are constrained by geography and other practical limitations. At the same time, in some important respects, dating sites and apps sometimes fall short of the promises they make to users.

Review Questions

1. Research on the influence of phones on social interaction indicates that
   - **a.** contrary to what some critics believe, the availability of mobile phones has no negative effect on social engagement.
   - **b.** men are more easily distracted by the presence of a phone during a conversation than are women.
   - **c.** even if a phone isn't being used during a conversation, it can still pose a distraction that comes at the expense of social engagement.
   - **d.** while laptops and tablets can be distracting during face-to-face interaction, phones are not.
2. Research on the effectiveness of dating websites and apps indicates that
   - **a.** websites and apps using mathematical algorithms to match couples by compatibility are far more successful than more traditional ways of meeting a partner such as getting fixed up by friends.
   - **b.** people tend to send messages to fellow website users whose attractiveness and popularity levels are similar to their own.
   - **c.** these sites and apps are very popular among gay and lesbian users, but not among heterosexuals.
   - **d.** the more you find out about someone you met online the more you tend to like that person.
3. Which of the following statements is true regarding how people tend to represent themselves in online dating profiles?
   - **a.** Misrepresentation in online profiles tends to be of both the intentional and unintentional varieties.
   - **b.** Deceptive web profiles tend to be longer and more detailed than accurate profiles.
   - **c.** There are no gender differences in how men and women represent themselves online.
   - **d.** The vast majority of people post inaccurate or misleading photos of themselves in online profiles.

Love and Close Relationships

LO 10.3 **Examine the cultural, personality, and biological factors that are associated with different types of love.**

By this point in the chapter, you have learned enough about attraction to make a favorable first impression the next time you meet someone. Suppose you want Sophia to like you. You should hang around her so that you become familiar, emphasize your

similarity to her, and let her know you enjoy her company. But what if you want to do more than make a good impression? What if you want to have a close friendship or a romantic relationship?

Until recently, social psychologists had little to say in answer to this question—research on attraction focused almost exclusively on first impressions. Why? Primarily because long-term relationships are much more difficult to study scientifically than first impressions are. As you know by now, random assignment to different conditions is the hallmark of the experimental method. When studying first impressions, a researcher can randomly assign you to a get-acquainted session with someone who is similar or dissimilar to you. But a researcher can't randomly assign you to the similar or dissimilar "lover" condition and make you have a relationship! In addition, the feelings and intimacy associated with close relationships can be difficult to measure. Psychologists face a daunting task when trying to analyze such complex feelings as love and passion.

Defining Love: Companionship and Passion

Despite the difficulties inherent to studying close relationships, social psychologists have made interesting discoveries about the nature of love, how it develops, and how it flourishes. Let's begin with perhaps the most difficult question: What, exactly, is love? Early attempts to define love distinguished between liking and loving, showing that, as you might expect, love is something different from "lots of liking"—and not just in terms of sexual desire (Aumer, 2016; Sternberg, 1987).

For Shakespeare's Romeo and Juliet, love was passionate, turbulent, and full of longing. Perhaps your grandparents, if they've remained married for a long time, exemplify a calmer, more tranquil kind of love. We use the word *love* to describe all of these relationships, though each one seems to be of a different kind (Berscheid & Meyers, 1997; Fehr, 2013; Vohs & Baumeister, 2004).

Social psychologists have recognized that a good definition of love must include the passionate, giddy feelings of romantic love as well as the deep, long-term devotion of married couples, lifelong friends, or siblings. In defining love, then, we generally distinguish between *companionate love* and *passionate love* (Hatfield & Rapson, 1993; Hatfield & Walster, 1978). **Companionate love** consists of feelings of intimacy and affection we have for someone that are not accompanied by passion or physiological arousal. People can experience companionate love in nonsexual close friendships, or in romantic relationships in which they experience great feelings of intimacy but not as much of the heat and passion as they once felt.

Companionate Love
The feelings of intimacy and affection we have for someone that are not accompanied by passion or physiological arousal

Passionate Love
An intense longing we feel for a person, accompanied by physiological arousal

Passionate love involves an intense longing for another person, characterized by the experience of physiological arousal—the feeling of shortness of breath and a thumping heart in someone's presence (Fisher, 2004; Ratelle et al., 2013; Regan & Berscheid, 1999). When things are going well (the other person loves us too), we feel great fulfillment and ecstasy. When things are not going well (our love is unrequited), we feel great sadness and despair. Elaine Hatfield and Susan Sprecher (1986) developed a questionnaire to measure passionate love, assessing strong, uncontrollable thoughts; intense feelings; and overt acts toward the target of one's affection. Find out if you are experiencing (or have experienced) passionate love by filling out the questionnaire in the following Try It! exercise.

The relationship between Tris and Four in *Divergent* exemplifies the early stages of passionate love.

Try It!

Passionate Love Scale

These items ask you to describe how you feel when you are passionately in love. Think of the person whom you love most passionately right now. If you are not in love right now, think of the last person you loved passionately. If you have never been in love, think of the person you came closest to caring for in that way. Choose your answers as you remember how you felt when your feelings were the most intense.

For each of the 15 items, choose the number between 1 and 9 that most accurately describes your feelings. The answer scale ranges from 1 (not at all true) to 9 (definitely true). Write the number you choose next to each item.

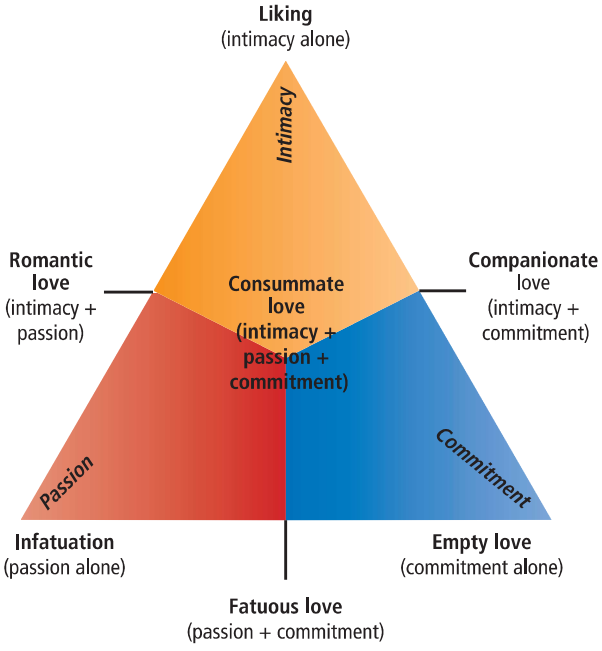
1 2 3 4 5 6 7 8 9
↑ ↑ ↑
Not at all true Moderately true Definitely true

1. I would feel deep despair if _____ left me.
2. Sometimes I feel I can't control my thoughts; they are obsessively on _____.
3. I feel happy when I am doing something to make _____ happy.
4. I would rather be with _____ than anyone else.
5. I'd get jealous if I thought _____ were falling in love with someone else.
6. I yearn to know all about _____.
7. I want _____—physically, emotionally, mentally.
8. I have an endless appetite for affection from _____.
9. For me, _____ is the perfect romantic partner.
10. I sense my body responding when _____ touches me.
11. _____ always seems to be on my mind.
12. I want _____ to know me—my thoughts, my fears, and my hopes.
13. I eagerly look for signs indicating _____'s desire for me.
14. I possess a powerful attraction for _____.
15. I get extremely depressed when things don't go right in my relationship with _____.

Scoring: Add up your scores for the 15 items. The total score can range from a minimum of 15 to a maximum of 135. The higher your score, the more your feelings for the person reflect passionate love; the items to which you gave a particularly high score reflect those components of passionate love that you experience most strongly.

(Adapted from Hatfield & Rapson, 1990, p. 146.)

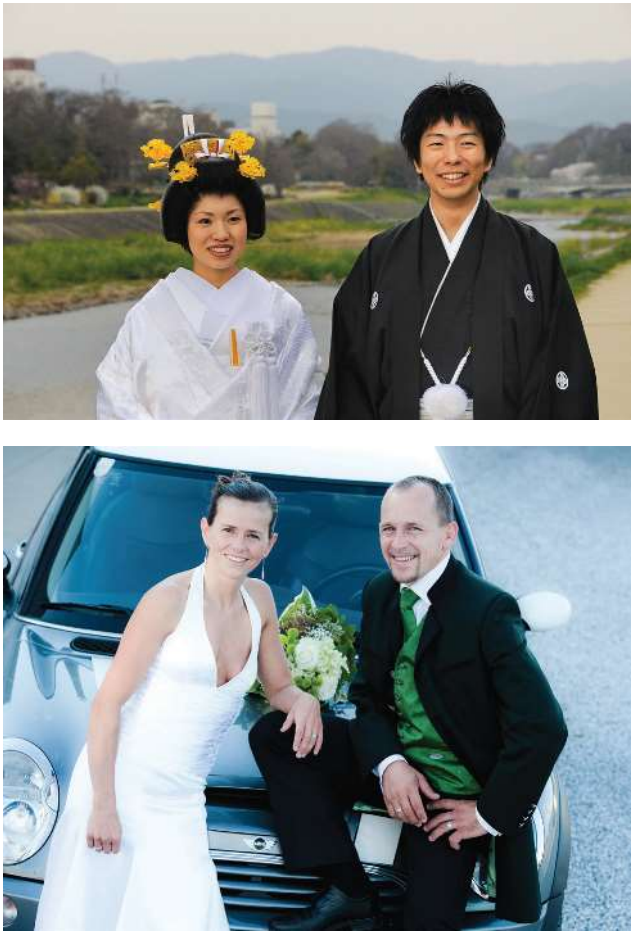
Figure 10.1 Sternberg's Triangular Theory of Love



Perhaps you bristle a bit at the effort to scientifically define and classify an experience as mystical as love. Can we really capture different "types of love" in a theoretical model? Or perhaps you're having the opposite reaction: don't some relationships have characteristics of both companionate and passionate love? Are two types of love enough to capture such a complex set of feelings and interactions? If you find yourself asking this second set of questions, then, boy, do we have the theory for you! Robert Sternberg's (1986) *triangular theory* proposes that there are three major components to love. First, there is intimacy, which he defines as feelings of closeness and connectedness. Second, there's passion, involving physical attraction and drives that lead to sexual relations. And third, commitment over time.

Sternberg proposed that these three components could be present (or absent) in any combination, with each combination translating into a different type of love (see Figure 10.1). Intimacy plus passion? That would be romantic love, according to Sternberg. Commitment by itself, without either intimacy or passion? Empty love, according to the theory. When you take a look at the figure on the left, what do you think? Are any types of love still missing from Stenberg's model?

Culture and Love



Although people all over the world experience love, how love is defined can vary across cultures.

The process of finding a romantic partner varies across the world. For example, in villages in Nepal, dating is forbidden, and even casual meetings between young men and women are considered inappropriate. Traditionally, a future spouse is chosen by one's parents, who focus on the potential mate's social standing: family, caste, and economic resources. In these arranged marriages, the bride and groom often speak to each other for the first time on their wedding day (Goode, 1999). Many of these unions turn out to be successful, especially considering the high divorce rate of unarranged marriages in the United States. That said, others might point out that the freedom to even consider seeking a divorce in an unhappy marriage is also something that varies by culture.

Beyond differences in custom and ceremony, cultures also differ with regard to how people think about, define, and experience love. As we have discussed throughout this book, Western and Eastern cultures vary with respect to how they conceptualize the needs of individuals, groups, and societies (Kim & Markus, 1999; Markus, Kitayama, & Heiman, 1996; Triandis, 1995). Social psychologists have noted that, although romantic love is deemed an important, even crucial, basis for marriage in individualistic societies, it is less emphasized in collectivistic ones. In individualistic societies, one immerses oneself in a new partner, virtually ignoring friends and family for a while. The decision regarding whom to become involved with or marry is for the most part a personal one. In comparison, in collectivistic societies, the individual in love must consider the wishes of family and other group members, which sometimes includes agreeing to an arranged marriage (Dion & Dion, 1993; Kamble et al., 2014; Levine et al., 1995). Interestingly, though, in recent decades Western ways of finding a partner have begun to permeate collectivistic cultures (Hatfield & Rapson, 2002). In Nepal, for example, prospective brides and grooms now write each other letters, getting to know each other a bit before the wedding (Goode, 1999).

Cross-cultural research indicates that American couples tend to value passionate love more than Chinese couples do, and Chinese couples tend to value companionate love more than American couples do (Gao, 1993; Jankowiak, 1995; Ting-Toomey & Chung, 1996). In comparison, the Taita of Kenya, in East Africa, value both equally; they conceptualize romantic love as a combination of companionate and passionate love. The Taita consider this the best kind of love, and achieving it is a primary goal in their society (Bell, 1995). Reviewing the anthropological research on 166 societies, William Jankowiak and Edward Fischer (1992) found evidence for passionate love in 147 of them, as you can see in Table 10.2.

The results of studies such as these indicate that we all love, but we do not necessarily all love in the same way (Dion & Dion, 1996; Hatfield & Rapson, 2002; Li et al., 2010)—or at least we don't describe it in the same way (Landis & O'Shea, 2000). For example, the Japanese use the word *amae* as an extremely positive emotional state in which one is a totally passive love object, indulged and taken care of by one's romantic partner, much like a mother-infant relationship. Amae has no equivalent word in English or in any other Western language; the closest is the word *dependency*, an emotional state that Western cultures consider unhealthy in adult relationships (Dion & Dion, 1993; Doi, 1988; Farrer, Tsuchiya, & Bagrowicz, 2008).

Table 10.2 Cross-Cultural Evidence for Passionate Love Based on Anthropological Research in 166 Societies

Cultural Area	Passionate Love Present	Passionate Love Absent
Mediterranean	22 (95.7%)	1 (4.3%)
Sub-Saharan Africa	20 (76.9%)	6 (23.1%)
Eurasia	32 (97.0%)	1 (3.0%)
Insular Pacific	27 (93.1%)	2 (6.9%)
North America	24 (82.8%)	5 (17.2%)
South and Central America	22 (84.6%)	4 (15.4%)

(Based on data from Jankowiak & Fischer, 1992)

Similarly, the Chinese concept of *gan qing* differs from the Western view of romantic love. Gan qing is achieved by helping and working for another person; for example, a "romantic" act would be fixing someone's bicycle or helping someone learn new material (Gao, 1996). In Korea, a special kind of relationship is expressed by the concept of *jung*. Much more than "love," jung is what ties two people together. Couples in new relationships may feel strong love for each other, but they have not yet developed jung—that takes time and mutual experiences. Interestingly, jung can develop in negative relationships too—for example, between business rivals who dislike each other. Jung may unknowingly grow over time, with the result that they will feel that a strange connection exists between them (Kline, Horton, & Zhang, 2008; Lim & Choi, 1996).

Thus, it appears that romantic love is nearly universal in the human species, but cultural rules alter how that emotional state is experienced, expressed, and remembered (Higgins et al., 2002; Jackson et al., 2006). As one final example, Shuangyue Zhang and Susan Kline (2009) found two major differences in American and Chinese dating couples' decisions to marry. When describing how they would decide whether or not to marry their partners, Chinese students placed a heavier emphasis on two concepts central to their collectivistic culture: xiao (the obedience and devotion shown by children to their parents) and guanxi (relationships as a network of connections). In contrast, American students placed importance on receiving support, care, and "living a better life." As Robert Moore (1998) noted in summarizing his research in the People's Republic of China, "Young Chinese do fall deeply in love and experience the same joys and sorrows of romance as young Westerners do. But they do so according to standards that require … the individual [to] sacrifice personal interests for the sake of the family … This means avoiding fleeting infatuations, casual sexual encounters, and a dating context [where] family concerns are forgotten" (p. 280).

Attachment Styles in Intimate Relationships

Attachment Styles
The expectations people develop about relationships with others based on the relationship they had with their primary caregiver when they were infants

Secure Attachment Style
An attachment style characterized by trust, a lack of concern with being abandoned, and the view that one is worthy and well liked

Avoidant Attachment Style
An attachment style characterized by difficulty developing intimate relationships because previous attempts to be intimate have been rebuffed

Much as the culture in which we grow up shapes how we think about and experience love, so do our interactions in the early years of life with parents or caregivers. Specifically, one approach to examining intimate relationships among adults focuses on **attachment styles** and draws on the groundbreaking work of John Bowlby (1969, 1973, 1980) and Mary Ainsworth (Ainsworth et al., 1978) concerning how infants form bonds with their primary caregivers (usually their mothers or fathers).

Ainsworth and her colleagues (1978) identified three types of relationships between infants and their caregivers. They did so by creating a situation in which a caregiver briefly left his or her infant in an unfamiliar room with a stranger before returning. The infant's reactions upon separation and reunion with the parent were observed. Infants with a **secure attachment style** cry and show signs of distress when their parent leaves the room and are quite happy when he or she returns. These infants tend to trust their caregivers, show positive emotions when interacting with them, and are not particularly worried about abandonment. Infants with an **avoidant attachment style** do not react

much at their parent's departure or return. They desire to be close to their caregiver but learn to suppress this need, as if they know that such attempts will be rejected, sometimes by a caregiver who is aloof, distant, or busy. Infants with an **anxious/ambivalent attachment style** seem distressed even before the parent leaves the room and can be difficult to soothe even upon the parent's return, their response often a mixture of anger and indifference. These infants are unusually anxious, sometimes owing to an inability to predict when and how their caregivers will respond to their needs.

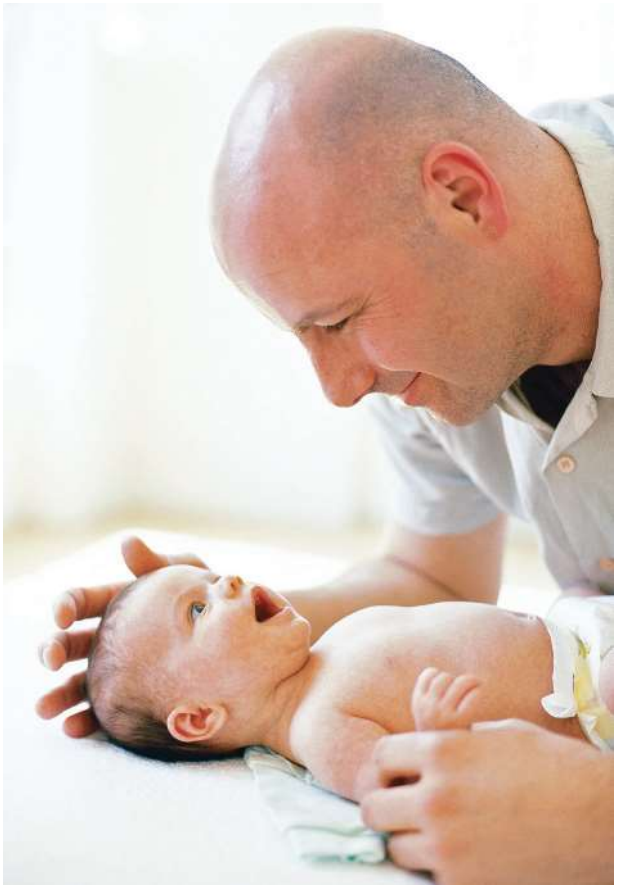
Anxious/Ambivalent Attachment Style

An attachment style characterized by a concern that others will not reciprocate one's desire for intimacy, resulting in higher-than-average levels of anxiety

The key assumption of attachment theory is that the particular attachment style we learn in infancy becomes our working model or schema for what all relationships are like throughout adult life (Fraley & Shaver, 2000; Konrath et al., 2014; Mikulincer et al., 2009). Thus, people who as children had a secure relationship with their parents or caregivers are better able to develop mature, lasting relationships as adults; people who had avoidant relationships with their parents are less able to trust others and find it difficult to develop close, intimate relationships; and people who had anxious/ambivalent relationships with their parents want to become close to their adult partners but often worry that their partners will not return their affections (Collins & Feeney, 2000; Rholes, Simpson & Friedman, 2006; Simpson et al., 2007). This has been borne out in numerous studies using questionnaires to measure adults' attachment styles and analyzing correlations between attachment style and the quality of adult romantic relationships. For example, in one study researchers asked adults to choose one of the three statements shown in Table 10.3, according to how they typically feel in romantic relationships (Hazan & Shaver, 1987). Each statement was designed to capture one of the three kinds of attachment styles we described.

When researchers correlate adults' responses to questions about attachment style with their answers to questions about their current relationships, they find results consistent with an attachment theory perspective (Feeney, Cassidy, & Ramos-Marcuse, 2008; Feeney, Noller, & Roberts, 2000; Hazan & Shaver, 1994). For example, securely attached individuals tend to have the most enduring romantic relationships of the three attachment types. They experience the highest level of commitment to relationships as well as the highest level of satisfaction with their relationships. The anxious/ambivalently attached individuals have the most short-lived romantic relationships. They enter into relationships the most quickly, often before they know their partner well. One study conducted at a marriage license bureau found that anxious men acquired marriage licenses after a shorter courtship than did either secure or avoidant men (Senchak & Leonard, 1992). They are also the most upset and angriest of the three types when their love is not reciprocated. The third group, avoidant individuals, is the least likely to enter into a relationship and the most likely to report never having been in love. They maintain their emotional distance and have the lowest level of commitment to their relationships of the three types (Campbell et al., 2005; Collins et al., 2006; Keelan, Dion, & Dion, 1994).

Attachment theory predicts that the attachment style we learn as infants and young children stays with us throughout life and generalizes to all of our relationships with other people.



It is important to note, however, that attachment theory does not suggest that people who had unhappy relationships with their parents are doomed to repeat this same kind of unhappy relationship with everyone they ever meet, or that secure attachment as an infant guarantees a healthy adult love life (Simms, 2002). Some researchers have recontacted their research participants months or years after their original studies and asked them to take the attachment-style scale again. They have found

Table 10.3 Measuring Adult Attachment Styles

As part of a survey of attitudes toward love published in a newspaper, people were asked to choose the statement that best described their romantic relationships. The attachment style each statement was designed to measure and the percentage of people who chose each alternative are indicated.

Secure style	56%	"I find it relatively easy to get close to others and am comfortable depending on them and having them depend on me. I don't often worry about being abandoned or about someone getting too close."
Avoidant style	25%	"I am somewhat uncomfortable being close to others; I find it difficult to trust them completely, difficult to allow myself to depend on them. I am nervous when anyone gets close, and often love partners want me to be more intimate than I feel comfortable being."
Anxious style	19%	"I find that others are reluctant to get as close as I would like. I often worry that my partner doesn't really love me or won't stay with me. I want to merge completely with another person, and this desire sometimes scares people away."

(Adapted from Hazan & Shaver, 1987)

that 25% to 30% of participants change from one attachment style to another (Feeney & Noller, 1996; Kirkpatrick & Hazan, 1994). People can and do change; their experiences in relationships can help them learn new ways of relating to others than what they experienced as children. Moreover, other research suggests that, at any given time, the attachment style that people display is the one that is called into play by their partner's behavior and the type of relationship that they've created as a couple. Thus, people can respond to situational variables in their relationships, displaying a more secure attachment style in one relationship and a more anxious one in another, or evolving in their attachment style within one relationship as time goes by (Fraley, 2002; Hadden et al., 2014; Simpson et al., 2003).

Your Body and Brain in Love

Falling in love is an extraordinary feeling, experienced by people in many different cultures with many different early childhood experiences. You feel giddy and euphoric. In the presence of your beloved, your heart races, your breathing quickens, and your body feels alert and full of energy. Indeed, most of us think of these bodily changes as symptoms of love. They can be. But it is also the case that bodily changes like these can make us more likely to fall for other people. That is, sometimes physiological arousal is a cause, rather than effect, of our attraction to others (Laird & Lacasse, 2014).

For example, in Chapter 5 we discussed Dutton and Aron's (1974) bridge studies, in which men whose hearts were still racing after they walked across an arousal-inducing suspension bridge showed greater signs of attraction to a female researcher who approached them. More recent research has also demonstrated this tendency to transfer feelings of physiological arousal to romantic feelings. Cindy Meston and Penny Frohlich (2003) approached men and women at an amusement park, surveying them either right before or after they rode a roller coaster. Participants who had just gone on the ride rated the stranger they were sitting next to as more attractive than did those about to go on the ride. These findings again demonstrate the bidirectional relationship between arousal and love. They also suggest that you may be more primed to meet that next special someone at the gym or on a hike rather than at the library or grocery store.

Psychologists have also studied what happens in our brains when we fall in love. One team of researchers recruited college students in the greater New York area who described themselves as currently being "intensely in love" (Aron et al., 2005). They asked these research participants to bring two photographs to the experimental

session: one of their beloved and one of an acquaintance of the same age and sex as their beloved. After filling out some questionnaires (including the Try It! Passionate Love Scale you completed earlier), the participants were ready for the main event. They slid into a functional MRI (fMRI) scanner, which records increases and decreases in blood flow in the brain, thus indicating which regions of the brain have changes in neural activity at any given time. While the participant was in the scanner, the experimenters alternated projecting on a screen one photograph and then the other, interspersed with a mathematical distraction task.

Watch SURVIVAL TIPS! LOOKING FOR LOVE IN ALL THE RIGHT PLACES

The researchers found that two specific areas, deep within the brain, showed evidence of increased activation when participants looked at the photograph of their romantic partner, but not when they looked at the photograph of their acquaintance (or when they engaged in the math task). Furthermore, those participants who self-reported higher levels of romantic love showed greater activation in these areas when looking at their beloved than those who reported lower levels (Aron et al., 2005). These two brain areas were the ventral tegmental area (VTA) and the caudate nucleus, which communicate with each other as part of a circuit.

Prior research has found that the VTA becomes active when we engage in rewarding behaviors, such as when people ingest cocaine—a drug that induces feelings of pleasure, euphoria, restlessness, sleeplessness, and loss of appetite (reactions that, wouldn't you know it, are also reminiscent of falling in love). The VTA, rich in the neurotransmitter dopamine, also fires when people eat chocolate. In short, the VTA and the caudate nucleus constitute a major reward and motivation center of the brain. For example, fMRI studies of gamblers' brains show greatly increased activity in these dopamine-rich areas when they win—a rewarding and motivating event (Aron et al., 2005). Thus, when people say that falling in love is "addictive," "like a drug," or "like winning the lottery," they're right. All these experiences predict greater activation in the same areas of the brain: dopamine-rich centers of pleasure, reward, and motivation (Bartels & Zeki, 2004; Fisher, 2004; Scheele et al., 2013).

Review Questions

1. Whereas _____ love is characterized by feelings of intimacy and affection, _____ love tends to include intense longing and physiological arousal.
   - **a.** platonic; romantic
   - **b.** tranquil; sexual
   - **c.** companionate; passionate
   - **d.** empty; erotic
2. Which of the following is not one of the three major components of love, according to Sternberg's triangular theory of love?
   - **a.** Intimacy
   - **b.** Passion
   - **c.** Reciprocity
   - **d.** Commitment
3. Which of the following is *not* one of the cross-cultural research findings about love and relationships reported in this chapter?
   - **a.** Unlike in the United States where it is conventional for married couples to live together, in many areas of West Africa, married couples live apart, prioritizing the connection with extended family over that with a spouse.
   - **b.** As indicated by the concept of *yuan*, Chinese are more likely to believe that relationship outcomes are determined by fate than are Americans.
   - **c.** Romantic love seems universal among humans, even as culture shapes how that emotional state is experienced and expressed.

d. Divorce rates are higher for arranged marriages than they are for marriages in which the individuals find their own spouse.

4. Which attachment style below is best captured by the following sentiment: "I am uncomfortable being close to others and find it difficult to trust people completely. I am nervous when anyone gets close, and often my partners want me to be more intimate than I feel comfortable being."
   a. Secure attachment style
   b. Avoidant attachment style
   c. Anxious/ambivalent attachment style
   d. Exchange attachment style
5. The regions of the brain that exhibit signs of increased activity when someone thinks about feelings of romantic love are the same regions that exhibit signs of increased activity when a person
   a. sleeps.
   b. ingests cocaine.
   c. cries.
   d. is anxious about being the focus of attention.

Assessing Relationships: Satisfaction and Breaking Up

LO 10.4 **Analyze different theories of measuring relationship satisfaction and research regarding romantic breakups.**

So far, we've examined attraction and the ways in which people define and experience love. But how exactly do individuals assess how their relationships are going? What factors shape how happy they are with their current mate or with their "love life" more generally? What determines whether people remain committed to a current relationship or start considering alternatives? And if they do decide to end a relationship, what are the psychological consequences of breaking up? We turn now to theories of relationship satisfaction and dissolution in the attempt to provide empirically based answers to these most intimate of questions.

Theories of Relationship Satisfaction

Relationships are not like the stock market or presidential approval ratings. Few of us keep daily charts or graphs in which we record precisely how happy we are with our current partner (which is likely a good thing!). That said, many of us periodically take stock of how our relationships are going more generally, perhaps on a significant anniversary or because someone asks directly. Or maybe because a fight or other aggravation with a partner makes us stop to ponder just how satisfied we really are. Below we review two influential theories regarding relationship satisfaction: social exchange theory and equity theory.

SOCIAL EXCHANGE THEORY Many of the variables we have discussed as antecedents of attraction can be thought of as examples of social rewards. It is pleasing to have our attitudes validated; thus, the more similar a person's attitudes are to ours, the more rewarded we are by spending time together. Likewise, it is rewarding to be around someone who likes us, particularly when that person is physically attractive. In other words, the more social rewards (and the fewer costs) a person provides us with, the more we like the person. The flip side of this equation is that if a relationship costs (e.g., in terms of emotional turmoil) far more than it gives (e.g., in terms of validation or praise), chances are that it will not last.

Social Exchange Theory
The idea that people's feelings about a relationship depend on their perceptions of its rewards and costs, the kind of relationship they deserve, and their chances for having a better relationship with someone else

This simple notion that relationships operate on an economic model of costs and benefits, much like other marketplaces, has been expanded by researchers into complex theories of social exchange (Cook et al., 2013; Kelley & Thibaut, 1978; Thibaut & Kelley, 1959). **Social exchange theory** holds that how people feel about a relationship will depend on their perceptions of the rewards they receive from it, their perceptions of the costs they incur, their beliefs regarding what kind of relationship they deserve,

and the probability that they could find a better relationship with someone else. In essence, we "buy" the best relationship we can get—one that gives us the most value for our emotional dollar based on the options on the table. The basic concepts of social exchange theory are reward, cost, outcome, and comparison level.

Rewards are the gratifying aspects of a relationship that make it worthwhile and reinforcing. They include the kinds of personal characteristics and behaviors of our relationship partner, and our ability to acquire external resources by virtue of knowing this person (e.g., gaining access to money, status, activities, or other interesting people; Lott & Lott, 1974). For example, in Brazil, friendship is openly used as an exchange value. Brazilians will readily admit that they need a *pistolão* (literally, a big, powerful handgun), meaning that they need a person who will use personal connections to help them get what they want (Rector & Neiva, 1996). Costs are, obviously, the other side of the coin, and all friendships and romantic relationships have some costs attached, such as putting up with those annoying habits and characteristics of the other person. The outcome of the relationship is a direct comparison of its rewards and costs; you can think of it as a mathematical formula where outcome equals rewards minus costs. If you come up with a negative number, your relationship is not in good shape.

According to social exchange theory, this couple's relationship satisfaction will depend on the two individuals' perceptions of benefits and costs, but also their more general expectations for how rewarding relationships should be.

In addition to rewards and costs, how satisfied you are with your relationship depends on another variable: your **comparison level**, or what you *expect* the outcome of your relationship to be in terms of costs and rewards (Kelley & Thibaut, 1978; Thibaut & Kelley, 1959). Over time, you have amassed a long history of relationships with others, and this history has led you to have certain expectations as to what your current and future relationships should be like. Some people have a high comparison level, expecting lots of rewards and few costs in their relationships. If a given relationship doesn't match this lofty expected comparison level, they quickly will grow unhappy and unsatisfied. In contrast, people who have a low comparison level would be happy in the same relationship because they expect their relationships to be difficult and costly.

Comparison Level

People's expectations about the level of rewards and costs they are likely to receive in a particular relationship

Finally, your satisfaction with a relationship also depends on your perception of the likelihood that you could replace it with a better one—or your **comparison level for alternatives**. As the saying goes, there are plenty of fish in the sea. Could a relationship with a different person give you a better outcome than your current one? People who have a high comparison level for alternatives—either because they believe the world is full of fabulous people dying to meet them or because they know of one particular fabulous person dying to meet them—are more likely to take the plunge, change things up, and hit the market for a new friend or lover. People with a low comparison level for alternatives will be more likely to stay in a costly relationship, because, in their mind, what they have may not be great, but it's better than what they expect they could find elsewhere (Etcheverry, Le, & Hoffman, 2013; Lehmiller & Agnew, 2006; Simpson, 1987).

Comparison Level for Alternatives

People's expectations about the level of rewards and costs they would receive in an alternative relationship

Social exchange theory has received a great deal of empirical support. Friends and romantic couples often do pay attention to the costs and rewards in their relationships, and these perceptions predict how positively people feel about the status of the relationship (Bui, Peplau, & Hill, 1996; Cook et al., 2013; Rusbult, 1983). Such findings have been observed for intimate relationships in cultures as different as Taiwan and the Netherlands (Le & Agnew, 2003; Lin & Rusbult, 1995; Van Lange et al., 1997). Generally speaking, when relationships are seen as offering a lot of rewards, people report feeling happy and satisfied.

However, many people do not leave their partners even when they are dissatisfied and their other alternatives look bright. Research indicates that we need to consider

Investment Model

The theory that people's commitment to a relationship depends not only on their satisfaction with the relationship, but also on how much they have invested in the relationship that would be lost by ending it

at least one additional factor to understand close relationships: a person's level of investment in the relationship (Carter et al., 2013; Goodfriend & Agnew, 2008; Rusbult et al., 2001). In her **investment model** of close relationships, Caryl Rusbult (1983) defines *investment* as anything people have put into a relationship that will be lost if they leave it. Examples include tangible things, such as financial resources, possessions, and property, as well as intangible things, such as the emotional welfare of one's children, the time and emotional energy spent building the relationship, and the sense of personal integrity that will be lost if one gets divorced. As seen in Figure 10.2, the greater the investment individuals have in a relationship, the less likely they are to leave, even when satisfaction is low and other alternatives look promising. In short, to predict whether people will stay in an intimate relationship, we need to know (1) how satisfied they are with the relationship, (2) what they think of their alternatives, and (3) how great their investment in the relationship is.

To test this model, Rusbult (1983) asked college students involved in heterosexual dating relationships to fill out questionnaires over the course of 7 months. Every 3 weeks, people answered questions about each of the components of the model shown in Figure 10.2. Rusbult also kept track of whether the students stayed in the relationships or broke up. As you can see in Figure 10.3, satisfaction, alternatives, and investments all predicted how committed people were to the relationship and whether it lasted. (The higher the number on the scale, the more each factor predicted the commitment to and length of the relationship.) Subsequent studies have found results similar to those shown in Figure 10.3 for married couples of different ages, lesbian and gay couples, nonsexual friendships, and residents of both the United States and Taiwan (Kurdek, 1992; Lin & Rusbult, 1995; Rusbult & Buunk, 1993).

Does the same model hold for destructive relationships? To find out, Rusbult and a colleague interviewed women who had sought refuge at a shelter for victims of domestic abuse (Rusbult & Martz, 1995). Why had these women stayed in these relationships, even to the point where some of them returned to an abusive partner? As

Figure 10.2 The Investment Model of Commitment

People's commitment to a relationship depends on several variables. First, their *satisfaction* with the relationship is based on their comparing their *rewards* to their costs and determining if the outcome exceeds their general expectation of what they should get in a relationship (or *comparison level*). Next, their *commitment* to the relationship depends on three variables: how *satisfied* they are, how much they feel they have *invested* in the relationship, and whether they have good *alternatives* to this relationship. These commitment variables in turn predict how stable the relationship will be. For example, a woman who feels her relationship has more costs and fewer rewards than she considers acceptable would have low satisfaction. If she also felt she had little invested in the relationship and an attractive person had just asked her for a date, she would have a low level of commitment. The end result is low stability; most likely, she will break up with her current partner.

(Adapted from Rusbult, 1983)

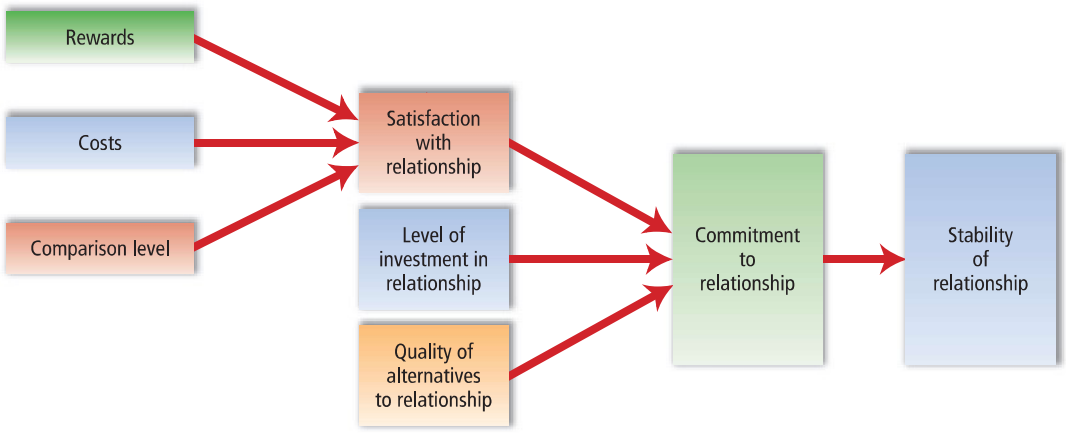
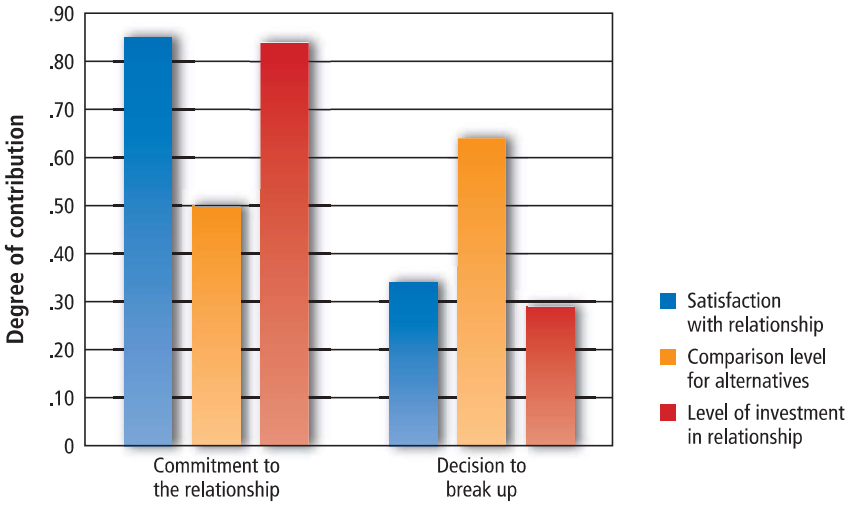


Figure 10.3 A Test of the Investment Model

This study examined the extent to which college students' satisfaction with a relationship, their comparison level for alternatives, and their investment in the relationship predicted their commitment to the relationship and their decision about whether to break up with their partner. The higher the number, the more each variable predicted commitment and breakup, independent of the two other variables. All three variables were good predictors of how committed people were and whether or not they broke up.

(Adapted from Rusbult, 1983)



the theory predicts, feelings of commitment to the abusive relationship were greater among women who had poorer economic alternatives to the relationship or were more heavily invested in the relationship. In long-term relationships, then, commitment is based on more than just the amount of rewards and costs a partner elicits; it also depends on people's perceptions of their investments in, satisfaction with, and alternatives to the relationship.

EQUITY THEORY Some researchers have criticized social exchange theory for ignoring an essential variable in relationships—the notion of fairness, or equity. Proponents of **equity theory** argue that people don't engage in relationships the way they do board games, doing anything they can to end up with the most reward in the bank. We aren't just out to get the most rewards for the least cost, the argument goes: We are also concerned about equity or the idea that the rewards and costs we experience should be roughly equal to those of the other person involved (Bowles, 2016; Kalmijn & Monden, 2012; Walster, Walster, & Berscheid, 1978). Indeed, these theorists describe equitable relationships as the happiest and most stable, whereas, inequitable relationships result in one person feeling overbenefited (getting a lot of rewards, incurring few costs, having to devote little time or energy to the relationship) and the other feeling underbenefited (getting few rewards, incurring a lot of costs, having to devote a lot of time and energy to the relationship).

Equity Theory
The idea that people are happiest with relationships in which the rewards and costs experienced by both parties are roughly equal

According to equity theory, both underbenefited and overbenefited partners should feel uneasy about this state of affairs, and both should be motivated to restore equity to the relationship. This makes sense for the underbenefited person—after all, who wants to feel miserable and unappreciated? But why should the overbenefited individual want to give up what social exchange theory indicates is a cushy deal, lots of rewards for little cost and little work? Theorists argue that equity is a powerful social norm and that people will eventually feel uncomfortable and guilty if they keep getting more than they deserve in a relationship. Still, being overbenefited isn't as bad as being underbenefited, and research has indicated that inequity is perceived as *more* of a problem by the underbenefited individual (Buunk & Schaufeli, 1999; Guerrero, La Valley, & Farinelli, 2008; Sprecher, 2016).

Close relationships can have either exchange or communal properties. Family relationships are typically communal.

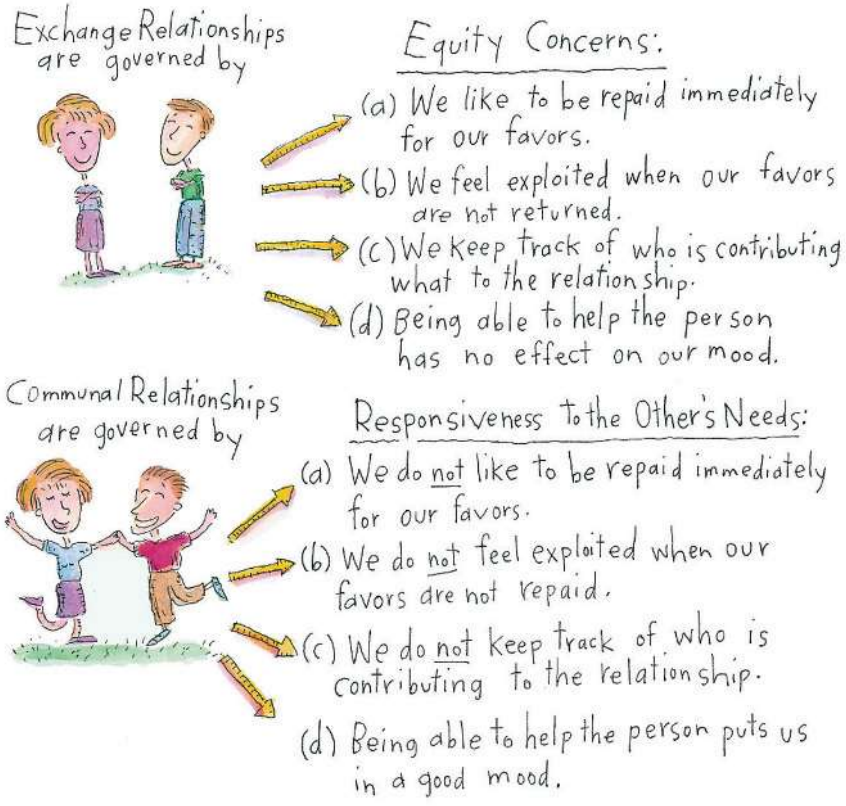
Of course, this whole notion of equity implies that partners in a relationship are keeping track of who is benefiting, who is getting shortchanged, and by how much. Some might suggest that many people in happy relationships don't spend so much time and energy keeping tabs in this manner. Indeed, the more we get to know someone, the more reluctant we are to believe that we are simply exchanging favors or expecting compensation for every kind gesture. Sure, in casual relationships, we trade "in kind"—you lend someone your class notes, she buys you lunch. But in intimate relationships, we're trading different types of resources, so even if we wanted to, determining whether or not equity has been achieved becomes difficult. Does taking out your significant other to a nice dinner one night balance out the fact that you had to work late the previous two nights? In other words, long-term, intimate relationships may be governed by a looser give-and-take notion of equity rather than a rigid tit-for-tat strategy (Kollack, Blumstein, & Schwartz, 1994; Laursen & Hartup, 2002; Vaananen et al., 2005).

According to Margaret Clark and Judson Mills (1993), interactions between new acquaintances are governed by equity concerns and are called **exchange relationships**. As you can see in Figure 10.4, in exchange relationships, people keep track of who is contributing what and feel taken advantage of when they feel they are putting more into the relationship than they are getting out of it. In comparison, longer-term interactions between close friends, family members, and romantic partners are governed less by an equity norm and more by a desire to help each other as needed. In these **communal relationships**, people give in response to the other's needs, regardless of whether

Exchange Relationships
Relationships governed by the need for equity (i.e., for an equal ratio of rewards and costs)

Communal Relationships
Relationships in which people's primary concern is being responsive to the other person's needs

Figure 10.4 Exchange Versus Communal Relationships



they get paid back (Abele & Brack, 2013; Mills & Clark, 2011; Vaananen et al., 2005). In this manner, communal interactions are the hallmark of long-term, intimate relationships. Research comparing heterosexual couples to same-sex couples has found that they are equally committed and communal in their relationships: if anything, gay men and lesbians report greater compatibility and less conflict than heterosexual couples do (Balsam et al., 2008; Roisman et al., 2008).

Are people in communal relationships completely unconcerned with equity? Not necessarily. As we saw previously, people do feel distressed if they believe their intimate relationships are inequitable (Canary & Stafford, 2001; Walster et al., 1978); however, equity takes on a somewhat different form in communal relationships than it does in less intimate ones. In communal relationships, the partners are more relaxed about what constitutes equity at any given time, believing that things will eventually balance out and a rough kind of equity will be achieved over the long run (Lemay & Clark, 2008; Lemay, Clark, & Feeney, 2007). If this doesn't happen—if they continue to feel that there is an imbalance—the relationship may ultimately end.

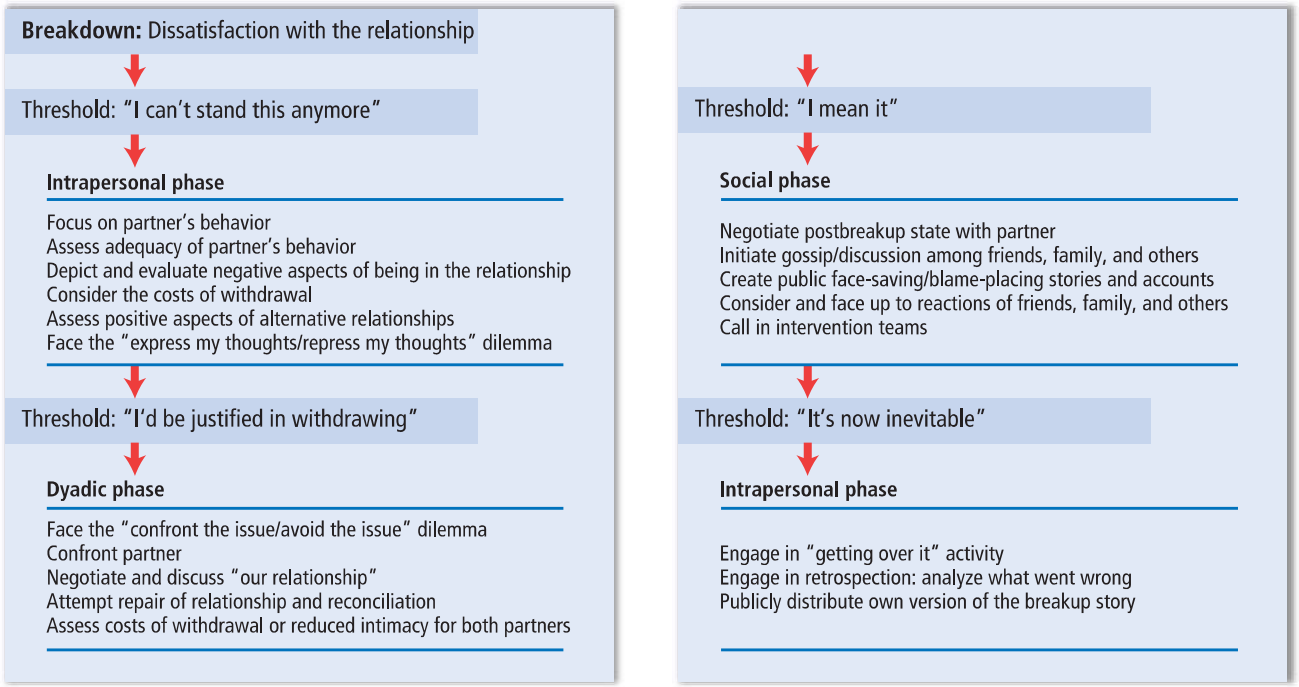
The Process and Experience of Breaking Up

The American divorce rate is nearly 50% and has been for the past few decades (Kennedy & Ruggles, 2014; National Center for Health Statistics, 2005). An examination of data from 58 societies, taken from the *Demographic Yearbook of the United Nations*, indicates that the majority of separations and divorces occur after just three or four years of marriage (Fisher, 2004). And, of course, countless romantic relationships between unmarried individuals end every day. Ending a romantic relationship is one of life's more painful experiences, and below we consider research about what prompts couples to break up and the disengagement strategies they use when doing so (Frazier & Cook, 1993; Rusbult & Zembrodt, 1983; Sprecher, Zimmerman, & Fehr, 2014).

For example, Steve Duck (1982) reminds us that relationship dissolution is not a single event but a process with many steps (see Figure 10.5). Duck theorizes that there are four stages to dissolving a relationship, ranging from the intrapersonal

Figure 10.5 Steps in Dissolving Close Relationships

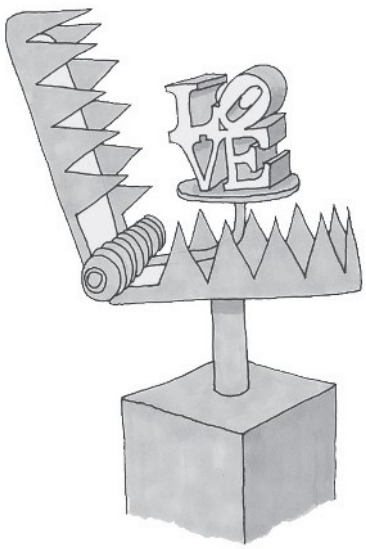
(Based on Duck, 1982)



(the individual thinks a lot about his or her dissatisfaction with the relationship) to the dyadic (the individual discusses the breakup with the partner) to the social (the breakup is announced to other people) and back to the intrapersonal (the individual recovers from the breakup and forms an internal account of how and why it happened). In terms of the last stage in the process, John Harvey and colleagues (Harvey, 1995; Harvey, Flanary, & Morgan, 1986) have found that the honest version of "why the relationship ended" that we present to close friends can be very different from the official version that we present to coworkers or neighbors.

Why relationships end has been studied from several angles (Bui et al., 1996; Drigotas & Rusbult, 1992). For example, Caryl Rusbult has identified four types of behavior that occur in troubled relationships (Rusbult, 1987; Rusbult & Zembrodt, 1983). The first two are destructive behaviors: actively harming the relationship (e.g., abusing the partner, threatening to break up, actually leaving) and passively allowing the relationship to deteriorate (e.g., refusing to deal with problems, ignoring the partner or spending less time together, putting no energy into the relationship). The other two responses are positive, constructive behaviors: actively trying to improve the relationship (e.g., discussing problems, trying to change, going to a therapist) and passively remaining loyal to the relationship (e.g., waiting and hoping that the situation will improve, being supportive rather than fighting, remaining optimistic). Rusbult and her colleagues have found that destructive behaviors harm a relationship a lot more than constructive behaviors help it. When one partner acts destructively and the other partner responds constructively to save the relationship, a common pattern, the relationship is likely to continue, but when both partners act destructively, the relationship typically ends (Rusbult, Johnson, & Morrow, 1986; Rusbult, Yovetich, & Verette, 1996).

Another approach to studying why relationships end considers what attracted the people to each other in the first place. For example, in one study, college men and women were asked to focus on a former romantic relationship to list the qualities that first attracted them to the person and the characteristics they ended up disliking the most about the person (Femlee, 1995, 1998). In 30% of these breakups, the very qualities that were initially so attractive became the very reasons why the relationship ended. For example, "He's so unusual and different" became "He and I have nothing in common." "She's so exciting and unpredictable" became "I can never count on her." This type of breakup reminds us again of the importance of similarity between partners to successful relationships.



If a romantic relationship is in bad shape, can we predict who will end it? Much has been made about the tendency in heterosexual relationships for women to end relationships more often than men. Research has found, however, that neither sex ends romantic relationships more frequently than the other (Hagestad & Smyer, 1982; Rusbult et al., 1986). A better predictor of whether and when a relationship will end seems to be how a couple deals with conflict. All relationships go through conflict, but not all couples handle it the same way. In studies of newlyweds, John Gottman and his colleagues have found that when discussing issues related to relationship conflict, those couples whose communication shows signs of contempt, sarcasm, and criticism are more likely to break up

(and break up sooner) than other couples (Gottman, 2014; Gottman & Levenson, 2002). Couples better able to weather the storms of conflict are those who wait to calm down before hashing out a disagreement and those who exhibit an ability to listen without automatically getting defensive.

Other research has examined the experience of breaking up, seeking to predict the different ways people will act and feel when their relationship ends (Connolly & McIsaac, 2009; Helgeson, 1994; Lloyd & Cate, 1985). Some research has indicated that investment plays a role in postbreakup interactions, as couples with higher rates of satisfaction and investment during the course of their relationship are also more likely to remain friends afterward (Tan et al., 2014). And while remaining friends with an ex-partner may be a positive outcome for many formerly intimate relationships, other research indicates that efforts to stay in contact or even monitor the new exploits of a former lover—perhaps simply by continuing to keep track of that person's activity via social media—can also be distressing and render it more challenging to adjust to the breakup (Belu, Lee, & O'Sullivan, 2016).

Indeed, from an emotional standpoint, it will come as little surprise to learn that research indicates that breaking up can be quite difficult. For example, Kimberly Balsam, Sharon Rostosky, and Ellen Riggle (2017) conducted interviews with women who had been in same-sex relationships that had recently ended. These interviews revealed three main themes in terms of these women's emotional reactions to their break-up: shame/guilt; feelings of failure; a sense of isolation and loneliness. Other research indicates that men and women tend to exhibit similar levels of distress after a breakup, and that, as one would expect, while even initiating a breakup can be stressful, being broken up with tends to lead to an even stronger negative emotional response (Sprecher, 1994).

In short, the social psychological research literature on close relationships spans the entire range of our most intimate of connections with others—from initial attraction and mate selection, to sexual behavior, to relationship satisfaction, to the heartbreak of breaking up … and then, in many instances, starting at least part of that trajectory all over again.

Review Questions

1. Although her girlfriend treats her well, always puts her needs first, and doesn't demand much in the way of relationship effort from her, Courtney feels unsatisfied with the relationship because a little voice in her head keeps telling her there must be an even better mate out there for her somewhere. Courtney seems to have
   - **a.** a high comparison level.
   - **b.** a low comparison level.
   - **c.** a low comparison level for alternatives.
   - **d.** a high sense of investment.
2. Equity theory suggests that if a relationship is not equitable
   - **a.** the overbenefited individual will still be satisfied with it.
   - **b.** both the underbenefited and the overbenefited individuals will still be satisfied with it.
   - **c.** both the underbenefited and the overbenefited individuals will be unsatisfied with it.
   - **d.** it will transition from a communal relationship to an exchange relationship.
3. Which of the following is an example of an intrapersonal stage to relationship dissolution?
   - **a.** The breakup is announced to other people.
   - **b.** One member of the couple thinks a lot about his or her relationship dissatisfaction.
   - **c.** One member of the couple discusses the potential breakup with the other person.
   - **d.** The couple decides to get back together.
4. Which of the following findings regarding breakups is true?
   - **a.** Initiating a breakup is even more distressing than being broken up with.
   - **b.** The dissolution of same-sex relationships is not marked by the same type and amount of negative emotional response as is the dissolution of cross-sex relationships.
   - **c.** Staying in contact and up-to-date on the new exploits of an ex-partner can have both positive and negative effects on an individual after a breakup.
   - **d.** On average, men are not nearly as upset by breakups as are women.

Summary

LO 10.1 Describe how people decide whom they like and want to get to know better.

- **What Predicts Attraction?**
  - **The Person Next Door: The Propinquity Effect** In the first part of this chapter, we discussed the variables that cause initial attraction between two people. One such variable is physical proximity, or the *propinquity effect*: People who you come into contact with the most are the most likely to become your friends and lovers. This occurs because of the *mere exposure effect*: Exposure to a stimulus increases liking for it.
  - **Similarity** Similarity between people, whether in attitudes, values, demographic characteristics, physical appearance, and even genetics is also a powerful predictor of attraction and liking. Similarity is more associated with attraction than complementarity, the idea that opposites attract, especially for long-term relationship formation.
  - **Reciprocal Liking** In general, we like others who behave as if they like us.
  - **Physical Attractiveness** Physical attractiveness also plays an important role in liking. People from different cultures perceive facial attractiveness quite similarly. The "what is beautiful is good" stereotype is an example of a *halo effect*, the tendency to believe that an individual who possesses one positive characteristic also possesses other, unrelated positive traits. Specifically, people assume that physical attractiveness is associated with a variety of other desirable traits, sometimes leading to self-fulfilling prophecies.
  - **Evolution and Mate Selection** Evolutionary psychology explains love in terms of genetic factors that have evolved over time according to the principles of natural selection. According to this perspective, which is not without its critics, men and women are attracted to different characteristics because this maximizes their reproductive success.

LO 10.2 Explain how new technologies shape attraction and social connections.

- **Making Connections in the Digital World**
  - New technologies provide social psychologists with new questions to ask about attraction and relationships, including whether phones and other mobile devices can undermine social connectedness.
  - **Attraction 2.0: Mate Preference in an Online Era** Basic predictors of attraction such as propinquity, similarity, and familiarity manifest themselves differently in the modern era of text messages, the internet, and social media.
  - **The Promise and Pitfalls of Meeting People Online** Online and mobile app-based dating expands your pool of potential mates, but carries its own risks, including unproven compatibility algorithms and deceptive profile descriptions and photos.

LO 10.3 Examine the cultural, personality, and biological factors that are associated with different types of love.

- **Love and Close Relationships**
  - **Defining Love: Companionship and Passion** One definition of love makes a distinction between *companionate love*, feelings of intimacy that are not accompanied by intense longing and arousal, and *passionate love*, feelings of intimacy that are accompanied by intense longing and arousal.
  - **Culture and Love** Although love is a universal emotion, there are cultural variations in the practice and definition of love. Love has a somewhat different emphasis in collectivistic and individualistic cultures.
  - **Attachment Styles in Intimate Relationships** People's past relationships with their caregivers are significant predictors of the quality of their close relationships as adults. There are three types of attachment relationships: *secure*, *avoidant*, and *anxious/ambivalent*.
  - **Your Body and Brain in Love** The experience of falling in love can also be examined at the level of the brain. Functional magnetic resonance imaging studies indicate that thinking about someone with whom you are in love leads to greater activation in regions of the brain also activated by other pleasurable rewards.

LO 10.4 Analyze different theories of measuring relationship satisfaction and research regarding romantic breakups.

- **Assessing Relationships: Satisfaction and Breaking Up**
  - **Theories of Relationship Satisfaction** Social Exchange Theory states that how people feel about their relationship depends on their perception of

the rewards they receive and the costs they incur. In order to determine whether people will stay in a relationship, we need to know their *comparison level* (expectations about the outcomes of their relationship), their *comparison level for alternatives* (expectations about how happy they would be in other relationships), as well as their *investment* in the relationship. Equity theory states that the most important determinant of satisfaction is that both parties feel comparably rewarded by the relationship. People are less likely to track costs and rewards in communal relationships than in exchange relationships.

- **The Process and Experience of Breaking Up** Strategies for responding to problems in a romantic relationship include both constructive and destructive behaviors. The breaking-up process is often composed of stages. Various factors predict how people will act and feel after a break-up, though continued contact with an ex-partner can have both positive and negative effects.

Revel Interactive

Shared Writing What Do You Think?

How might the varied research findings in this chapter help make dating websites and apps more effective?

Test Yourself

1. Sam has his eye on Julie and wants her to like him. According to research in social psychology, which of the following is *least* likely to work?

a. Emphasizing how similar their attitudes are
b. Arranging to work with her on a class project so that he can spend time with her
c. Emphasizing that they have complementary personalities and that opposites attract
d. Making himself look as physically attractive as he can

2. Which of the following is a benefit of online dating?

a. The ability to achieve propinquity with a wider range of people
b. Mathematical formulas that are highly effective at creating compatibility matches
c. People tend to be more honest about themselves online
d. With online dating, there's no such thing as potential mates feeling "out of your league"

3. Which of the following is *false*?

a. People in communal relationships tend to keep track of who is contributing what to the relationship.
b. People find "average" faces to be more attractive than unusual faces.
c. People like others who like them.
d. The more we see and interact with people, the more we will like them.

4. Katie and Madeline are dating. According to the *investment model of close relationships*, which of the following will influence their commitment to the relationship?

a. Their satisfaction with the relationship
b. Their level of investment in the relationship
c. The availability and quality of alternative partners
d. All of these answers are correct.

5. _____ involves intense longing for another person, accompanied by physiological arousal.

a. Passionate love
b. Companionate love
c. Exchange love
d. Communal love

6. Which of the following statements regarding attachment style is true?

a. Few if any individuals change their attachment style once they reach adulthood.
b. A majority of adults have been found to exhibit an avoidant attachment style.
c. The attachment style that adults display is shaped by their partner's behavior and the type of relationship they've created as a couple.
d. Your attachment style as an infant typically has little to do with the attachment style you have in your adult relationships.

7. Marquel and Eric have been friends since the beginning of the school year. According to equity theory, their friendship will suffer if

a. Eric is much more likely to help Marquel out when he needs it than Marquel is to help Eric.

b. Eric has a "makeover" and suddenly becomes far more attractive than Marquel.

c. Eric and Marquel stop having similar interests.

d. Eric and Marquel are romantically interested in the same person.

8. Elliot worries that his girlfriend doesn't really love him and he smothers her with attention. According to attachment theory, Elliot probably has a(n) _____ attachment style, because when he was an infant, his caregivers were _____.

a. avoidant; aloof and distant

b. secure; responsive to his needs

c. communal; smothering but very open

d. anxious/ambivalent; inconsistent and overbearing

9. You are considering breaking up with your significant other after 1 month of being a couple. While the relationship gives you lots of rewards and has few costs, you have recently met someone new whom you anticipate will give you even more rewards for even fewer costs. Your dilemma stems from the fact that you have a _____ and a _____.

a. low comparison level; high comparison level for alternatives

b. high comparison level; high comparison level for alternatives

c. low comparison level; low comparison level for alternatives

d. high comparison level; low equity level

10. After a breakup, which of the following couples is most likely to remain friends?

a. A couple that had a high level of satisfaction and investment during the actual relationship.

b. A couple that had a low level of satisfaction and investment during the actual relationship

c. A couple that initially met online

d. A couple in which one individual was overbenefited and the other was underbenefited

Chapter 11

Prosocial Behavior

Why Do People Help?

Chapter Outline and Learning Objectives

Basic Motives Underlying Prosocial Behavior: Why Do People Help?

LO 11.1 **Describe the basic motives that determine whether people help others.**

Evolutionary Psychology: Instincts and Genes
Social Exchange: The Costs and Rewards of Helping
Empathy and Altruism: The Pure Motive for Helping

Personal Qualities and Prosocial Behavior: Why Do Some People Help More than Others?

LO 11.2 **Describe the personal qualities that influence whether a given individual will help.**

Individual Differences: The Altruistic Personality
Gender Differences in Prosocial Behavior
Cultural Differences in Prosocial Behavior
Religion and Prosocial Behavior
The Effects of Mood on Prosocial Behavior

Situational Determinants of Prosocial Behavior: When Will People Help?

LO 11.3 **Describe the situations in which people are more likely, or less likely, to help others.**

Environment: Rural Versus Urban
Residential Mobility
The Number of Bystanders: The Bystander Effect
Diffusion of Responsibility in Cyberspace
Effects of the Media: Video Games and Music Lyrics

How Can Helping Be Increased?

LO 11.4 **Explain what can be done to promote prosocial behavior.**

Increasing the Likelihood That Bystanders Will Intervene
Increasing Volunteerism

WHAT DO YOU THINK?

Revel Interactive

Survey **What Do You Think?**

SURVEY | RESULTS

Have you ever helped someone in an emergency, either directly (e.g., saving someone in danger) or by calling 911?

- ○ Yes
- ○ No

September 11, 2001, was truly a day of infamy in American history, with terrible loss of life at the World Trade Center, the Pentagon, and the field in Pennsylvania where United Airlines flight 93 crashed. It was also a day of incredible courage and sacrifice by people who did not hesitate to help their fellow human beings. Many people lost their lives while helping others, including 403 New York firefighters and police officers who died trying to rescue people from the World Trade Center.

Many of the heroes of September 11 were ordinary citizens who found themselves in extraordinary circumstances. Imagine that you were working in the World Trade Center towers when they were hit by the planes and how strong the desire would be to flee and seek personal safety. This is exactly what William Wik's wife urged him to do when he called her from the 92nd floor of the South Tower shortly after the attacks. "No, I can't do that; there are still people here," he replied (R. W. Lee, 2001, p. 28). Wik's body was found in the rubble of the South Tower after it collapsed; he was wearing work gloves and holding a flashlight.

Abe Zelmanowitz worked on the 27th floor of the North Tower and could easily have walked down the stairs to safety when the plane struck the floors above. Instead, he stayed behind with his friend Ed Beyea, a quadriplegic, waiting for help to carry him down the stairs. Both died when the tower collapsed.

Rick Rescorla was head of security for the Morgan Stanley brokerage firm. After the first plane hit the North Tower, Rescorla and the other employees in the South Tower were instructed to remain at their desks. Rescorla, who had spent years studying the security of the towers, had drilled his employees repeatedly on what to do in an emergency like this—find a partner, avoid the elevators, and evacuate the building. He invoked this plan immediately, and when the plane hit the South Tower, he was on the 44th floor supervising the evacuation, yelling instructions through a bullhorn. After most of the Morgan Stanley employees made it out of the building, Rescorla decided to do a final sweep of the offices to make sure no one was left behind, and he perished when the South Tower collapsed. Rescorla is credited with saving the lives of the 3,700 employees he guided to safety (Stewart, 2002).

And then there were the passengers on United flight 93. Based on phone calls made from the plane in the fateful minutes after it was hijacked, it appears that several passengers, including Todd Beamer, Jeremy Glick, and Thomas Burnett—all fathers of young children—stormed the cockpit and struggled with the terrorists. They could not prevent the plane from crashing, killing everyone on board, but they did prevent the plane from carrying out its likely mission: crashing into the White House or the U.S. Capitol.

Basic Motives Underlying Prosocial Behavior: Why Do People Help?

LO 11.1 **Describe the basic motives that determine whether people help others.**

Prosocial Behavior
Any act performed with the goal of benefiting another person

How can we explain acts of great self-sacrifice and heroism like these? Especially when people are also capable of acting in uncaring, heartless ways? In this chapter, we will consider the major causes of **prosocial behavior**—any act performed with the goal

of benefiting another person (Batson, 2012; Penner et al., 2005). We are particularly concerned with prosocial behavior that is motivated by **altruism**, which is the desire to help another person even if it involves a cost to the helper. Someone might act in a prosocial way out of self-interest, hoping to get something in return. Altruism is helping purely out of the desire to benefit someone else, with no benefit (and often a cost) to oneself; the heroes of September 11, who gave their lives while helping strangers, are a clear example of altruism.

Altruism
The desire to help another person even if it involves a cost to the helper

We begin by considering the basic origins of prosocial behavior and altruism: Is the willingness to help a basic impulse with genetic roots? Must it be taught and nurtured in childhood? Is there a pure motive for helping? Or do people typically help only when there is something in it for them? Let's see how psychologists have addressed these centuries-old questions (Crocker, Canevello, & Brown, 2017; Keltner et al., 2014; Piliavin, 2009; Tomasello & Vaish, 2013).

Evolutionary Psychology: Instincts and Genes

According to Charles Darwin's (1859) theory of evolution, natural selection favors genes that promote the survival of the individual. Any gene that furthers our survival and increases the probability that we will produce offspring is likely to be passed on from generation to generation. Genes that lower our chances of survival, such as those causing life-threatening diseases, reduce the chances that we will produce offspring and thus are less likely to be passed on. Evolutionary psychologists attempt to explain social behavior in terms of genetic factors that have evolved over time according to the principles of natural selection (Buss, 2014; Neuberg, Kenrick, & Schaller, 2010; Tooby & Cosmides, 2005). In Chapter 10, we discussed how evolutionary psychology attempts to explain love and attraction; here we discuss its explanation of prosocial behavior (Arnocky et al., 2017; Hare, 2017; Simpson & Beckes, 2010).

Darwin realized early on that there was a problem with evolutionary theory: How can it explain altruism? If people's overriding goal is to ensure their own survival, why would they ever help others at a cost to themselves? It would seem that over the course of human evolution altruistic behavior would disappear, because people who acted that way would, by putting themselves at risk, produce fewer offspring than would people who acted selfishly. Genes promoting selfish behavior should be more likely to be passed on—or should they?

KIN SELECTION One way that evolutionary psychologists attempt to resolve this dilemma is with the notion of **kin selection**, the idea that behaviors that help a genetic relative are favored by natural selection (Carazo et al., 2014; Hamilton, 1964; Vasey & VanderLaan, 2010). People can increase the chances that their genes will be passed along not only by having their own children, but also by ensuring that their genetic relatives have children. Because a person's blood relatives share some of his or her genes, the more that person ensures their survival, the greater the chances that his or her genes will flourish in future generations. Thus, natural selection should favor altruistic acts directed toward genetic relatives.

Kin Selection
The idea that behaviors that help a genetic relative are favored by natural selection

According to evolutionary psychology, prosocial behavior occurs in part because of kin selection.

In one study, for example, people reported that they would be more likely to help genetic relatives than nonrelatives in life-and-death situations, such as a house fire. People did not report that they would be more likely to help genetic relatives when the situation was nonlife-threatening, which supports the idea that people are most likely to help in ways that ensure the survival of their own genes. Interestingly, both males and females, and both American and Japanese participants, followed this rule of kin selection in life-threatening situations, suggesting that kin selection is not limited to one gender or a particular culture (Burnstein, Crandall, & Kitayama, 1994).

Watch SUCCESSFUL AGING, EXTENDED FAMILY

Of course, in this study people reported what they thought they would do; this doesn't prove that in a real fire they would indeed be more likely to save their sibling than their cousin. Anecdotal evidence from real emergencies, however, is consistent with these results. Survivors of a fire at a vacation complex reported that when they became aware that there was a fire, they were much more likely to search for family members before exiting the building than they were to search for friends (Sime, 1983).

Evolutionary psychologists are not suggesting that people consciously weigh the biological importance of their behavior before deciding whether to help. According to evolutionary theory, however, kin selection may have become ingrained in human behavior, and as a result the genes of people who help their relatives are more likely to survive than the genes of people who do not (Archer, 2013; Vasey & VanderLaan, 2010).

Norm of Reciprocity
The expectation that helping others will increase the likelihood that they will help us in the future

THE RECIPROCITY NORM To explain altruism, evolutionary psychologists also point to the **norm of reciprocity**, which is the expectation that helping others will increase the likelihood that they will help us in the future. The idea is that as human beings were evolving, a group of completely selfish individuals, each living in his or her own cave, would have found it more difficult to survive than a group that had learned to cooperate. Of course, if people cooperated too readily, they might have been exploited by an adversary who never helped in return. Those who were most likely to survive, the argument goes, were people who developed an understanding with their neighbors about reciprocity: "I will help you now, with the agreement that when I need help, you will return the favor." Because of its survival value, such a norm of reciprocity may have become genetically based (Gray, Ward, & Norton, 2014; Krockow, Colman, & Pulford, 2016; Trivers, 1971). Some researchers suggest that the emotion of *gratitude*—the positive feelings that are caused by the perception that one has been helped by others—evolved in order to regulate reciprocity (Algoe, 2012; Algoe, Fredrickson, & Gable, 2013; Eibach, Wilmot, & Libby, 2015). That is, if someone helps us, we feel gratitude, which motivates us to return the favor in the future. The following Try It! describes how the reciprocity norm has been studied using economic games.

Try It!

The Dictator Game

Imagine that you take part in the following study: An experimenter gives you 10 one-dollar bills and says that you can keep all of the money or donate some of it to the next participant, whom you will never meet. The experimenter leaves you by yourself, with the instructions to put whatever amount you want to give to the next participant (if any) in a sealed envelope, after which you can leave. How much, if anything, would you donate?

This procedure, called the Dictator Game, has been used in dozens of studies to study human generosity. Although it would be in people's self-interest to keep all the money, most people donate some of it to the anonymous stranger they will never meet—on average, about $2.80 (Engel, 2010). In other words, people act altruistically in this situation, by helping another person at some cost to themselves. Now imagine a slight twist in the game: When you arrive, the experimenter gives you an envelope containing money that a participant in another room sent to you as part of the Dictator Game. That is, the other person was given $10 and told that he or she could keep it all or give some of it to you, and the amount he or she donated—let's say it was $4.00—is in your hands.

Now the experimenter gives you an additional $10 and asks you to keep it or give some of it to that same participant in the next room. By the way, you will never meet this person, and the experimenter will never know how much you gave—after

you make your decision you will leave without seeing the other participant. How much of the $10, if anything, will you give to the other participant?

If your answer was $4.00—the same amount that the other participant gave you—you answered like most people in a study that followed this exact procedure. In that study, almost all participants gave the person in the next room the same amount that that person had given them, or close to it (Ben-Ner, Putterman, Kong, & Magan, 2004). Thus, if the person had given you $4, you likely gave them $4 back, whereas if he or she had given you $1, you likely give them that much back. This study illustrates how sensitive people are to the *reciprocity norm*; we help others to the same degree that they help us.

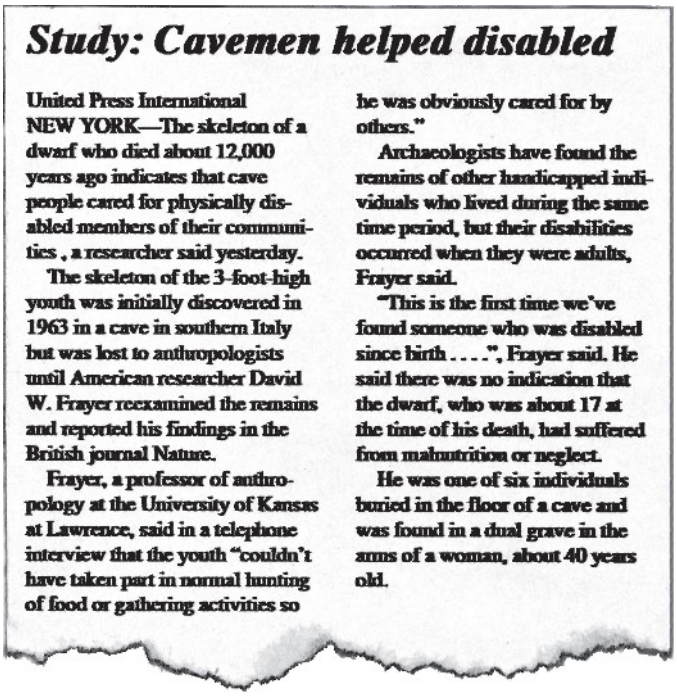
GROUP SELECTION Classic evolutionary theory argues that natural selection operates on individuals: People who have traits that make them more likely to survive are more likely to reproduce and pass those traits on to future generations. Some argue that natural selection also operates at the group level. Imagine two neighboring villages, for example, that are often at war with each other. Village A is made up entirely of selfish individuals who refuse to put themselves at risk to help the village. Village B, on the other hand, has selfless sentries who put their lives at risk by alerting their comrades of an invasion. Which *group* is more likely to win the war and pass on its genes to later generations? The one with the selfless (altruistic) sentries, of course. Even though the *individual* sentries in Village B are at risk and likely to be captured and killed, their selfless behavior increases the likelihood that their *group* will survive—namely, the group that values altruism. Though the idea of group selection is controversial and not supported by all biologists, it has prominent proponents (Rand & Nowak, 2013; Wilson, Van Vugt, & O'Gorman, 2008; Wilson & Wilson, 2007).

In sum, evolutionary psychologists believe that people help others because of factors that have become ingrained in our genes. As we saw in Chapter 10, evolutionary psychology is a challenging and creative approach to understanding prosocial behavior, though it has its critics (Batson, 2011; LaFrance & Eagly, 2017; Panksepp & Panksepp, 2000; Wood & Eagly, 2002). How, for example, can evolutionary theory explain why complete strangers sometimes help each other, even when there is no reason for them to assume that they share some of the same genes or that their favor will ever be returned? It seems absurd to say that the heroes of September 11, who lost their lives while saving others, somehow calculated how genetically similar they were to the others before deciding to help. Further, just because people are more likely to save family members than strangers from a fire does not necessarily mean that they are genetically programmed to help genetic relatives. It may simply be that they cannot bear the thought of losing a loved one and therefore go to greater lengths to save the ones they love over people they have never met. We turn now to other possible motives behind prosocial behavior that do not necessarily originate in people's genes.

Social Exchange: The Costs and Rewards of Helping

Although some social psychologists disagree with evolutionary approaches to prosocial behavior, they share the view that altruistic behavior can be based on self-interest. In fact, *social exchange theory* (see Chapter 10) argues that much of what we do stems from the desire to maximize our rewards and minimize our costs (Cook & Rice, 2003; Homans, 1961; Thibaut & Kelley, 1959). The difference from evolutionary approaches is that social exchange theory doesn't trace this desire back to our evolutionary roots, nor does it assume that the desire is genetically based. Social exchange theorists assume that just as people in an economic marketplace try to maximize the ratio of their monetary profits to their monetary losses, people in their relationships with others try to maximize the ratio of social rewards to social costs.

Helping can be rewarding in a number of ways. As we saw with the norm of reciprocity, it can increase the likelihood that someone will help us in return. Helping



Study: Cavemen helped disabled

United Press International

NEW YORK—The skeleton of a dwarf who died about 12,000 years ago indicates that cave people cared for physically disabled members of their communities , a researcher said yesterday.

The skeleton of the 3-foot-high youth was initially discovered in 1963 in a cave in southern Italy but was lost to anthropologists until American researcher David W. Frayer reexamined the remains and reported his findings in the British journal Nature.

Frayer, a professor of anthropology at the University of Kansas at Lawrence, said in a telephone interview that the youth "couldn't have taken part in normal hunting of food or gathering activities so he was obviously cared for by others."

Archaeologists have found the remains of other handicapped individuals who lived during the same time period, but their disabilities occurred when they were adults, Frayer said.

"This is the first time we've found someone who was disabled since birth . . . .", Frayer said. He said there was no indication that the dwarf, who was about 17 at the time of his death, had suffered from malnutrition or neglect.

He was one of six individuals buried in the floor of a cave and was found in a dual grave in the arms of a woman, about 40 years old.

This touching story of early hominid prosocial behavior is intriguing to think about in terms of different theories of prosocial behavior. Evolutionary psychologists might argue that the caregivers helped the dwarf because he was a relative and that people are programmed to help those who share their genes (kin selection). Social exchange theory would maintain that the dwarf's caregivers received sufficient rewards from their actions to outweigh the costs of caring for him. The empathy-altruism hypothesis would hold that the caregivers helped out of strong feelings of empathy and compassion for him—an interpretation supported by the article's final paragraph.

someone is an investment in the future, the social exchange being that someday someone will help us when we need it. Helping can also relieve the personal distress of a bystander. Considerable evidence indicates that people are aroused and disturbed when they see another person suffer and that they help at least in part to relieve their own distress (Dovidio, 1984; Dovidio et al., 1991; Eisenberg & Fabes, 1991). By helping others, we can also gain such rewards as social approval from others and increased feelings of self-worth.

The other side of the coin, of course, is that helping can be costly. Helping decreases when the costs are high, such as when it would put us in physical danger, result in pain or embarrassment, or simply take too much time (Dovidio et al., 1991; Piliavin et al., 1981; Piliavin, Piliavin, & Rodin, 1975). Perhaps Abe Zelmanowitz, who stayed behind with his friend Ed Beyea in the World Trade Center, found the prospect of walking away and letting his friend die too distressing. Basically, social exchange theory argues that true altruism, in which people help even when doing so is costly to them, does not exist. People help when the benefits outweigh the costs.

If you are like many of our students, you may think this is an overly cynical view of human nature. Is true altruism, motivated only by the desire to help someone else, really such a mythical act? Must we trace all prosocial behavior, such as large charitable gifts made by wealthy individuals, to the self-interest of the helper? Well, a social exchange theorist might reply, there are many ways in which people can obtain gratification, and we should be thankful that one way is by helping others. After all, wealthy people could decide to get their pleasure solely from lavish vacations, expensive cars, and meals at fancy restaurants. We should applaud their decision to give money to the disadvantaged, even if, ultimately, it is just a way for them to feel good about themselves. Prosocial acts are doubly rewarding in that they help both the giver and the recipient of the aid. Thus, it is to everyone's advantage to promote and praise such acts.

Still, many people are dissatisfied with the argument that all helping stems from self-interest. How can it explain why people give up their lives for others, as many of the heroes of September 11 did? According to some social psychologists, people do have hearts of gold and sometimes help only for the sake of helping.

Empathy and Altruism: The Pure Motive for Helping

C. Daniel Batson (1991) is the strongest proponent of the idea that people often help purely out of the goodness of their hearts. Batson acknowledges that people sometimes help others for selfish reasons, such as to relieve their own distress at seeing another person suffer. But he also argues that people's motives are sometimes purely altruistic, in that their only goal is to help the other person, even if doing so involves some cost to them. Pure altruism is likely to come into play, he maintains, when we feel **empathy** for the person in need of help, putting ourselves in the shoes of another person and experiencing events and emotions the way that person experiences them (Batson, 2011; Batson, Ahmad, & Stocks, 2011).

Empathy

The ability to put oneself in the shoes of another person and to experience events and emotions (e.g., joy and sadness) the way that person experiences them

Helping behavior is common in virtually all species of animals, and sometimes it even crosses species lines. In August 1996, a 3-year-old boy fell into a pit containing seven gorillas, at the Brookfield, Illinois, zoo. Binti, a 7-year-old gorilla, immediately picked up the boy. After cradling him in her arms, she placed the boy near a door where zookeepers could get to him. Why did she help? Evolutionary psychologists would argue that prosocial behavior is selected for and thus becomes part of the genetic makeup of the members of many species. Social exchange theorists would argue that Binti had been rewarded for helping in the past. In fact, because she had been rejected by her mother, she had received training in parenting skills from zookeepers, in which she was rewarded for caring for a doll (20 Years Ago Today, 2016).

Suppose that while you are food shopping, you see a man holding a baby and a bag full of diapers, toys, and rattles. As he reaches for a box of cereal, the man drops the bag, and everything spills onto the floor. Will you help him pick up his things? According to Batson, it depends first on whether you feel empathy for him. If you do, you will help, regardless of what you have to gain. Your goal will be to relieve the other person's distress, not to gain something for yourself. This is the crux of Batson's **empathy-altruism hypothesis**: When we feel empathy for another person, we will attempt to help that person for purely altruistic reasons, regardless of what we have to gain.

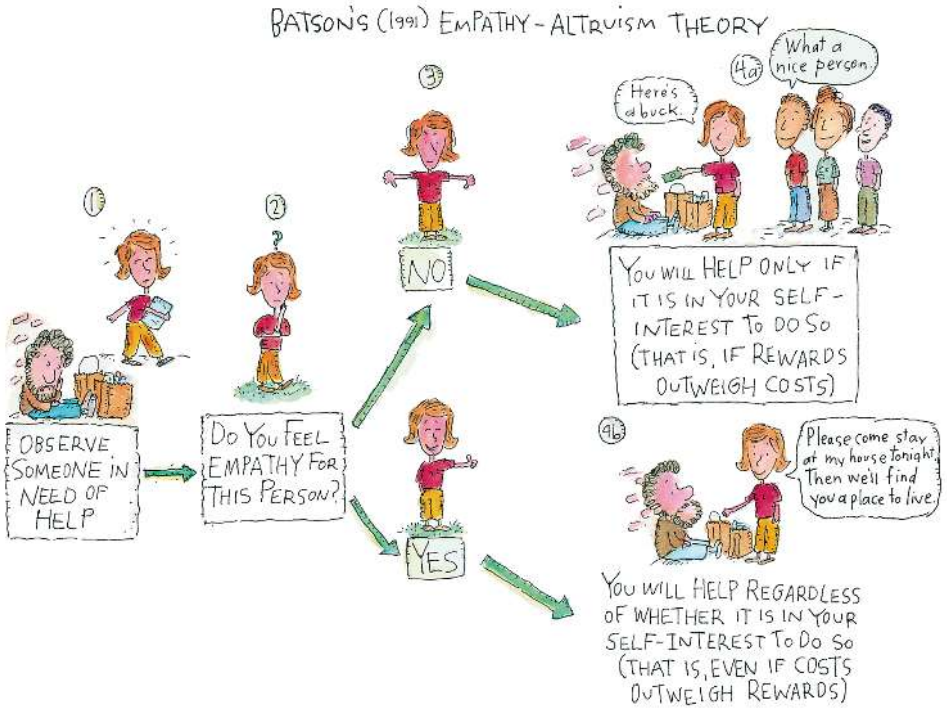
Empathy-Altruism Hypothesis
The idea that when we feel empathy for a person, we will attempt to help that person for purely altruistic reasons, regardless of what we have to gain

If you do not feel empathy, Batson says, social exchange concerns come into play. What's in it for you? If there is something to be gained, such as obtaining approval from the man or from onlookers, you will help the man pick up his things. If you will not profit from helping, you will go on your way without stopping. Batson's empathy-altruism hypothesis is summarized in Figure 11.1.

Batson and his colleagues would be the first to acknowledge that it can be difficult to isolate the exact motives behind complex social behaviors. If you saw someone help the man pick up his possessions, how could you tell whether the person was acting out of empathic concern or to gain some sort of reward, such as relieving his own distress? Consider a famous story about Abraham Lincoln. One day, while riding in a coach, Lincoln and a fellow passenger were debating the very question we are considering: Is helping ever truly altruistic? Lincoln argued that helping always stems from self-interest, whereas his fellow passenger took the view that true altruism exists. Suddenly, the men were interrupted by the screeching of a pig that was trying to save her piglets from drowning in a creek. Lincoln ordered the coach to stop, jumped out, ran down to the creek, and lifted the piglets to the safety of the bank. When he returned, his companion said, "Now, Abe, where does selfishness come in on this little episode?" "Why, bless your soul, Ed," Lincoln replied. "That was the very essence of selfishness. I should have had no peace of mind all day had I gone on and left that suffering old sow worrying over those pigs. I did it to get peace of mind, don't you see?" (Sharp, 1928, p. 75).

As this example illustrates, an act that seems truly altruistic is sometimes motivated by self-interest. How, then, can we tell which is which? Batson and his colleagues have devised a series of clever experiments to unravel people's motives (Batson, Ahmad, &

Figure 11.1 Empathy-Altruism Theory



Stocks, 2004; Batson & Powell, 2003). Imagine that you were an introductory psychology student in one of these studies (Toi & Batson, 1982). You are asked to evaluate some recordings of new programs for the university radio station, one of which is called *News from the Personal Side*. There are lots of different submissions for this program, and you are told that only one person will be listening to each submission. The one you hear is an interview with a student named Carol Marcy. She says she was in a bad automobile accident in which both of her legs were broken and talks about how hard it has been to keep up with her class work as a result of the accident, especially because she is still in a wheelchair. Carol says she is especially concerned about how far she has fallen behind in her Introductory Psychology class and mentions that she will have to drop the class unless she can find another student to tell her what she has missed.

When you're done listening to the story, the experimenter hands you an envelope marked "To the student listening to the Carol Marcy submission." The experimenter says she doesn't know what's in the envelope but was asked by the professor supervising the research to hand it out. You open the envelope and find a note from the professor, saying that he was wondering if the student who listened to Carol's story would be willing to help her out with her psychology class. Carol was reluctant to ask for help, he says, but because she is so far behind in the class, she agreed to write a note to the person listening to her submission. The note asks if you could meet with her and share your Introductory Psychology lecture notes.

As you have probably guessed, the point of the study was to look at whether people agreed to help Carol and to pit two motives against each other: empathy versus self-interest. The researchers varied how much empathy people felt toward Carol by telling different participants to adopt different perspectives when listening to her story. In the high-empathy condition, people were told to try to imagine how Carol felt about what had happened to her and how it had changed her life. In the low-empathy condition, people were told to try to be objective and not be concerned with how Carol felt. As expected, people in the high-empathy condition reported feeling more empathy for Carol than people in the low-empathy condition did.

The researchers looked at self-interest by varying how costly it would be *not* to help Carol. In one condition, participants learned that she would start coming back to class the

following week and happened to be in the same psychology section as they were; thus, they would see her every time they went to class and would be reminded that she needed help. This was the high-cost condition because it would be unpleasant to refuse to help Carol and then run into her every week in class. In the low-cost condition, people learned that Carol would be studying at home and would not be coming to class; therefore, they would never have to face her in her wheelchair and feel guilty about not helping her.

According to the empathy-altruism hypothesis, people should have been motivated purely by altruistic concerns and helped regardless of the costs—if empathy was high (see Figure 11.1). As you can see from the right side of Figure 11.2, this prediction was confirmed: In the high-empathy condition, about as many people agreed to help when they thought they would see Carol in class as when they thought they would not see her in class. This suggests that people had Carol's interests in mind and not their own. But in the low-empathy condition many more people agreed to help when they thought they would see Carol in class than when they thought they would not see her in class (see the left side of Figure 11.2). This suggests that when empathy was low, social exchange concerns came into play, in that people based their decision to help on the costs and benefits to themselves. They helped when it was in their interests to do so (i.e., when they would see Carol in her wheelchair and feel guilty for not helping), but not otherwise (i.e., when they thought they would never see her again).

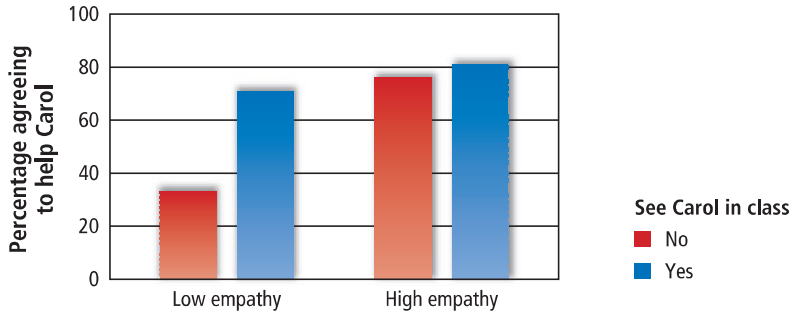
Does this resolve the debate over whether helping can be purely altruistic? Well, as the "Carol" experiment illustrates, people will sometimes help out of a concern for others when there is no tangible benefit to themselves. But it is hard to prove that there was *nothing* in it for the people in the "high empathy" condition of that experiment. Indeed, some theorists have argued that what ultimately motivates people to help others, even when there are costs to doing so, is the good feeling that results. Consistent with this view, recent research shows that when people help others, the same parts of their brain are activated as when they receive such tangible rewards as food, water, and sex (Buchanan & Preston, 2016; Zaki & Mitchell, 2016).

In the end, this debate centers on how we define "self-interest." If by that we mean immediate, tangible, benefits to the self, such as praise from others or a promotion at work, then it is clear that such rewards are not the only reasons people help others. As Batson's work illustrates, when people feel empathy toward others, they will help even if it is not in their immediate self-interest to do so. But if we define "self-interest" more broadly, to include the glow people experience when they help others, and the relief they feel when they can alleviate another person's suffering, then yes, this kind of altruism is "selfish" as well (Crocker et al., 2017; Marsh, 2016). But isn't it a wonderful thing

Figure 11.2 Altruism Versus Self-Interest

Under what conditions did people agree to help Carol with the work she missed in her introductory psychology class? When empathy was high, people helped regardless of the costs and rewards (i.e., regardless of whether they would encounter her in their psychology class). When empathy was low, people were more concerned with the rewards and costs for themselves; they were more likely to help if they would encounter Carol in their psychology class and thus feel guilty about not helping.

(Adapted from Toi & Batson, 1982)



that human beings are so willing to help others even when there are costs to doing so? Sometimes people pay the ultimate cost, as seen by those who lost their lives helping others at the World Trade Centers or by those who die in military service to their country, and it is hard to argue that there was anything selfish about such heroic acts.

To sum up, we've identified three basic motives underlying prosocial behavior, each of which has its supporters and critics:

1. Helping is an instinctive reaction to promote the welfare of those genetically similar to us (evolutionary psychology).
2. The rewards of helping often outweigh the costs, so helping is in our self-interest (social exchange theory).
3. Under some conditions, powerful feelings of empathy and compassion for the victim prompt selfless giving (the empathy-altruism hypothesis).

Review Questions

1. Which of the following is the best example of altruistic behavior?
   - **a.** Julia puts a dollar in the church collection basket because everyone else donates.
   - **b.** Robert volunteers at his son's school to help out his class.
   - **c.** Jawal anonymously donates $100 to a homeless shelter.
   - **d.** Mary helps her husband with the dishes with the hope that he will cook dinner more often.
2. Evolutionary psychology would have the most trouble explaining which of the following incidents?
   - **a.** When Usha was in a building that caught on fire, she let everyone else exit before her, even though she didn't know them.
   - **b.** Clint risks his life to save his nephew who was drowning.
   - **c.** Natasha runs in front of a moving car to keep her daughter from being hit.
   - **d.** When Julio was put in the unfortunate situation of saving his cousin or his son in a boating accident, he chose to save his son.
3. According to social exchange theory, which of the following people is most likely to give money to a homeless person?
   - **a.** Jade, who feels empathy for the homeless person
   - **b.** Bill, who wants to impress his date by helping the homeless person
   - **c.** Jack, who is related to the homeless person
   - **d.** Emma, who has a genetic predisposition for helping people
4. According to Batson's empathy-altruism theory, which of the following people is *most* likely to give money to a homeless person?
   - **a.** Jade, who feels empathy for the homeless person
   - **b.** Bill, who wants to impress his date by helping the homeless person
   - **c.** Jack, who is related to the homeless person
   - **d.** Both Jade and Bill are likely to give money.

Personal Qualities and Prosocial Behavior: Why Do Some People Help More Than Others?

LO 11.2 **Describe the personal qualities that influence whether a given individual will help.**

If basic human motives fully explained prosocial behavior, why are some people so much more helpful than others? Clearly, we need to consider the personal qualities that distinguish the helpful person from the selfish one.

Individual Differences: The Altruistic Personality

As just noted, individuals have stood out for their incredibly altruistic acts throughout history, such as those who sheltered Jews during World War II, saving them from the death camps, often at great risk to themselves (Oliner & Oliner, 1988). The heroes of

Some people have more of an altruistic personality than others. Taylor Swift and Beyoncé, for example, have topped lists of "Most Generous Celebrities" for helping to raise money for charities. Personality, however, is not the whole story; the nature of the social situation also determines whether people help.

Altruistic Personality

The qualities that cause an individual to help others in a wide variety of situations

September 11 are other examples—selfless, caring people who gave their lives to save others. It is natural to assume that such people have an **altruistic personality**, the qualities that cause an individual to help others in a wide variety of situations (Eisenberg, Spinrad, & Sadovsky, 2006; Habashi, Graziano, & Hoover, 2016; Hubbard et al., 2016; Zhao, Ferguson, & Smillie, 2016).

Clearly some people have more of an altruistic personality than others, and psychologists have developed instruments to measure this quality. Go ahead and fill out the empathic concern questionnaire in the Try It! exercise below, to see where you fall on this dimension.

Whereas men are more likely to perform chivalrous and heroic acts, women are more likely to be helpful in long-term relationships that involve greater commitment.

Even if you have a high score on this measure, though, research shows that when it comes to predicting how helpful people actually are, personality is not the full story (Eisenberg et al., 2014; Graziano & Habashi, 2015; Hertz & Krettenauer, 2016). We need to consider several other critical factors as well, such as the situational pressures that are affecting people, their gender, the culture in which they grew up, how religious they are, and even their current mood (Graziano et al., 2007).

Gender Differences in Prosocial Behavior

Consider two scenarios. In one, someone performs a dramatic, heroic act, like storming the cockpit of United flight 93 to fight terrorists. In the other, someone is involved in a long-term helping relationship, such as assisting a disabled neighbor with chores around the house. Are men or women more likely to help in each situation?

The answer is males in the first situation and females in the second (Eagly, 2009; Eagly & Koenig, 2006; Einolf, 2011). In virtually all cultures, norms prescribe different traits and behaviors for males and females, learned as boys and girls are growing up. In Western cultures, the male sex role includes being chivalrous and heroic; females are expected to be nurturing and caring and to value close, long-term relationships (Rand et al., 2016). Indeed, of the 7,000 people who received medals from the Carnegie Hero

Try It!

Empathic Concern

Instructions: The following statements inquire about your thoughts and feelings in a variety of situations. For each item, indicate how well it describes you by circling the appropriate number next to the statement. Please read each item carefully before responding. Answer as honestly as you can.

	Does Not Describe Me Very Well				Describes Me Very Well
1. I often have tender, concerned feelings for people less fortunate than me.	1	2	3	4	5
2. Sometimes I don't feel very sorry for other people when they are having problems.	1	2	3	4	5
3. When I see someone being taken advantage of, I feel kind of protective toward them.	1	2	3	4	5
4. Other people's misfortunes do not usually disturb me a great deal.	1	2	3	4	5
5. When I see someone being treated unfairly, I sometimes don't feel very much pity for them.	1	2	3	4	5
6. I am often quite touched by things that I see happen.	1	2	3	4	5
7. I would describe myself as a pretty soft-hearted person.	1	2	3	4	5

Scoring: On some of the questions a high score reflects low sympathy, so we first need to "reverse score" your answers to those questions. First, reverse your answers to Questions 2, 4, and 5. That is, if you answered 1 change it to 5, if you answered 2 change it to a 4, if you answered 3 keep it the same, if you answered 4 change it to a 2, and if you answered 5 change it to a 1. Now sum your answers to all the items and divide by 7 to get your average score.

Interpretation: These questions, from a scale by Davis (1983), are a measure of empathic concern (your feelings of sympathy for other people in need). The higher your score, the more empathic concern you expressed.

Empathy and Your Age: Research shows that your score might be a function of how old you are. Recall that in Chapter 5, we saw that narcissism has increased in college students over the past few decades. Unfortunately, people's empathic concern has decreased during that same time period (Konrath, O'Brien, & Hsing, 2011). Why has empathy decreased? No one knows for sure, though the authors speculate that it might have to do with the increase in the amount of time people spend on personal technology and media, to the extent that that decreases the amount of time people spend in meaningful, face-to-face interactions with others. The increase in reality television shows might also play a role, to the extent that they portray narcissistic people concerned mostly with themselves.

Watch 92-YEAR-OLD VOLUNTEER

Fund Commission for risking their lives to save a stranger, 91% have been men. In contrast, women are more likely than men to provide social support to their friends and to engage in volunteer work that involves helping others (Eagly & Koenig, 2006; Monin, Clark, & Lemay, 2008; Volunteering in the United States, 2013). Cross-cultural evidence suggests the same pattern. In a survey of adolescents in seven countries, more girls than boys reported doing volunteer work in their communities (Flanagan et al., 1998).

Cultural Differences in Prosocial Behavior

Suppose you find out that a student at your university needs help because she lost all of her possessions in a fire at her apartment building. She has no insurance and very little money, so a call goes out to donate to a fund to help her buy clothes and other necessities. Would you donate money? Well, let's take this example a little further: Suppose that in one case the student was similar to you; she is of the same race and has a similar background. Alternatively, suppose that she is a member of a different cultural group. Perhaps you grew up in the United States and she is an international student, or vice versa. Would this make a difference in your willingness to help her?

On the one hand, there is ample evidence that people often favor their **in-groups**, or the groups with which they identify as a member, and discriminate against members of **out-groups**, defined as groups with which they do not identify (P. B. Smith, 2015). Indeed, there is a long history of discrimination and prejudice against out-group members, including those of other races, cultures, and genders, as well as people with different sexual orientations. But on the other hand, people often go out of their way to help out-group members. People donate to charities that help disadvantaged strangers and rise to the occasion when an individual is in need, even if he or she belongs to a different group.

In-Group
The group with which an individual identifies as a member

Out-Group
Any group with which an individual does not identify

Recent research resolves this conundrum. It turns out that people often help both in-group and out-group members, but for different reasons. We are more likely to feel empathy toward members of our in-groups who are in need. Thus, if the student who lost her possessions in the apartment fire is a member of your in-group, you will probably feel empathy for her, and the more empathy you feel, the more likely you are to help. We tend to help out-group members for a different reason—we do so, to put it bluntly, when there is something in it for us, such as making us feel good about ourselves or making a good impression on others. Sound familiar? Recall that Batson's empathy-altruism theory posits two routes to helping others: When we feel empathy, we help regardless of whether there is something in it for us, but when we don't feel empathy, we help only if there is something in it for us (see Figure 11.1). Research on intergroup helping suggests that we are more likely to take the first route when the person in need is an in-group member, but more likely to take the second route when the person in need is an out-group member (van Leeuwen & Täuber, 2010; Stürmer & Snyder, 2010).

More generally, are there differences in cultural values that make people in one culture more likely to help than people in another culture? One such value is *simpatía*. Prominent in Spanish-speaking countries, simpatía refers to a range of social and emotional traits, including being friendly, polite, good-natured, pleasant, and helpful toward others (interestingly, it has no direct English translation). One study tested the hypothesis that helping would be higher in cultures that value simpatía than in cultures that do not (Levine, 2003; Levine, Norenzayan, & Philbrick, 2001; Ramírez-Esparza et al., 2012). The researchers staged helping incidents in large cities in 23 countries and observed what people did. In one scenario, for example, a researcher posing as a blind person stopped at a busy intersection and observed whether pedestrians offered help in crossing or informed the researcher when the light turned green.

If you look at Table 11.1, you'll see that the percentage of people who helped (averaged across the different incidents) in countries that value simpatía was higher than in countries that did not, 83% to 66%. The researchers noted that these results are only suggestive, because the five Latin American and Spanish countries differed from the others in ways other than the value they placed on simpatía. And some countries not known for their simpatía had high rates of helping. Nevertheless, if a culture strongly values friendliness and prosocial behavior, people may be more likely to help strangers on city streets (Janoff-Bulman & Leggatt, 2002).

Table 11.1 Helping in 23 Cities

In 23 cities around the world, researchers observed how many people helped in three situations: helping a person with a leg brace who dropped a pile of magazines, helping someone who did not notice that he or she had dropped a pen, and helping a blind person across a busy intersection. The percentages in the table are averaged across the three situations. The cities in boldface are in countries that have the cultural value of *simpatía*, which prizes friendliness, politeness, and helping others.

City	Percent Helping
Rio de Janeiro, Brazil	**93**
San José, Costa Rica	**91**
Lilongwe, Malawi	86
Calcutta, India	83
Vienna, Austria	81
Madrid, Spain	**79**
Copenhagen, Denmark	78
Shanghai, China	77
Mexico City, Mexico	**76**
San Salvador, El Salvador	**75**
Prague, Czech Republic	75
Stockholm, Sweden	72
Budapest, Hungary	71
Bucharest, Romania	69
Tel Aviv, Israel	68
Rome, Italy	63
Bangkok, Thailand	61
Taipei, Taiwan	59
Sofia, Bulgaria	57
Amsterdam, Netherlands	54
Singapore	48
New York, United States	45
Kuala Lumpur, Malaysia	40

(Based on Levine, Norenzayan, & Philbrick, 2001)

Religion and Prosocial Behavior

Most religions teach some version of the Golden Rule, urging us to do unto others as we would have others do unto us. Are religious people more likely to follow this advice than nonreligious people? That is, do religious people engage in more prosocial behavior?

The answer, it turns out, is a qualified yes. A very important feature of religion is that it binds people together and creates strong social bonds. As a result, religious people are more likely to help than other people are, with an important qualification: if the person in need of help shares their religious beliefs (Galen, 2012; Graham & Haidt, 2010). Indeed, some have argued that religion was partly responsible for the dramatic increase in human population that occurred roughly 12,000 years ago. Prior to that time, human beings lived in small-scale societies in which most people knew each other. From that time forward, large scale societies began to flourish, in which strangers lived together in large towns and cities. How did strangers learn to live together peacefully in such large numbers? One reason, according to Ara Norenzayan and colleagues (2016), is that members of those societies shared religious beliefs that stressed cooperation with like-minded individuals, even if they were strangers.

One study, for example, examined 200 utopian communities that arose in the United States in the 19th century. Which ones lasted longer, those that were based on shared religious beliefs or those that were nonreligious? As seen in

#trending

Helping Across the Political Divide

As just seen, people are more likely to help in-group members than out-groups members. And, in Chapter 13, we will see how prone human beings are to divide people in to in-groups and out-groups, resulting in stereotyping and prejudice toward those who are "not like me." But in this chapter we also saw that people *will* help a stranger, across group lines, if they feel empathy toward that person. This is what seems to have happened on Monday, January 23, 2017, in a Washington D.C. restaurant.

Jason White, a White dentist from West Texas, was in town for Donald Trump's inauguration. A Trump supporter from the beginning, he and two friends had spent the weekend celebrating President Trump's election. At breakfast that Monday morning, their server was Rosalynd Harris, a 25-year-old African American dancer who was working there to make ends meet. In contrast to her three patrons, Ms. Harris was not a Trump supporter and was in fact feeling quite energized by the Women's March on Washington that had occurred the day after the presidential inauguration.

Think about how this encounter could have gone wrong: Given the partisan divide in America, one can imagine any number of ways that two people of different races at opposite ends of the political spectrum might have acted suspiciously, or even with hostility, toward each other. Instead they had a warm and friendly conversation. They joked, they chatted cheerfully, they learned a little bit about each other. "You automatically assume if someone supports Trump that they have ideas about you," she [Ms. Harris] said, "but [the customer was] more embracing than even some of my more liberal friends, and there was a real authenticity in our exchange" (Itkowitz, 2017).

After White had finished his meal and left, Harris noticed that he had written something on the receipt: "We may come from different cultures and may disagree on certain issues," she read, "but if everyone would share their smile and kindness like your beautiful smile, our country will come together as one people. Not race. Not gender. Just American" (Itkowitz, 2017). And, accompanying the note was a $450 tip.

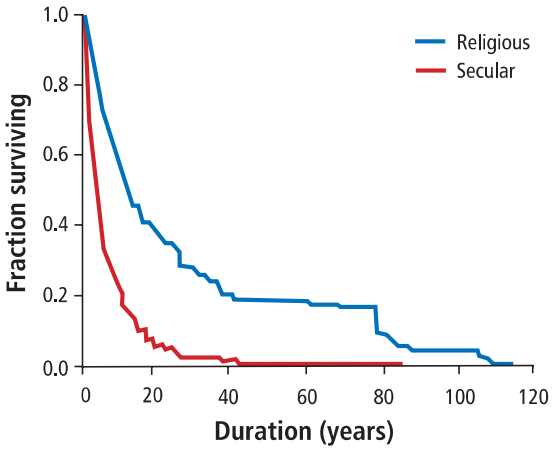
Based on what you've read in this chapter, why do you think White acted so generously toward a complete stranger who differed from him in so many ways? According to Batson's empathy-altruism hypothesis, it is because he felt empathy toward her and realized she could probably use the money. This doesn't mean there was nothing in it for him, as we discussed earlier, he may well have experienced the satisfaction and glow that results from helping another person. But this example shows that under the right circumstances, people will reach out and help others who are not members of their in-group.

Figure 11.3, religious ones lasted longer, possibly because their religious values increased the likelihood that the members of the commune cooperated with each other (Solis, 2000).

Note that this evidence concerns how likely religious people are to help in-group members, namely those who share their religious values. Are religious people more likely to help out-group members, namely those who don't necessarily share their values? The evidence suggest that the answer is no. When it comes to helping strangers, for example, such as donating blood, or tipping a waiter or waitress, religious people are no more helpful than nonreligious people (Batson, Schoenrade, & Ventis, 1993; Galen, 2012; Preston, Ritter, & Hernandez, 2010). And, there is some evidence that religious beliefs *increase* hostilities toward outgroup members who do not share those beliefs (Hobson & Inzlicht, 2016). Religion is likely another example of in-group favoritism, which, as we saw in the previous section on cultural differences in helping, occurs because people feel more empathy toward in-group than out-group members.

Figure 11.3 The Duration of Religious and Non-Religious Communes in the 19th Century

Nineteenth-century communes whose members shared religious beliefs lasted longer than nonreligious communes. From Solis, 2000.



The Effects of Mood on Prosocial Behavior

It turns out that it also matters what mood people are in. Whether people are in good, bad, or neutral moods can have surprising effects on how helpful they will be.

EFFECTS OF POSITIVE MOODS: FEEL GOOD, DO GOOD In a classic study, researchers wanted to see whether people's mood influenced the likelihood that they would help a stranger in a real world setting (Isen & Levin, 1972). To find out, they staged a helping opportunity at a shopping mall, whereby a man "accidentally" dropped a manila folder full of papers in front of stranger who was by himself or herself. The researchers then observed whether the stranger stopped and helped the man pick up the papers. But how did they experimentally manipulate the stranger's mood? They did so in a clever way, namely by leaving a dime in the coin-return slot of a public telephone at the mall and then waiting for someone to find it. (Note that when this study was done there were no cell phones, so people relied on pay phones, and also that 10 cents then would be like finding 50 cents today.) Half of the time the research assistant dropped the folder in front of a stranger who had just found the planted dime, and thus had just gotten a temporary mood boost, and half of the time he dropped the folder in front of a stranger who had just used the phone without a planted dime. Now, it might not seem like finding a dime would influence people's moods very much, or affect their likelihood of helping a stranger, but the results were dramatic: Only 4% of the people who did not find a dime helped the man pick up his papers, whereas a whopping 84% of the people who found a dime stopped to help.

This "feel good, do good" effect has been replicated many times with different ways of boosting people's moods (including giving positive feedback on a test, giving gifts, and playing cheerful music; North, Tarrant, & Hargreaves, 2004) and with many different ways of measuring helping (e.g., whether people help someone find a lost contact lens, tutor another student, donate blood, or help coworkers on the job; Carlson, Charlin, & Miller, 1988; Isen, 1999; Kayser et al., 2010).

FEEL BAD, DO GOOD Should you avoid asking people to help when they are in a bad mood? Given that feeling happy leads to greater helping, it might seem that feeling sad would lower it. Surprisingly, however, sadness can also lead to an increase in helping, because when people are sad, they are motivated to engage in activities that make them feel better. And, because helping others is rewarding, it can lift people out of the doldrums. Thus, you might have luck asking people to help with your community service project if they are in sad moods (as opposed to neutral moods; Cialdini & Fultz, 1990; Wegener & Petty, 1994; Yue, Wang, & Groth, 2016).

Another kind of bad mood also increases helping: feeling guilty (Ahn, Kim, & Aggarwal, 2014; Xu, Bègue, & Bushman, 2012). People often act on the idea that good deeds cancel out bad deeds. When they have done something that has made them feel guilty, helping another person balances things out, reducing their guilty feelings. For example, one study found that Catholic churchgoers were more likely to donate money to charities before attending confession than afterward, presumably because confessing to a priest reduced their guilt (Harris, Benson, & Hall, 1975).

Review Questions

1. Which of the following is true?
   - **a.** People with high scores on tests of altruism are *not* that much more likely to help another person than people with low scores.
   - **b.** People with high scores on tests of altruism *are* much more likely to help another person than people with low scores.
   - **c.** If a person has an altruistic personality, then they are quite likely to overcome situational pressures preventing them from helping someone.
   - **d.** The genes for an altruistic personality have been identified by evolutionary psychologists.
2. _____ is most likely to dive into a pond to save a drowning child, whereas _____ is most likely to do errands for an elderly neighbor every week.
   - **a.** A woman; a man
   - **b.** A man; a woman
   - **c.** An East Asian citizen; a Western citizen
   - **d.** A Western citizen; an East Asian citizen

3. In which city are people most likely to help a blind person cross a street?
   a. New York, USA
   b. Amsterdam, Netherlands
   c. Budapest, Hungary
   d. Rio de Janeiro, Brazil
4. Which person is *least* likely help a blind person cross the street?
   a. Marco, who is having a normal day and is in a neutral mood
   b. Silvi, who just got an A on a paper and is thus in a good mood
   c. Olivia, who just got a D on a paper and is thus feeling sad
   d. Brandon, who just cheated on his girlfriend and is thus feeling guilty

Situational Determinants of Prosocial Behavior: When Will People Help?

LO 11.3 **Describe the situations in which people are more likely, or less likely, to help others.**

Personality, gender, culture, religion, and mood all contribute a piece to the puzzle of why people help others, but they do not complete the picture. To understand more fully why people help, we also need to consider the social situation in which people find themselves.

Environment: Rural Versus Urban

Here's another helping scenario for you. Suppose you are walking down the street one day when you see a man suddenly fall down and cry out with pain. He rolls up his pants leg, revealing a bandaged shin that is bleeding heavily. What would you do? When this event was staged in small towns, about half the people who walked by stopped and offered to help the man. But in large cities, only 15% of passersby stopped to help (Amato, 1983). Other studies have found that people in small towns are more likely to help when asked to find a lost child, give directions, and return a lost letter. Increased helping in small towns has been found in several countries (Hedge & Yousif, 1992; Oishi, 2014; Steblay, 1987).

Why are people more likely to help in small towns? One possibility is that people who grow up in a small town are more likely to internalize altruistic values.

People are less helpful in big cities than in small towns, not because of a difference in values, but because the stress of urban life causes them to keep to themselves.

If this were the case, people who grew up in small towns would be more likely to help, even if they were visiting a big city. Alternatively, the immediate surroundings might be the key and not people's internalized values. Stanley Milgram (1970), for example, suggested that people living in cities are constantly bombarded with stimulation and that they keep to themselves to avoid being overwhelmed by it. According to this **urban overload hypothesis**, if you put urban dwellers in a calmer, less stimulating environment, they would be as likely as anyone else to reach out to others. Research has supported the urban overload hypothesis more than the idea that living in cities makes people less altruistic by nature. Thus, to predict whether people will help, it is more important to know whether they are currently in a rural or urban area than it is to know where they happened to grow up (Levine et al., 1994; Steblay, 1987).

Urban Overload Hypothesis
The theory that people living in cities are constantly bombarded with stimulation and that they keep to themselves to avoid being overwhelmed by it

Residential Mobility

In many areas of the world, it is common for people to move far away from where they were raised (Hochstadt, 1999). In the year 2000, for example, nearly one in five Americans (18%) were living in a different state than they were in 1995 (Migration and Geographic Mobility, 2003), and in many urban areas, fewer than half of the residents were living in the same house as they were in 1995 (Oishi et al., 2007).

As it turns out, people who have lived for a long time in one place are more likely to engage in prosocial behaviors that help their community. Residing in one place leads to a greater attachment to the community, more interdependence with one's neighbors, and a greater concern with one's reputation in the community (O'Brien, Gallup, & Wilson, 2012; Oishi, 2014; Oishi et al., 2015). For all these reasons, long-time residents are more likely to engage in prosocial behaviors. Shigehiro Oishi and colleagues (2007), for example, found that people who had lived for a long time in the Minneapolis-St. Paul area were more likely to purchase "critical habitat" license plates, compared to people who had recently moved to the area. (These license plates cost an extra $30 a year and provide funds for the state to purchase and manage natural habitats.)

Perhaps it is not surprising that people who have lived in one place for years feel more of a stake in their community. Oishi and his colleagues (2007) also found, though, that this increase in helping can arise quite quickly, even in a one-time laboratory setting. Imagine that you are in a study in which you are playing a trivia contest against four other students, where the winner will win a $10 gift certificate. The experimenter says that people in the group can help each other if they want, but that doing so might lower the helper's chances of winning the prize. As the game progresses, one of your fellow group members keeps sighing and commenting that he doesn't know the answers to the questions. Would you offer him some help or let him continue to struggle on his own?

The answer, it turns out, depends on how long you have been in the group with the struggling student. The study by Oishi and colleagues involved a total of four tasks; the trivia contest was the last one. Half of the participants remained together and worked on all the tasks throughout the study, whereas the other half switched to a new group after each task. Thus, in the former condition people had more of an opportunity to get to know each other and form a sense of community, whereas the latter group was more analogous to moving from one community to another. As the researchers predicted, people in the "stable community" condition were more likely to help their struggling companion than were people in the "transient" group condition. Another reason that people might be less helpful in big cities, then, is that residential mobility is higher in cities than in rural

areas. People are more likely to have just moved to a city and thus feel less of a stake in the community.

The Number of Bystanders: The Bystander Effect

On March 11, 2011, in Bethesda, Maryland, Jayna Murray was brutally murdered by a coworker inside the clothing store where they worked. Two employees in an Apple store next door heard the murder through the walls, including cries for help from Murray, but did nothing to help (Johnson, 2011). In October of 2011 in Southern China, a 2-year-old girl was run over by two vans, minutes apart, and lay in the street dying. Neither car stopped, and a dozen people walked or rode past the girl without offering help (Branigan, 2011). In September of 2013 in Philadelphia, a transit police officer was beaten by a man he was trying to arrest, in front of more than a dozen onlookers, none of whom intervened or called 911 (Ubinas, 2013).

Why did the bystanders fail to come to the aid of a fellow human being who was in dire need of help? We have just discussed one possibility, namely that the passersby kept to themselves because they were overloaded with urban stimulation (all of the events took place in large cities). Although this may be part of the reason, these kinds of failures to help are not limited to big cities. In Fredericksburg, Virginia, for example, a town of 28,000 residents, a convenience store clerk was beaten in front of customers, who did nothing to help, even after the assailant had fled and the clerk lay bleeding on the floor (Hsu, 1995).

Maybe the answer is that people are just too afraid or cowardly to do anything. That was the premise of the movie *Kick-Ass*, in which the main character, a nerdy high school student who gets picked on by bullies, decides to become a superhero to help those in need. Unlike superheroes in comic books he doesn't have any super powers, but donning a costume and assuming an alternative identity gives him the courage to confront bullies and bad guys. But as entertaining as the movie is, it misses a key social psychological point: Often, the fact that many people fail to help in emergencies is not because of who they are, but because of the nature of the social situation.

Bibb Latané and John Darley (1970) were the first to propose this idea and put it to the test. The key situational variable, they thought, might be the number of bystanders who witness an emergency. Paradoxically, they reasoned, the greater the number of bystanders who observe an emergency, the less likely any one of them is to help. In each of the three brutal incidents we described earlier, more than one bystander witnessed the emergency, and this may have been the key to why no one intervened.

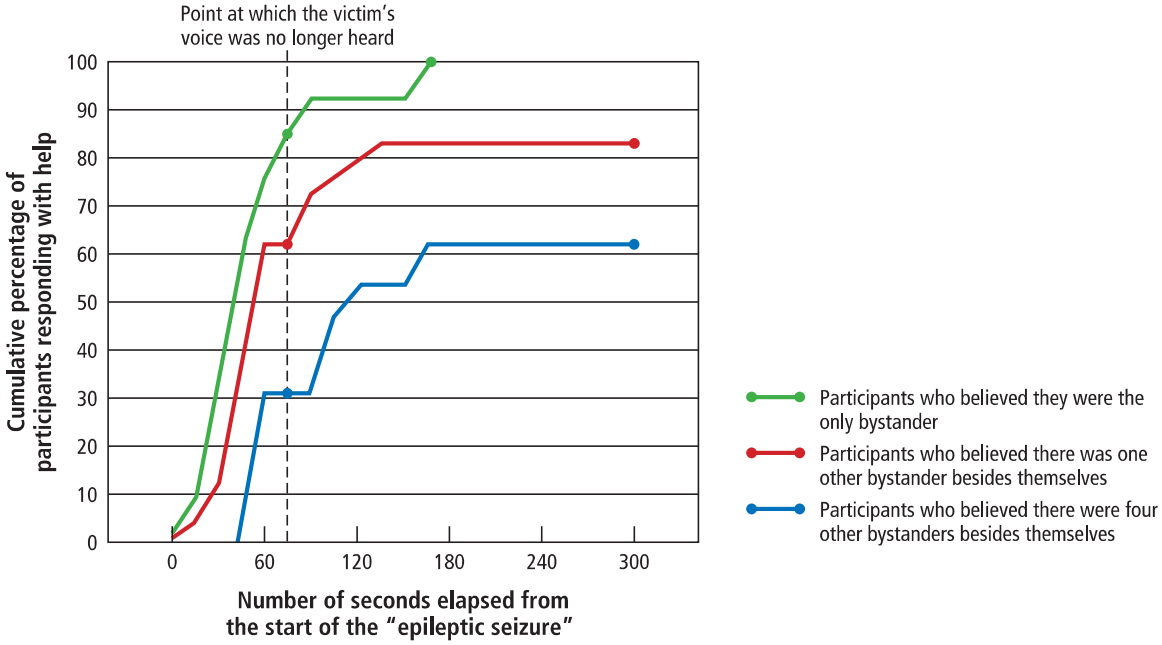
In a series of now-classic experiments, Latané and Darley (1970) found support for this hypothesis. Think back to the seizure experiment we discussed in Chapter 2. In that study, people sat in individual cubicles, participating in a group discussion of college life (over an intercom system) with students in other cubicles. One of the other students suddenly had a seizure, crying out for help, choking, and finally falling silent. There was actually only one real participant in the study. The other "participants," including the one who had the seizure, were prerecorded voices. The point of the study was to see whether the real participant would attempt to help the seizure victim by trying to find him or by summoning the experimenter, or whether the participant would simply sit there and do nothing.

As Latané and Darley anticipated, the answer depended on how many people the participant thought witnessed the emergency. When people believed they were the only ones listening to the student having the seizure, most of them (85%) helped within 60 seconds. By 2 1/2 minutes, 100% of the people who thought they were the only bystander had offered assistance (see Figure 11.4). In comparison, when the research

Figure 11.4 Bystander Intervention: The Presence of Bystanders Reduces Helping

When people believed they were the only one witnessing a student having a seizure, when they were the lone bystander, most of them helped him immediately, and all did so within a few minutes. When they believed that someone else was listening as well, that there were two bystanders, they were less likely to help and did so more slowly. And when they believed that four others were listening, that there were five bystanders, they were even less likely to help.

(Based on Darley & Latané, 1968)



participants believed there was one other student listening, fewer helped—only 62% within 60 seconds; helping occurred more slowly when there were two bystanders and never reached 100%, even after 6 minutes, when the experiment was ended. Finally, when the participants believed there were four other students listening in addition to themselves, the percentage of people who helped dropped even more dramatically. Only 31% helped in the first 60 seconds, and after 6 minutes only 62% had offered help. Dozens of other studies, conducted in the laboratory and in the field, have found the same thing: The greater the number of bystanders who witness an emergency, the less likely any one of them is to help the victim—a phenomenon called the **bystander effect** (Fischer et al., 2011).

Bystander Effect
The finding that the greater the number of bystanders who witness an emergency, the less likely any one of them is to help

Why is it that people are less likely to help when others are present? Latané and Darley (1970) developed a five-step tree that describes how people decide whether to intervene in an emergency (see Figure 11.5). Part of this description is an explanation of how the number of bystanders can make a difference. But let's begin with the first step—whether people notice that someone needs help.

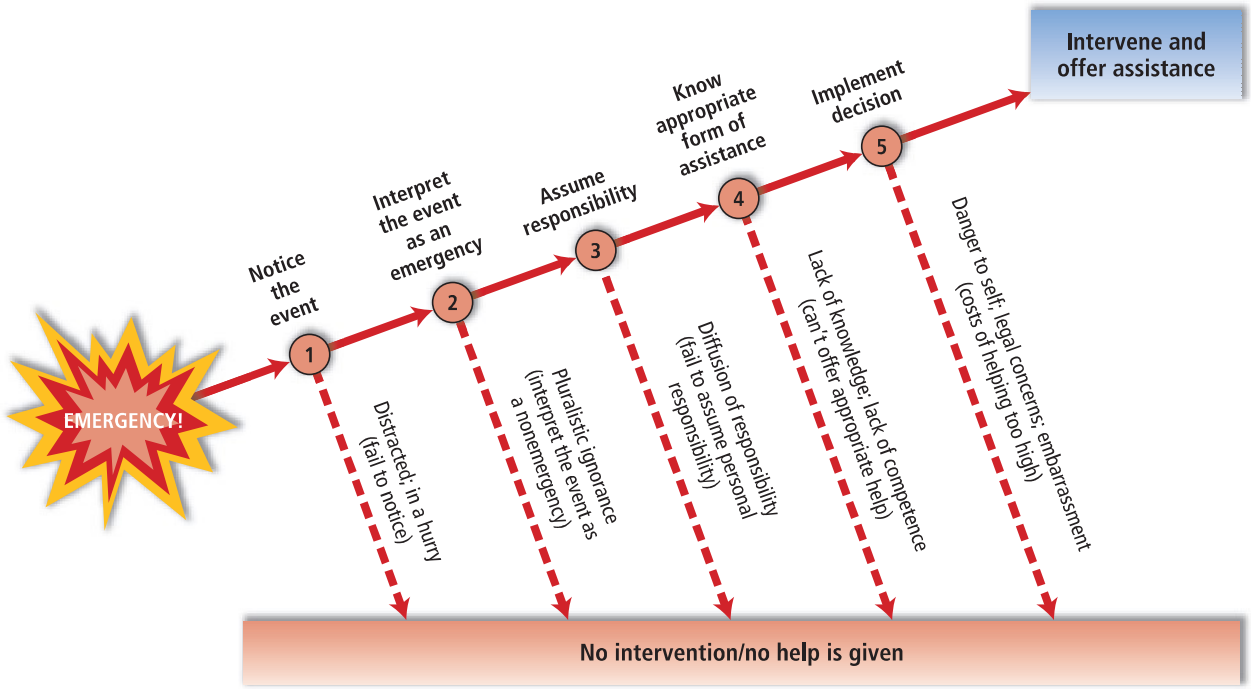
NOTICING AN EVENT If you are hurrying down a crowded street, you might not notice that someone has collapsed in a doorway. Obviously, if people don't notice that an emergency situation exists, they will not intervene and offer to help. What determines whether people notice an emergency?

John Darley and Daniel Batson (1973) demonstrated that something as seemingly trivial as how much of a hurry people are in can make more of a difference than what kind of people they are. These researchers conducted a study that mirrored the parable of the Good Samaritan, wherein many passersby failed to stop to help a man lying unconscious at the side of the road. The research participants were people we might think would be extremely altruistic—seminary students preparing to devote their lives to the ministry. The students were asked to walk to another building,

Figure 11.5 Bystander Intervention Decision Tree: Five Steps to Helping in an Emergency

Latané and Darley (1970) showed that people go through five decision-making steps before they help someone in an emergency. If bystanders fail to take any one of the five steps, they will not help. Each step is outlined here, along with the possible reasons why people decide not to intervene.

(Based on Darley & Latané, 1968)



where the researchers would record them making a brief speech. Some were told that they were late and should hurry to keep their appointment. Others were told that there was no rush because the assistant in the other building was running a few minutes behind schedule. As they walked to the other building, each of the students passed a man who was slumped in a doorway. The man (an accomplice of the experimenters) coughed and groaned as each student walked by. Did the seminary students stop and offer to help him? If they were not in a hurry, most of them (63%) did. If they were hurrying to keep their appointment, however, only 10% stopped to help. Many of the students who were in a hurry did not even notice the man.

Surely if people were deeply religious, they would be less influenced by such a small matter as how hurried they were. Surprisingly, though, Darley and Batson (1973) found that the seminary students who were the most religious were no more likely to help than those who were the least religious. What about if they were thinking about helping people in need? The researchers also varied the topic of the speech they asked the students to give. Some were asked to discuss the kinds of jobs seminary students preferred; others were asked to discuss the parable of the Good Samaritan. You might think that seminary students who were thinking about the parable of the Good Samaritan would be especially likely to stop and help a man slumped in a doorway, given the similarity of this incident to the parable, but the topic of the speech made little difference in whether they helped. Students in a hurry were unlikely to notice the man and help, even if they were very religious and about to give a speech about the Good Samaritan.

INTERPRETING THE EVENT AS AN EMERGENCY Even if people do notice someone slumped in a doorway, they might not stop and help. The next determinant of helping is whether the bystander interprets the event as an emergency—as a situation where help is needed (see Figure 11.5). Sometimes, of course, there is little doubt that an emergency has occurred, such as when we witness a car accident and see that

people have been seriously injured. Under these circumstances, the number of bystanders is less likely to matter, because people know that help is needed (Fischer et al., 2011). Often, however, the situation is more ambiguous.

Is the person in the doorway drunk or seriously ill? Did the scream we just heard come from someone having a good time at a party or is someone being attacked? If people assume that what they witnessed is not an emergency, then obviously they will not help.

In ambiguous situations such as these, the number of bystanders makes a difference in a curious way: The greater the number of people who witness an emergency, the less likely they are to *know* that it is an emergency. To understand why, think back to our discussion of informational social influence in Chapter 8. This type of social influence occurs when we use other people to help us define reality. Suppose, for example, that you are sitting in class one day and notice that some white vapor or smoke is coming out of an air conditioning vent. Because you aren't sure what to make of this, you do what comes naturally to us all; you look around and see how other people are responding. You notice that the person to your left is looking at the vent and doesn't seem at all concerned, so you conclude that there is nothing to worry about. "Probably just some water vapor from the air conditioning system," you think. As we saw in Chapter 8, using other people to help us interpret an ambiguous event is often a good strategy. The danger is that no one may know exactly what is going on, and mistakenly assume that everyone else does. For example, the guy sitting to your left in the class may look unconcerned because he saw that *you* weren't panicking. Emergencies are often confusing and sudden events, and bystanders tend to freeze, watching with blank expressions as they try to figure out what is happening (Van den Bos & Lind, 2013). When they glance at each other, they see an apparent lack of concern on the part of everyone else. This results in a state of **pluralistic ignorance**, wherein people think that everyone else is interpreting a situation in a certain way, when in fact they are not.

Pluralistic Ignorance
The case in which people think that everyone else is interpreting a situation in a certain way, when in fact they are not

This white-smoke scenario is taken from another classic experiment by Latané and Darley (1970) and illustrates the dangers of pluralistic ignorance. Again, imagine you were a participant and arrive at the appointed time for a study of people's attitudes toward the problems of urban life. A sign tells you to fill out a questionnaire while you're waiting for the study to begin, so you take a seat and get started. Then you notice something odd: White smoke is trickling into the room through a small vent in the wall. Before long, the room is so filled with smoke that you can barely see the questionnaire. What will you do?

In fact, there was no real danger—the experimenters were pumping smoke into the room to see how people would respond to this potential emergency. Not surprisingly, when people were alone, most of them took action. Within 2 minutes, 50% of the participants left the room and found the experimenter down the hall, reporting that there may have been a fire in the building; by 6 minutes, 75% of the participants had left the room to alert the experimenter.

Watch PLURALISTIC IGNORANCE AND EMERGENCIES

But what would happen if people were not alone? Given that 75% of the participants who were by themselves reported the smoke, it would seem that the larger the group, the greater the likelihood that someone would report the smoke. In fact, this can be figured mathematically: If there is a 75% chance that any one person will report the smoke, then there is a 98% chance that at least one person in a three-person group will do so.

To find out if there really is safety in numbers, Latané and Darley (1970) included a condition

in which three participants took part at the same time. Everything was identical except that three people sat in the room as the smoke began to seep in. Surprisingly, in only 12% of the three-person groups did someone report the smoke within 2 minutes, and in only 38% of the groups did someone report the smoke within 6 minutes. In the remaining groups, the participants sat there filling out questionnaires even when they had to wave away the smoke with their hands to see what they were writing. What went wrong?

Unsure whether the smoke signaled an emergency, participants used each other as a source of information. If the people next to you glance at the smoke and then continue filling out their questionnaires, you will feel reassured that nothing is wrong; otherwise, why would they be acting so unconcerned? The problem is that they are probably looking at you as well, and if you seem untroubled, they too are reassured that everything is OK. In short, each group member is reassured because they assume that everyone else knows more about what's going on than they do. And when the event is ambiguous—as when smoke is coming from a vent—people in groups will convince each other that nothing is wrong, resulting in potentially tragic cases of pluralistic ignorance (Clark & Word, 1972; Solomon, Solomon, & Stone, 1978).

Emergency situations can be confusing. Does this man need help? Have the bystanders failed to notice him or has the behavior of the others led each of them to interpret the situation as a nonemergency—an example of pluralistic ignorance?

ASSUMING RESPONSIBILITY Sometimes it is obvious that an emergency is occurring, such as when the bystanders in Philadelphia witnessed the transit officer being attacked by a man he was trying to arrest. That they did nothing indicates that even if we interpret an event as an emergency, we have to decide that it is *our* responsibility, not someone else's, to do something about it. Here again the number of bystanders is a crucial variable.

Think back to the Latané and Darley (1968) seizure experiment in which participants believed they were the only one listening to the student while he had a seizure. The responsibility was totally on their shoulders. If they didn't help, no one would, and the student might die. As a result, in this condition most people helped almost immediately, and all helped within a few minutes.

But what happens when there are many witnesses? A **diffusion of responsibility** occurs: Each bystander's sense of responsibility to help decreases as the number of witnesses increases. Because other people are present, no single bystander feels a strong personal responsibility to act. Recall from our previous discussion that helping often entails costs: We might be putting ourselves in danger or end up looking foolish by overreacting or doing the wrong thing. Why should we risk these costs when many other people who can help are present? One study found that a diffusion of responsibility even among 5-year-olds. When an experimenter "accidentally" knocked over a glass of water, 95% of children helped clean it up, if they were the only person to witness the accident. But when two other children were present and didn't help (they were accomplices

Diffusion of Responsibility
The phenomenon wherein each bystander's sense of responsibility to help decreases as the number of witnesses increases

Watch SURVIVAL TIPS! DIFFUSION OF RESPONSIBILITY IN FIELD HOCKEY

of the experimenter and were instructed to do nothing), then only 55% of the children helped (Plötner et al., 2015).

A diffusion of responsibility is particularly likely to occur when people cannot tell whether someone else has already intervened. When participants in the seizure experiment believed that other students were witnesses as well, they couldn't tell whether another student had already helped, because the intercom system allowed only the voice of the student having the seizure to be transmitted. Each student probably assumed that he or she did not have to help, thinking that surely someone else had already done so. The same is true in many real-life emergencies; when we drive by a car accident on the highway, for example, we assume that someone else has already called 911.

KNOWING HOW TO HELP Even if people have made it this far in the helping sequence, another condition must still be met (Step 4 in Figure 11.5): They must decide what kind of help is appropriate. Suppose that on a hot summer day you see a woman collapse in the street. No one else seems to be helping, so you decide it is up to you. But what should you do? Has the woman had a heart attack? Is she suffering from heatstroke? Should you call an ambulance, administer CPR, or try to get her out of the sun? If people don't know what form of assistance to give, obviously they will be unable to help.

DECIDING TO IMPLEMENT THE HELP Finally, even if you know exactly what kind of help is appropriate, there are still reasons why you might decide not to intervene. For one thing, you might not be qualified to deliver the right kind of help. Even if the woman is complaining of chest pains, indicating a heart attack, you may not know how to give her CPR. Or you might be afraid of making a fool of yourself, of doing the wrong thing and making matters worse, or even of placing yourself in danger by trying to help. Consider the fate of three television network technicians who in 1982 saw a man beating a woman in a New York parking lot, tried to intervene, and were shot and killed by the assailant. Even when we know what kind of intervention is needed, we have to weigh the costs of trying to help.

Diffusion of Responsibility in Cyberspace

People increasingly interact on social media sites and chat rooms and sometimes encounter requests for help. Are people less likely to help each other as the number of people in the chat room increases, as Latané and Darley's model predicts? Researchers in one study entered chat groups on Yahoo! Chat where 2 to 19 people were discussing a wide variety of topics (Markey, 2000). The researchers posed as either a male or female participant and typed this request for help: "Can anyone tell me how to look at someone's profile?" (p. 185). The message was addressed either to the group as a whole or to one randomly selected person in the chat room. Then the researchers timed how long it took someone in the group to respond to the request for help.

When the request was addressed to the group as a whole, Latané and Darley's results were replicated closely: The more people there were in the chat room, the longer it took for anyone to respond to the request for help. But when the request was directed to a specific person, that person responded quickly, regardless of the size of the group. These results suggest that the diffusion of responsibility was operating. When a general request for help is made, a large group makes people feel that they do not have much responsibility to respond. When addressed by name, though, people are more likely to feel a responsibility to help, even when many others are present (van Bommel et al., 2012).

Effects of the Media: Video Games and Music Lyrics

When we think about the effects of the media on behavior, we usually think about negative influences, such as whether violence on television or playing violent video games makes people more aggressive. There are indeed such negative effects, which we discuss in Chapter 12. But can the opposite also occur, such that seeing people act in prosocial ways or playing prosocial video games makes people more cooperative? Recent research suggests that it can.

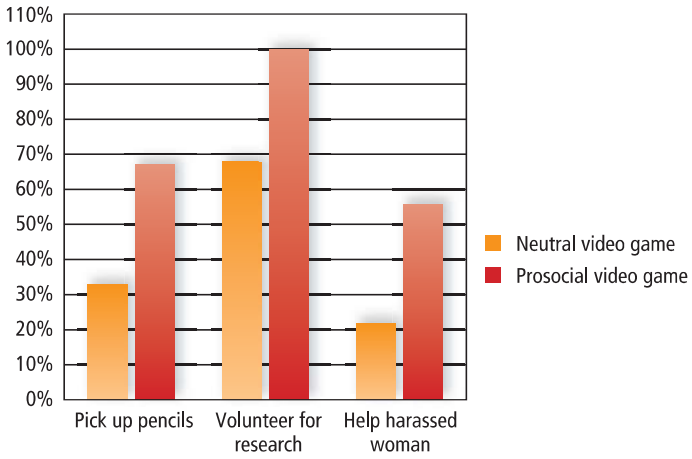
Tobias Greitemeyer and his colleagues have conducted a number of studies that follow the same procedure: First, participants come into the lab and play a video game for about 10 minutes. Half are randomly assigned to play a game that involves prosocial acts, such as *Lemmings*, in which the goal is to care for a group of small beings and save them by helping them find the exit out of different worlds. The other half play a neutral video game such as *Tetris*, where the goal is to rotate falling geometric figures so that they cover the bottom of the screen. Participants then take part in what they think is an unrelated study, in which they are given the opportunity to help someone. The helping opportunities include relatively easy actions such as helping an experimenter pick up a cup of pencils that he or she accidentally knocked over, more time-consuming commitments such as volunteering to participate in future studies without compensation; and potentially dangerous actions such as helping a female experimenter when an ex-boyfriend enters the room and starts harassing her. As seen in Figure 11.6, people who had just played a prosocial video game were more likely to help in all of these ways than were people who had just played a neutral video game (Greitemeyer & Osswald, 2010; Prot et al., 2014).

It isn't just prosocial video games that can make people more helpful—listening to songs with prosocial lyrics works too. Studies have found that people who listen to songs such as Michael Jackson's *Heal the World* or the Beatles' *Help* are more likely to help someone than people who listened to songs with neutral lyrics such as the Beatles' *Octopus's Garden* (Greitemeyer, 2009, 2011; North et al., 2004).

Why does playing a prosocial video game or listening to prosocial song lyrics make people more helpful? It works in at least two ways: by increasing people's empathy toward someone in need of help and increasing the accessibility of thoughts about helping others (Greitemeyer, Osswald, & Brauer, 2010). So, if you ever find yourself in need of help and see someone approaching with headphones on, hope that he or she is listening to music with prosocial lyrics!

Figure 11.6 Effects of Playing Prosocial Video Games on the Likelihood of Helping

(Based on Greitemeyer & Osswald, 2010)



Review Questions

1. Which of the following people is most likely to agree to help clean up a park in a large city?
   - **a.** Brian, who just moved to that city
   - **b.** Rachel, who grew up in a small town
   - **c.** Jiaying, who has lived in that city her entire life
   - **d.** David, who just played a violent video game

2. Which one of the following is *not* part of the Bystander Intervention Decision Tree?
   - **a.** Having an altruistic personality
   - **b.** Interpreting an event as an emergency
   - **c.** Assuming responsibility
   - **d.** Knowing the appropriate form of assistance

3. Suppose that Jinyi sends a tweet asking for someone to help her move a couch into her apartment. Under which of these conditions is one of her followers mostly likely to agree to help?
   a. Jinyi has a very large number of followers.
   b. Jinyi just began tweeting and has only a few followers.
   c. Jinyi lives in a very large city.
   d. Jinyi grew up in the United States.

4. Which of the following people is *least* likely to help someone who dropped a folder of papers on her way to class?
   a. Julia, who just listened to Michael Jackson's song *Heal the World*
   b. Owen, who just played the videogame *Lemmings*
   c. Chanel, who just listened to the Beatles song *Help*
   d. Ben, who just played the videogame *Tetris*

How Can Helping Be Increased?

LO 11.4 Explain what can be done to promote prosocial behavior.

What can we do to get people to help those in need? Before addressing this question, we should point out that people do not always want to be helped. Imagine that you are sitting in a coffee shop and are trying to figure out how to upload a video from your phone to a new social media site. You're having trouble getting it to work when a guy you know saunters over, looks over your shoulder for a few minutes and then says, "You have a lot to learn. Let me show you how to do it." How would you react? You might feel gratitude, but you will probably also feel some resentment. His offer of help comes with a message: "You are too stupid to figure this out for yourself." Because receiving help can make people feel inadequate and dependent, they do not always react positively when someone offers them aid. People do not want to appear incompetent, so they often decide to suffer in silence, even if doing so lowers their chances of successfully completing a task (Alvarez & Van Leeuwen, 2011; Halabi, Nadler, & Dovidio, 2013).

Nevertheless, the world would be a better place if more people helped those in need. How can we increase everyday acts of kindness, such as looking out for an elderly neighbor or volunteering to read to kids at the local school? The answer to this question lies in our discussion of the causes of prosocial behavior. For example, we saw that several personal characteristics of potential helpers are important, and promoting those factors can increase the likelihood that these people will help (Clary et al., 1994; Snyder, 1993). But even kind, altruistic people will fail to help if certain situational constraints are present, such as being in an urban environment or witnessing an emergency in the presence of numerous bystanders.

Increasing the Likelihood That Bystanders Will Intervene

There is evidence that simply being aware of the barriers to helping in an emergency can increase people's chances of overcoming those barriers. A few years ago at Cornell University, several students intervened to prevent another student from committing suicide. As is often the case with emergencies, the situation was very confusing, and at first the bystanders were not sure what was happening or what they should do. The student who led the intervention said that she was reminded of a lecture she had heard on bystander intervention in her introductory psychology class a few days before and realized that if she didn't act, no one would (Savitsky, 1998). Or consider an incident at Vassar College not long ago where students saw someone being attacked by a mugger. As so often happens with incidents like this, most of the bystanders did nothing, probably because they assumed that somebody else had already called the police. One of the students, however, immediately called the campus police because she was struck by how similar the situation was to the studies on bystander intervention she had read about in her social psychology course—even though she had taken the class more than a year earlier (Coats, 1998).

These are not controlled experiments, of course, and we cannot be certain that these helpful people were spurred on by what they had learned in their psychology classes. Fortunately, this question has been addressed experimentally (Beaman et al., 1978). The researchers randomly assigned students to listen to a lecture about Latané and Darley's (1970) bystander intervention research or a lecture on an unrelated topic. Two weeks later, all the students participated in what they thought was a completely unrelated sociology study, during which they came across a student lying on the floor. Was he in need of help? Had he fallen and injured himself, or was he simply a student who had fallen asleep after pulling an all-nighter? As we have seen, when in an ambiguous situation such as this one, people look to see how other people are reacting. Because an accomplice of the experimenter (posing as another participant) intentionally acted unconcerned, the natural thing to do was to assume that nothing was wrong. This is exactly what most participants did if they had not heard the lecture about bystander intervention research; in this condition, only 25% of them stopped to help the student. However, if the participants had heard the lecture about bystander intervention, 43% stopped to help the student. Thus, knowing how we can be unwittingly influenced by others can by itself help overcome this type of social influence and make us more likely to intervene in a possible emergency.

Would it help to train people more broadly to "not be a bystander" and help when needed? Consider, for example, the all-too-common problem of violence in our society, including sexual violence, bullying, and stalking. Many of us have probably had the experience of seeing someone who might be at risk for such violence but we failed to intervene, because we weren't sure what to do or because there were lots of other people available to help. Suppose, for example, that you are at a college party and see a man gripping a woman by the arm and leading her out of the room. She doesn't seem to be leaving voluntarily, or is she? It's probably OK, you think. After all, no one else is doing anything about it. The man is probably a friend of the woman's and is helping her home because she has had too much to drink.

But by now you know that the other bystanders might be in the same position as you, failing to help because they don't see anyone else reacting with alarm (including you!). And now that you know about the bystander effect and diffusion of responsibility, we hope you are more likely to jump in and ask the woman if she is OK.

Indeed, this is the premise behind bystander intervention training programs such as Green Dot—that people can be trained to be better bystanders by understanding the difficulties of helping in situations such as the one we just described. Many colleges have adopted programs such as this, and although they are new, there is some initial evidence that they work. In one study, for example, researchers tracked the incidence of sexual violence in 26 high schools, after randomly assigning half of them to get Green Dot bystander intervention training and half to a control group that did not get the training. Over a 5-year period, there were significantly fewer reports of sexual violence in the schools that got the training (Coker et al., 2017).

Another approach is simply to remind ourselves that it can be important to overcome our inhibitions and do the right thing. When people find themselves in situations that are surprising and difficult to understand—which is certainly the case when emergencies arise—they naturally "freeze" and try to make sense of what is happening around them (van den Bos & Lind, 2013). This is particularly likely to happen when people are in public and worry about "doing the wrong thing" in front of others.

Maybe people who are concerned about doing the wrong thing in public would be more likely to help if they thought about times in the past when they overcame their inhibitions. To test

Why did this person help, even when several other bystanders witnessed the same emergency and didn't help? Perhaps this person learned about the barriers to bystander intervention in a social psychology class.

that hypothesis, Kees van den Bos and colleagues (2009) asked people to fill out one of two versions of a questionnaire. In the disinhibition condition, people wrote about times when they had acted in an uninhibited way despite what other people thought. In the control condition, people wrote about how they behaved on normal days. Next the researchers staged a helping situation to see which group of people was most likely to come to the aid of someone in need. As they predicted, it was the people in the disinhibition condition. In one study, for example, 53% of individuals who had filled out the disinhibition questionnaire helped a man pick up pens that he dropped as he was rushing to catch a train, compared to only 7% of individuals in the control condition. As natural as it is to hang back and do nothing in situations such as this one, reminding ourselves of times in the past when we overcame our inhibitions can make us more likely to help (Van den Bos & Lind, 2013).

Increasing Volunteerism

There are many important kinds of prosocial behavior besides intervening in emergencies, including volunteerism and community service. Social psychologists have studied this kind of helping as well, wherein people commit to helping strangers on a more long-term basis (Johnson & Post, 2017; Mannino, Snyder, & Omoto, 2011; Piliavin, 2010).

Surveys of Western European and North American countries have found that many people engage in volunteer work, with the highest rate in the United States (47%; Ting & Piliavin, 2000). This level of volunteerism is a tremendous source of support for many members of our society, including children, the homeless, immigrants, and many others. It is also a great source of support for those doing the volunteering (Layous et al., 2017). Older adults who engage in volunteer work, have better health, less depression, and even a longer life (Anderson et al., 2014). These benefits are so substantial that some medical professionals have argued that doctors should prescribe two hours a week of volunteer behavior to all their patients (Johnson & Post, 2017). Similar to our previous discussion of empathy and helping, volunteerism is a case where there are benefits both to the helper and those being helped.

Because of this, some institutions have responded by requiring their members to perform community service. Some high schools, colleges, and businesses, for example, require their students or employees to engage in volunteer work. These programs have the benefit of increasing the pool of volunteers available to help community organizations such as homeless shelters, medical clinics, and day-care centers.

But the question arises as to the effect of such "mandatory volunteerism" on the motivation of the people who do the helping. As we discussed in Chapter 5, giving people strong external reasons for performing an activity can actually undermine their intrinsic interest in that activity. This is called the *overjustification effect*: People see their behavior as caused by compelling extrinsic reasons (e.g., being required to do volunteer work), making them underestimate the extent to which their behavior was caused by intrinsic reasons (e.g., that they like to do volunteer work). Consistent with this research, the more that people feel they are volunteering because of external requirements, the *less* likely they are to volunteer freely in the future (Bringle, 2005; Kunda & Schwartz, 1983; Stukas, Snyder, & Clary, 1999). The moral? It is best to encourage people to volunteer while at the same time preserving the sense that they freely choose to do so. Under these conditions volunteering will increase people's well-being and their intentions to volunteer again in the future (Piliavin, 2008; Stukas et al., 1999).

An increasing number of schools and businesses are requiring people to perform community service. These programs can actually lower interest in volunteering if people feel they are helping because of an external requirement. Encouraging people to volunteer while preserving the sense that they freely choose to do so is likely to increase people's intentions to volunteer again in the future.

Review Questions

1. Which of the following is true?
   a. People are always grateful for offers to help them.
   b. As a result of learning about the social psychology of prosocial behavior, you may be more likely to help someone in need in the future.
   c. If someone doesn't want to help others there isn't much we can do to change that.
   d. Hearing a lecture about prosocial behavior and bystander intervention isn't likely to change how people behave in a real emergency.
2. A company is considering offering its employees the opportunity to do community service. Which of the following would you recommend they do, based on research in social psychology?
   a. Make the community service mandatory
   b. Offer incentives for doing the community service such as extra vacation days
   c. Make sure that people feel that doing the community service is voluntary
   d. Assign people to different community agencies
3. Which of the following people would be most admired by his or her peers?
   a. Victoria volunteers at a hospital because she thinks it will look good on her college applications.
   b. Kevin works at a soup kitchen each week as part of a mandatory community service requirement at his job.
   c. Jun failed to help in an emergency because he thought someone else had already called 911.
   d. Shamika volunteers at a shelter for homeless families because she really likes working with the kids.

Summary

LO 11.1 Describe the basic motives that determine whether people help others.

- **Basic Motives Underlying Prosocial Behavior: Why Do People Help?** This chapter examined the causes of *prosocial behavior*, acts performed with the goal of benefiting another person. What are the basic origins of prosocial behavior?
  - **Evolutionary Psychology: Instincts and Genes** Evolutionary theory explains prosocial behavior in three ways. *Kin selection*, the idea that behaviors that help a genetic relative are favored by natural selection. The *norm of reciprocity*, which is the expectation that helping others will increase the likelihood that they will help us in the future. The third is *group selection*, the idea that social groups with altruistic members are more likely to survive in competition with other groups.
  - **Social Exchange: The Costs and Rewards of Helping** Social exchange theory argues that prosocial behavior is not necessarily rooted in our genes. Instead, people help others in order to maximize social rewards and minimize social costs.
  - **Empathy and Altruism: The Pure Motive for Helping** People can be motivated by *altruism*, the desire to help another person even if it involves a cost to the helper. According to the *empathy-altruism hypothesis*, when people feel *empathy* toward another person (they experience events and emotions the other person experiences), they attempt to help that person purely for altruistic reasons.

LO 11.2 Describe the personal qualities that influence whether a given individual will help.

- **Personal Qualities and Prosocial Behavior: Why Do Some People Help More Than Others?** Basic motives are not all there is to understanding prosocial behavior—personal qualities matter as well.
  - **Individual Differences: The Altruistic Personality** Although some people have altruistic personalities that make them more likely to help others, we need to consider several other critical factors when predicting who will help and who will not.
  - **Gender Differences in Prosocial Behavior** In many cultures, the male sex role includes helping in chivalrous and heroic ways, whereas the female sex role includes helping in close, long-term relationships.
  - **Cultural Differences in Prosocial Behavior** People are willing to help both *in-group* and *out-group* members, but for different reasons. People are more likely to feel empathy toward members of their in-groups who are in need, and the more empathy they feel, the more likely they are to help. People help out-group members for a different

reason: They do so when they have something to gain, such as feeling good about themselves or making a good impression on others.

- **Religion and Prosocial Behavior** There is a pervasive stereotype that religious people are more moral and engage in more prosocial behavior than nonreligious people. When it comes to actual behavior, it is true that religious people are more likely to help than other people are *if* the person in need of help shares their beliefs, but religious people are not more likely to help strangers. This is an example of in-group favoritism, in that people show preference to in-group members over out-group members. Thus, it may not be religiosity per se that causes people to be more helpful, but rather that people are more helpful toward people who belong to the same groups they do.
- **The Effects of Mood on Prosocial Behavior** People are more likely to help if they are in especially good moods, but also if they are in especially bad moods.

LO 11.3 Describe the situations in which people are more likely, or less likely, to help others.

- **Situational Determinants of Prosocial Behavior: When Will People Help?** To understand why people help others, we also need to consider the nature of the social situation.
  - **Environment: Rural Versus Urban** People are less likely to help in dense, urban settings because of the *urban overload hypothesis*—the idea that people living in cities are constantly bombarded with stimulation and that they keep to themselves to avoid being overwhelmed by it.
  - **Residential Mobility** People who have lived for a long time in one place are more likely to engage in prosocial behaviors than are people who have recently moved to an area.
  - **The Number of Bystanders: The Bystander Effect** To help in an emergency, people must meet five conditions: They must notice the event, interpret it as an emergency, assume responsibility, know how to help, and implement their decision to help. As the number of bystanders who witness an emergency increases, the more difficult it is to meet two of these conditions—interpreting the event as an emergency and assuming responsibility. This produces the *bystander effect*: The larger the number of bystanders, the less likely any one of them is to help.
  - **Diffusion of Responsibility in Cyberspace** The bystander effect has also been observed in online chat rooms. The more people there were in a chat room, the longer it took for anyone to respond a user's request for help.
  - **Effects of the Media: Video Games and Music Lyrics** Playing a prosocial video game or listening to a song with prosocial lyrics makes people more likely to help others in a variety of ways.

LO 11.4 Explain what can be done to promote prosocial behavior.

- **How Can Helping Be Increased?** Prosocial behavior can be increased in a number of ways.
  - **Increasing the Likelihood That Bystanders Will Intervene** Research shows that teaching people about the barriers to bystander intervention increases the likelihood that they will help in emergencies. Reminding people of times they acted in uninhibited ways can work as well.
  - **Increasing Volunteerism** Organizations that encourage their employees to engage in volunteer work should be careful about how they do so. If people feel that they are volunteering only because they have to, they may actually become less likely to volunteer in the future. Encouraging people to volunteer while preserving the sense that they freely choose to do so has been shown to increase people's sense of well-being and their intentions to volunteer again in the future.

Revel Interactive

Shared Writing **What Do You Think?**

Think about a time in the past when you were in a position to help someone, either in an emergency or not in an emergency. Why did you help or not help the person?

Test Yourself

1. Which of the following is *not* a way in which evolutionary theory explains prosocial behavior?
   a. Social exchange
   b. Kin selection
   c. Reciprocity norm
   d. Group selection

2. Amy is walking across campus and sees someone on her hands and knees looking for a ring that slipped off her finger. Under which of the following conditions is Amy *least* likely to help the person look for the ring, according to the empathy-altruism hypothesis?
   a. Amy feels empathy toward the person, and thinks she will be admired by passersby if she stops to help.
   b. Amy feels empathy toward the person, but she doesn't think she has much to gain by helping.
   c. Amy doesn't feel empathy toward the person but recognizes her as a TA in her English class. Amy really wants to get a good grade in that class.
   d. Amy doesn't feel empathy toward the person and doesn't think she has much to gain by helping.

3. Research on prosocial behavior finds that religious people:
   a. help others more than nonreligious people do in virtually all ways.
   b. show more compassion toward needy strangers than do nonreligious people.
   c. are more likely to help than other people are if the person in need of shares their beliefs, but are not more likely to help strangers.
   d. actually help others less than do nonreligious people.

4. Frank has recently graduated from college and moved from New York City back to the small town in Ohio where he grew up. He now finds that he is much more inclined to engage in prosocial behavior. What is the most likely reason for this change?
   a. Growing up in a small town caused him to internalize altruistic values.
   b. The change in his immediate surroundings changed his likelihood of helping.
   c. College students are less likely to help because they are more susceptible to the bystander effect.
   d. Frank is more likely to engage in negative-state relief when he is in the small town.

5. Luke listened to a lecture in his history class that he found very confusing, but at the end of the class when the professor asked whether there was anything students didn't understand, Luke didn't raise his hand. Because no other hands were raised, Luke assumed that other students had understood the material and that he just didn't pay enough attention. In fact, many students hadn't understood the material and were in the same situation as Luke. This is an example of:
   a. empathy-altruism hypothesis.
   b. reciprocity norm.
   c. social exchange.
   d. pluralistic ignorance.

6. Which of the following is *not* a reason why being in a good mood tends to increase prosocial behavior?
   a. Good moods make us view situations more positively, and thus we are more likely to give people the benefit of the doubt.
   b. Helping prolongs good moods.
   c. Good moods make us pay more attention to the possible rewards for helping.
   d. Good moods increase how much attention we pay to ourselves, which makes us more likely to act according to our values.

7. Which of the following is true?
   a. Listening to song lyrics with prosocial lyrics makes people more helpful.
   b. If we want someone to say yes when we ask for a date, it doesn't really work to have him or her listen to a song with romantic lyrics.
   c. Playing prosocial video games has no effect on how helpful people will be.
   d. Playing violent video games makes people more helpful.

8. Meghan lives in a single room in a college dormitory. Late one night, she hears a scream coming from just outside her dorm. She is pretty sure that the person needs help because the person yelled, "Help me! I think I broke my leg!" Meghan goes back to sleep, only to find out the next day that the person was on the ground for 45 minutes before someone helped. Which of the following best explains why Meghan didn't help?
   a. Informational influence
   b. A diffusion of responsibility
   c. She didn't interpret it as an emergency
   d. Pluralistic ignorance

9. Which of the following is true about prosocial behavior?

a. How often people have moved from one place to another influences how helpful they are.

b. There is no effect of personality on prosocial behavior.

c. Being in a bad mood decreases prosocial behavior.

d. Being in a good mood decreases prosocial behavior.

10. It's a busy day at the motor vehicles office and many people are waiting for their turn. As one man gets up to leave, he accidentally drops a folder he was carrying and papers go everywhere. Which person is *least* likely to help him pick up the papers?

a. Meghan, who was just thinking about times in her past when she acted in uninhibited ways

b. Joe, who is taking social psychology and heard a lecture about Latané and Darley's decision tree earlier in the week

c. Michael, who is feeling guilty because he should be home helping his roommates clean their apartment

d. Maggie, who is very religious but doesn't know the man who dropped the papers

Chapter 12

Aggression

Why Do We Hurt Other People? Can We Prevent It?

Chapter Outline and Learning Objectives

Is Aggression Innate, Learned, or Optional?

LO 12.1 **Distinguish evolutionary, cultural, and learning explanations of aggression.**

The Evolutionary View
Culture and Aggression
Gender and Aggression
Learning to Behave Aggressively
Some Physiological Influences

Social Situations and Aggression

LO 12.2 **Describe situational and social causes of aggression.**

Frustration and Aggression
Provocation and Reciprocation
Weapons as Aggressive Cues
Putting the Elements Together: The Case of Sexual Assault

Violence and the Media

LO 12.3 **Explain how observing violence increases violence.**

Studying the Effects of Media Violence
The Problem of Determining Cause and Effect

How to Decrease Aggression

LO 12.4 **Identify ways aggression can be diminished.**

Does Punishing Aggression Reduce Aggression?
Can We Release Anger by Indulging It?
What Are We Supposed to Do with Our Anger?
Disrupting the Rejection-Rage Cycle